ECR 2017
VIENNA
MARCH 1–5
THE FLOWER GARDENS OF RADIOLOGY

FINAL PROGRAMME
ECR 2017 will be a green meeting designed to meet environmental sustainability criteria set by the Österreichisches Umweltzeichen (Austria’s national eco-friendly certificate).

The ECR is the annual meeting of the European Society of Radiology (ESR). The ECR is now recognised as the official annual scientific meeting in medical imaging for radiographers by both the European Federation of Radiographer Societies (EFRS) and the European Society of Radiology (ESR).
Welcome to Vienna

WELCOME TO THE EUROPEAN CONGRESS OF RADIOLoGY 2017
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<th>Time</th>
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<tr>
<td>08:30</td>
<td>Special Focus Session SF 1</td>
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<tr>
<td>09:00</td>
<td>Professional Challenges Session PC 1</td>
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<tr>
<td>09:30</td>
<td>E 1 - ECR Academies</td>
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<tr>
<td>10:00</td>
<td>E 218, E 221</td>
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<td>E 1 - Rising Stars Programme</td>
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<tr>
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<td>Guest Lecture</td>
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<td>13:00</td>
<td>Wilhelm Conrad Röntgen</td>
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<td>Josef Lissner</td>
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<td>14:00</td>
<td>E 1 - The Beauty of Basic Knowledge</td>
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<td>10:30</td>
<td>E 618, E 621</td>
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<tr>
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<td>Joint Course: ESR and RSNA</td>
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<td>MC 628</td>
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<td>Professional Issues and Economics in Radiology (PIER)</td>
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<td>Wilhelm Conrad Röntgen</td>
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<td>14:00</td>
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<tr>
<td>14:00</td>
<td>E 24A, E 25A</td>
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<tr>
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<td>Clinical Trials in Radiology</td>
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<tr>
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**Wednesday, March 1**

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<tr>
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<td>State of the Art Symposium SA 5</td>
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<tr>
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<td>New Horizons Session</td>
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<tr>
<td>10:00</td>
<td>E 1 - ECR Academies</td>
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<tr>
<td>10:30</td>
<td>E 919, E 921</td>
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<td>E 1 - ECR Master Class</td>
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<td>13:00</td>
<td>MC 528</td>
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<tr>
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<td>EuroSafe Imaging Session</td>
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**Thursday, March 2**

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<tr>
<td>14:00</td>
<td>E 24C, E 25C</td>
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<td>EuroSafe Imaging Session</td>
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**Saturday, March 4**

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<td>E 1 - Rising Stars Programme</td>
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**Sunday, March 5**

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<tr>
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<tr>
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<td>Final Student Session</td>
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<td>12:15</td>
<td>E 1 - The Beauty of Basic Knowledge</td>
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<tr>
<td>13:00</td>
<td>E 24E, E 25E</td>
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<td>13:30</td>
<td>Clinical Trials in Radiology</td>
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<td>14:00</td>
<td>Case-Based Diagnosis Training 1</td>
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**The Voice of EPOS • in the ECR Online & EPOS™ Lounge**

Wednesday – Friday: 09:00–16:00 • Saturday: 09:00–15:00 • Sunday: 09:00–12:00
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<tr>
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<th>Special Focus Sessions</th>
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<td>PC 3</td>
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<td>Presentation of Honorary Membership</td>
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<td>E3 - ECR Academy</td>
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<td>Richard L. Baron, US</td>
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<td>MS 4</td>
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<td>Presentation of Gold Medals</td>
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<td>José Ignacio Bilbao, ES</td>
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<td>Guy Fré, FR</td>
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<td>E3 426</td>
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<td>Satellite Symposium</td>
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**The Voice of EPOS - in the ECR Online & EPOS™ Lounge**

Wednesday - Friday: 09:00-16:00 • Saturday: 09:00-15:00 • Sunday: 09:00-12:00
29th European Congress of Radiology

Congress Venue
Austria Center Vienna
Bruno Kreisky Platz 1
1220 Vienna, Austria

Congress Language
English

Onsite Opening Hours

Registration
Tuesday, February 28 .................. 12:00–18:00
Wednesday, March 1 .......................... 07:00–18:00
Thursday, March 2 to Saturday, March 4 07:30–18:00
Sunday, March 5 .......................... 07:30–16:00

Preview Centre
Tuesday, February 28 .................. 12:00–18:00
Wednesday, March 1 to Saturday, March 4 07:30–18:00
Sunday, March 5 .......................... 07:30–16:00

ECR Online & EPOS™ Lounge
EPOS™ – Scientific Exhibition
Wednesday, March 1 to Saturday, March 4 08:00–18:00
Sunday, March 5 .......................... 08:00–15:30

Technical Exhibition
EXPO Halls and EXPO Foyer D
Thursday, March 2 to Saturday, March 4 10:00–17:00
Sunday, March 5 .......................... 10:00–14:00

EXPO Gallery (First Level)
Wednesday, March 1 .......................... 14:00–17:00
Thursday, March 2 to Saturday, March 4 10:00–17:00
Sunday, March 5 .......................... 10:00–15:30

Travel Service
Tuesday, February 28 .................. 12:00–18:00
Wednesday, March 1 to Saturday, March 4 08:00–17:30
Sunday, March 5 .......................... 08:00–12:00

Press Office & Business Centre
Wednesday, March 1 to Saturday, March 4 08:00–18:00
Sunday, March 5 .......................... 08:00–16:00

Sessions in Joint Sponsorship With

CIRSE Cardiovascular and Interventional Radiological Society of Europe
EFOMP European Federation of Organisations for Medical Physics
EFRS European Federation of Radiographer Societies
ESCR European Society of Cardiovascular Radiology
ESER European Society of Emergency Radiology
ESGAR European Society of Gastrointestinal and Abdominal Radiology
ESHNR European Society of Head and Neck Radiology
ESMIFIR European Society of Molecular and Functional Imaging in Radiology
ESNR European Society of Neuroradiology
ESOI European Society of Oncologic Imaging
ESPR European Society of Paediatric Radiology
ESSR European Society of Musculoskeletal Radiology
ESTI European Society of Thoracic Imaging
ESUR European Society of Urogenital Radiology
EUSOBI European Society of Breast Imaging
EuSoMII European Society of Medical Imaging Informatics
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Please note that sessions are marked with a logo to indicate their classification according to the European Training Curriculum.

LEVEL I First three years of training
LEVEL II Fourth and fifth years of training
LEVEL III Subspecialty training standard

www.myESR.org
But there is more ... ECR 2017 will have a unique twist compared with previous editions, because our meeting is specifically dedicated to YOUTH, die Jugend, de jeugd, la jeunesse, la giovinezza, la juventud, молодежь. During ECR 2017, I extend an open invitation to all and sundry to take a stroll in ‘the flower gardens of radiology’. Radiology is a beautiful, fragrant, sweet-smelling flower garden, and this is the message I want to bring to young radiologists, throughout Europe and across the globe. Our scientific programme for ECR 2017 reflects this focus on a new generation of radiologists, who demand high-quality education, delivered in an efficient, understandable, and customer-friendly way. To accommodate these young colleagues, there will be more interactive sessions, a more prominent role for social media, and we shall have topics that are of interest to young people, because they are the future of our profession. The broad consensus among the members of the Programme Planning Committee demonstrates our shared ambition for ECR 2017 to bring this message of hope to a new generation of radiologists.

As President of ECR 2017, I am extremely happy and proud that this new generation in radiology has heeded my call. We received an all-time record of submitted abstracts, which proves that this army of young, smart, ambitious, driven young professionals have entered our garden, ready and willing to plant new seeds and prepare new flowerbeds. Abstract submission for ECR 2017 closed with a record 6,757 abstracts submitted, representing a 22.8% increase on the previous year’s figure. The new record includes abstracts submitted for both scientific papers for oral presentations (+18%), and electronic posters for the ECR’s EPOS™ exhibition (+27%).
The boost in submissions for EPOS™ reflects the overwhelming success of the Voice of EPOS sessions, introduced at ECR 2016, which give poster authors the opportunity to present their work in person at the congress. In addition to abstracts from the traditional European countries, it is of note that we received huge increases in submissions from Latin America (Argentina, Brazil, Mexico, Chile, and Colombia) and Asia (China, India). This great success is living proof that the outreach of our society is now truly global. Moreover, it demonstrates that the appeal of playing a part in one of the world’s biggest medical imaging events is as high as ever and that the future of radiology, and of the ECR, is secure.

Radiology is currently undergoing a metamorphosis, and there is a growing focus on functional, biological, and genetics-related imaging. Even though the mainstay of radiology is still ‘anatomical imaging’, we must provide information about cutting edge techniques to our colleagues, and help them to understand that they should not be afraid of innovations, but rather find a way to adopt these techniques to explore new diagnostic pathways and improve existing workflows. Radiology is not only about detecting lesions and offering a differential diagnosis, but also about understanding how the human body works, how lesions arise and behave, and how we can monitor and influence disease processes using radiological techniques and image-guided interventions. The scientific programme for ECR 2017 will address these issues.

Our Honorary Lectures will be presented by an all-star international cast of top speakers from the United States of America (Prof. Mauricio Castillo – Wilhelm Conrad Röntgen Honorary Lecture), from the Netherlands (Prof. Mathias Prokop – Josef Lissner Honorary Lecture), and from the United Kingdom (Prof. Fiona J. Gilbert – Arthur de Scheper Honorary Lecture). In addition, we shall have a special guest lecturer from Brazil, who will provide us with insider information about the Zika virus infection (Dr. Maria de Fátima Vasco Aragão – Breaking news from Latin America).

Traditionally, the ECR offers a platform for the ESR to take an international perspective, and to have joint sessions with member countries. These are the so-called ‘ESR meets …’ sessions.
FOREWORD BY THE ESR PRESIDENT

The E³ programme is divided into the Rising Stars Programme, The Beauty of Basic Knowledge, European Diploma Prep Sessions, ECR Academies, and ECR Master Classes, in order of increasing complexity. All sessions are labelled as level 1, 2 or 3, according to the ESR’s European Training Curriculum for Radiology. Moreover, we are proud to offer delegates a Joint Course of the ESR and RSNA (Radiological Society of North America) on Hybrid Imaging. And, not to forget, there will be a Pros & Cons Session on Providing an effective ultrasound service: how and by whom? Finally, I would like to remind all delegates that the ECR also offers Satellite Symposia and Industry Workshops.

Please make sure you also stop by the EPOS™ Arena to catch some of the Voice of EPOS™ sessions, which proved so popular during their first run at ECR 2016. The authors of electronic posters will give live presentations about their work, which will also be broadcast online via the ECR Online streaming service. You can watch these presentations each day during the conference, grouped into topical sessions, and sessions dedicated to various countries and languages. This initiative is primarily intended to offer young radiologists, radiographers, residents and students, a forum to present their work to their peers, in a high-energy, low-threshold setting.

There are many more joint sessions which the ESR will co-host together with other organisations. ECR 2017 offers a platform to our partner disciplines and societies, with the purpose of fostering collaboration across boundaries and disciplines.

As President, I am very happy to see that, increasingly, the ECR has also become the flagship meeting of the European Federation of Radiographer Societies (EFRS). A growing number of educational sessions and workshops have been planned especially for radiographers. In particular, I would like to draw your attention to the EFRS Workshop and to the ‘EFRS meets Belgium’ session, which provides an insight into the clinical and research work performed by radiographers. In a significant new step, all of the sessions for radiographers taking place in Room K at ECR 2017 will also be simultaneously translated into German, Italian, Polish and Spanish.

Very close to my heart is the European Diploma in Radiology (EDiR). Examinations for the EDiR have been taking place at the ECR for several years, as well as at various other venues. It is reassuring to notice that EDiR continues to grow in popularity and has become a standard of excellence for radiologists. I am very happy to announce that EDiR will have a prominent place during ECR 2017, as we will host a fully booked diploma examination. Candidates accepted to take the EDiR examination who applied before December 15 also receive free congress registration.

Many of you are already familiar with ECR Online. This portal is used by thousands of viewers to follow the ECR remotely. However, I would also like to invite you to use ECR Online in Vienna, for example to catch up with sessions you cannot visit due to schedule conflicts within the programme. Unfortunately, for a huge meeting such as ECR 2017, scheduling conflicts are inevitable, because there are so many parallel sessions, and it is physically impossible to see everything. But fortunately, through ECR Online, you can still catch up with those sessions you missed.

I take this opportunity to express my thanks to all my colleagues on the ECR 2017 Programme Planning Committee, as well as to the chairs and members of the Scientific Subcommittees. It is thanks to their inspiration, commitment and hard work, that ECR 2017 will be a success. Moreover, I would like to give special thanks to the entire staff of the ESR Office in Vienna, under the inspired leadership of Peter Baierl and Andrea Cermak.

ECR 2017 will be more than just a congress. It will be a happening; an experience; an event to be enjoyed and remembered. With all my heart, I invite you to be a part of ECR 2017, to feel the joy and the energy. I invite you to share ECR 2017 with old and new friends, with professional contacts, with industry partners, with everyone. I look forward to seeing you in Vienna, and please remember …

When you’re going to Vienna for ECR 2017, 
Join us for a walk through the flower gardens of radiology. 
When you’re going to Vienna for ECR 2017 
Be sure to wear some flowers in your hair 
When you’re going to Vienna for ECR 2017 
You’re gonna meet some gentle people there …
GENERAL INFORMATION
General Information

INFORMATION FROM A–Z

ARTS & CULTURE
Delegates are encouraged to visit the Arts & Culture Desk in the entrance hall for information on Vienna’s cultural events such as exclusive opera performances, delightful concerts, and the fascinating exhibitions in Vienna’s most important and remarkable museums. Pick up your personal Arts & Culture Brochure at this counter to find descriptions of all cultural places.

BADGES
For organisational and security reasons, badges must be worn at the congress venue. Access to the different areas will only be granted upon presentation of an appropriate badge.

Lost or Forgotten Badges
In the case of loss, a replacement badge will only be provided on full payment of the applicable onsite registration fee. Forgotten badges will be replaced against a deposit of the full onsite fee.

BOOK OF ABSTRACTS
In keeping with the ESR’s commitment to environmental sustainability, and due to demand from its members, the Book of Abstracts is only available online. All abstracts can be accessed at www.i3-journal.org/articles. You can also create your own personal Book of Abstracts with the help of the popular ECR Interactive Programme Planner on our platform ECR Online (ecronline.myESR.org). Abstracts of EPOS™ presentations no longer appear in the Book of Abstracts. Each full EPOS™ presentation can instead be cited by a Digital Object Identifier (DOI), which appears with the presentation at www.myESR.org/epos.

BROADCAST ZONES
The ECR features specific Broadcast Zones, where you can listen to sessions and view the corresponding presentation material in a relaxed atmosphere when the actual lecture rooms are overcrowded. Broadcast Zones are located
• In the Austria Center Vienna next to Room B (2nd level), Rooms O and N (1st level), Rooms E1 and F2 (entrance level) and Room K (lower level)
• In the M Building next to Rooms M4 and M5

See Floor Plans on pages 25–34.

BUSINESS CENTRE
The Press Office & Business Centre, located on the entrance level, offers copy facilities for a small charge.

Opening hours:
Wednesday, March 1 to Saturday, March 4: 08:00–18:00
Sunday, March 5: 08:00–16:00

CAFÉS & RESTAURANTS
If you are looking for an ideal meeting point, or if you just want to take a short break, try one of the various foyer cafés and restaurants. They are situated throughout the whole congress venue and on all levels of the building, offering a variety of tasty hot and cold snacks. Please see the ‘coffee-cup’ and ‘knife and fork’ signs on the Floor Plans on pages 25–34 of this programme to locate the various foyer cafés.

CASE-BASED DIAGNOSIS TRAINING
Please refer to the E³ - Rising Stars Programme and see page 90.

CASES OF THE DAY
From Wednesday to Saturday, five Cases of the Day covering different sections of radiology are shown on computer stations in the ECR Online & EPOS™ Lounge on the 1st level. Participants are invited to submit their diagnoses. The winners will be announced on the ESR website.

We would like to acknowledge the contribution of the following authors to the Cases of the Day:

Wednesday:
Case 1:  A. van Breda Vriesman; Netherlands
Case 2:  M.M. Slattery, M.J. Lee; Ireland
Case 3:  C. de Lange, T. Möller, L.S. Ording Müller, E. von Brandis, I. Taksdal; Norway
Case 4:  S. Vanden Bossche, N. Pyatigorskaya; France
Case 5:  E. Dappa, F. Jungmann, T. Emrich, K.-F. Kreitner; Germany
Thursday:
Case 1: M. Lacroix, P.-Y. Brillet; France
Case 2: M. Stoeva, M. Vloka, G.I. Kirova-Nedialkova; Bulgaria
Case 3: S. Gerevini, E. Venturini; Italy
Case 4: A.C. Tsili, C. Naka, V. Maliakas, M.I. Argyropoulou; Greece
Case 5: A. Athanasiou; Greece

Friday:
Case 1: D. de Witte, J.J. Hensen; Netherlands
Case 2: E. Loney; United Kingdom
Case 3: G. Sommer; Switzerland
Case 4: I. Shrayner, V.E. Sinitsyn, E. Zorin, N. Ermakov; Russian Federation
Case 5: C.A. Minoiu, C.D. Brenes Umana, R.J. Perea Palazón; Romania, Costa Rica, Spain

Saturday:
Case 1: L. Kintzelé, M.-A. Weber; Germany
Case 2: I. Illyes, T. Guttman, N. Vainak, D. Dreptate, E. Nastasa, C. Salvan-Schaschl; Romania, Austria
Case 3: A. Oktay, M. Argin; Turkey
Case 4: K. Borbély; Hungary
Case 5: J.M. García Santos, C. Vázquez Olmos; Spain

CHARGING STATIONS
Charge your mobile device at one of 20 charging stations located near the entrance to every lecture hall. Free of charge, due to the kind support of Bracco.

CHURCHES AND RELIGIOUS COMMUNITIES IN VIENNA
Vienna is a multi-denominational, multi-cultural city. We will be pleased to provide you with information on local religious communities and places of worship at the Travel Service Desk.

CLINICAL TRIALS IN RADIOLOGY
For the third time, at ECR 2017, Clinical Trials in Radiology (CTiR) sessions are taking place. The CTiR sessions are comprised of presentations on recent trials which are very likely to have an impact on clinical practice. Session places are allocated on a first-come, first-served basis. Please refer to page 143 for the programme of the sessions.

CME ACCREDITATION SYSTEM
The ESR is happy to provide you with a fully digital CME acquisition system for ECR 2017. Please note that we no longer provide printed CME stickers. Evaluation and CME acquisition will be possible via
- The official ECR app, ECR 2017, available via the App Store (iOS) and Google play (Android)
- More than 130 laptops in the ECR Online & EPOS Lounge located on the 1st level
- The CME & evaluation terminals located on the 1st level

Please note that evaluation of the sessions is only possible March 1–6, 2017.

CME credits will only be awarded if
- You are logged into http://eval.myESR.org with your username (last name) and Personal ID (printed on your badge)
- You have fully completed the electronic questionnaire for each session
See pages 20–21.

CMEasy
The ESR is always proud to introduce new technology. When you arrive at the congress venue, please pick up a bluetooth ‘tag’ in the entrance hall and attach it to your badge. With a personalised tag (personalisation is possible at the CMEasy counters in the entrance hall), we can track which sessions you attend, meaning you can claim CME credits in the easiest way possible – automatically! Shortly after leaving a lecture room, we will send you an email confirming your attendance and granting your CME credits. A link to an evaluation form will also be provided, for you to evaluate the session. For more information, visit myESR.org

CME – HOW THE CREDITS ARE COUNTED
After the congress, you can go online any time to the MyUserArea and print out your ‘CME Confirmation’ sheet. This sheet lists in exact detail all the sessions you visited and evaluated during the congress as well as the number of hours attended. For more information see pages 20–21.
INFORMATION FROM A-Z

COAT CHECK
The coat check services are located on the entrance level, in Foyers E and F, as well as on the lower level next to Room D.

COMMUNICATION AREAS
If you are looking for the perfect place to meet and talk with friends or just to relax and browse through ECR Today, ECR 2017 offers areas perfectly equipped for communication and recreation; the ESR Welcome Lounge right in the middle of the entrance hall, the Radiographer Lounge on the lower level, the Free Publications Area behind the café at the main entrance, the EuroSafe Imaging Café on the 1st level, and the ESOR & Rising Stars Lounge on the entrance level of the M building, which welcomes all students, residents and trainees.

CONFIRMATION OF PAYMENT AND ATTENDANCE
Congress-related confirmation will be available during and after the congress from the ESR website (www.myESR.org) via the MyUserArea (login with your last name and your Personal ID as printed on your badge).

CONGRESS LANGUAGE
English

CONGRESS VENUE
Austria Center Vienna
Bruno Kreisky Platz 1
1220 Vienna, Austria
Phone: (+43 1) 533 40 64–0
To reach the ACV by public transport from the city centre (Stephansplatz) take the U1 underground line (red line, direction Leopoldau). Get off at Kaisermühlen/Vienna International Centre and take the exit marked Donau-City-Straße.
Travelling time: approximately eight minutes.

‘ECR ONLINE’
After its success in previous years, the ESR is once again providing a live streaming service for ECR 2017, ECR Online, in an effort to bring the ECR to everyone. All ECR sessions are being broadcast live via the ESR website, with Facebook and Twitter options integrated into the web interface to provide a fully interactive experience. ECR Online is kindly supported by Bayer and GE HealthCare.
Link: ecronline.myESR.org

ECR ONLINE & EPOS™ LOUNGE
The ECR Online & EPOS™ Lounge has 130 computer terminals where delegates can watch ECR sessions either live or on demand. Enjoy the Lounge’s relaxing atmosphere while you catch up with the congress sessions.

ECR TODAY
ECR Today, the popular daily newspaper of the congress, is published from Wednesday to Sunday and distributed in the entrance hall of the congress venue and in the entrance area of the Technical Exhibition. In addition, all issues are available online at www.myESR.org/publications

ECR 2017 SMARTPHONE APP
The ECR 2017 App gives iPhone, iPad and Android users a new way to experience the congress. The app is packed with features, including general congress information, scientific and educational programme details, full abstracts, and even floor plans of the Austria Center. You can download the ECR 2017 App from iTunes/Google Play.

EFOMP (European Federation of Organisations for Medical Physics) WORKSHOP
This workshop is the 19th in the series of EFOMP Workshops on new technology in diagnostic radiology. This year’s workshop is entitled ‘Radiation incidents and accidents in medical imaging and their management’. It has been organised by EFOMP in collaboration with the ESR to address the current and future technological requirements for radiology imaging equipment (please refer to page 146).
‘EFRS MEETS’ SESSION
After the enormous success at previous ECRs, which reflected the good relations between the ESR and the European Federation of Radiographer Societies (EFRS), the EFRS is again hosting a dedicated session. ‘EFRS meets Belgium’ underlines the essential role of radiographers in medical imaging. Please refer to page 66 for the programme of the session.

EIBIR BOOTH
Visit the EIBIR Booth in the M Building for the most recent news on the European Institute for Biomedical Imaging Research.

EMERGENCY INFORMATION/FIRST AID
For fire, medical or police assistance, please contact ACV Information or the nearest available ECR or ACV staff member. A medical specialist trained in emergency medicine will be present for the duration of the congress. See Red Cross sign on the Floor Plan page 27 (entrance level).

EPOS™ – SCIENTIFIC EXHIBITION
The ECR 2017 electronic scientific exhibition is open Wednesday to Saturday from 08:00 to 18:00, and Sunday from 08:00 to 15:30. EPOS™ can be accessed via the 130 workstations in the ECR Online & EPOS™ Lounge, which is located on the 1st level. Make sure to attend the The Voice of EPOS sessions, where the authors of the best posters will present those in moderated poster sessions. See pages 109–115.

‘ESR MEETS’ SESSIONS
The purpose of ‘ESR meets’ is to forge closer ties between the ESR and its guest societies. The guest nations of this year’s ECR are Peru, the United States of America and Belgium, as a tribute to the home of ESR President Paul M. Parizel. There are dedicated sessions for the radiological communities of these nations to demonstrate the excellence of radiology in their countries. Places at these sessions are allocated on a first-come, first-served basis. Please refer to pages 65–66 for the programme of the sessions.

ESR WELCOME LOUNGE
Visit the ESR Welcome Lounge in the entrance hall! Whether you are looking for an ideal meeting point or just want to take a short break – the ESR Welcome Lounge will suit your needs. Free wireless LAN is provided for your convenience. Watch out for artistic performances from the ‘ESR meets’ countries during the lunch breaks.

EUROPEAN BOARD OF RADIOLOGY (EBR)
Visit the EBR Booth in the entrance hall to learn all about the European Diploma in Radiology (EDiR), how to apply, and where and when the next exams will take place. In addition, receive here all information about the Accreditation Council in Imaging (ACI), required criteria, documents and latest news in the field of radiology accreditation. www.myEBR.org

EUROPEAN DIPLOMA IN RADIOLOGY (EDiR)
An examination for the European Diploma in Radiology is being held at ECR 2017. The examination takes place on Tuesday, February 28, in the ECR Online & EPOS™ Lounge on the 1st level and in Rooms 1.85/1.86, and on Wednesday, March 1 in Rooms 1.85/1.86. Success in the examination certifies a standard of radiological knowledge deemed appropriate by the ESR for independent practice in general radiology. Don’t miss the EDiR Talk on essential tips for success on Friday, March 3, 16:00–17:30 in Room X (2nd level)! www.myEBR.org

EUROPEAN EXCELLENCE IN EDUCATION (E³)
The E³ programme emphasises the importance of lifelong learning. It covers the entire range of educational issues, from undergraduate medical education to subspecialised continuing professional development. The E³ programme is structured according to the different levels defined by the ESR European Training Curriculum for Radiology. The E³ programme consists of the following five branches, which reflect the different levels of education in radiology, as well as the different stages of an individual’s professional career: Rising Stars Programme, European Diploma Prep Sessions, The Beauty of Basic Knowledge, ECR Academies, ECR Master Classes.
The **Rising Stars Programme** is designed especially for residents, students, radiographers and trainee radiographers. It consists of Basic Sessions, Student Sessions, Joint Sessions with ESOR (European School of Radiology), Case-Based Diagnosis Training, EFRS Radiographers’ Basic Session, and the Radiology Trainees Forum Programme including the RTF Highlighted Lectures and the RTF Quiz.

The **European Diploma Prep Sessions** aim to prepare prospective candidates for the European Diploma in Radiology (EDiR). They are also suitable for residents who want an overview of the various topics relevant to imaging and for those preparing for their national board examinations. The content of the programme reflects Levels I+II European Training Curriculum for Radiology (ETC) learning objectives across a two-year cycle. The sessions are held in close cooperation with the European Board of Radiology (EBR).

Each of the six sessions is led by three lecturers and moderated by one chairman.

The **Beauty of Basic Knowledge** programmes focus on knowledge essential to the daily practice of radiology. The format of these sessions reflects the tradition of conventional teaching sessions, in which experienced teachers share their insights into a topic of particular relevance with a group of attendees. A Beauty of Basic Knowledge session either consists of 45-minute lectures held by one or two speakers (plus 10–15 minutes of discussion per lecture), or two 25-minute lectures and a general discussion. The teaching format is usually case-based, and features some interaction with the attendees. The content of the sessions is mostly tied to the Level I European Training Curriculum (ETC) learning objectives. The Beauty of Basic Knowledge sessions are suited to residents and board-certified radiologists who want to refresh their knowledge in basic topics of imaging and image-guided therapy.

The **ECR Academies** consist of a series of four to six sessions relevant to a particular area of radiology. This may be a classic organ-based field or a technically oriented area of another field related to radiology, such as management. Each ECR Academy spans several days, in which the different facets of the area in question are covered by experts in the field. An ECR Academy is a coherent course in which the different sessions complement one another in order to reflect the entirety of the field. The ECR Academies are particularly suited to general radiologists or radiologists with a subspecialisation.

The **ECR Master Classes** focus on continuous professional development and lifelong learning. The classes are designed for subspecialised radiologists seeking cutting-edge information in their particular fields of interest. They are held by experts in the field and reflect state-of-the-art knowledge, as well as emerging trends. The ECR Master Classes are offered in cooperation with each of the following subspecialty societies: CIRSE (one on vascular and one on interventional radiology), ESCR, ESER, ESGAR, ESHNR, ESMOFIR, ESNR, ESOI, ESPR, ESSR, ESTI, ESUR, EUSOBI.

‘EUROPEAN RADIOLOGY’

*European Radiology* is Europe’s number one journal in general radiology. And it celebrates its 25th anniversary this year! Visit the ‘Jardin des Publications’ in the entrance hall to browse through the beautifully designed 25th Anniversary Special Edition. And don’t miss the ER 25th Anniversary Session on Friday, March 3, 16:00–17:30 in Room Z (2nd level)!

See page 63.

EUROPEAN SCHOOL OF RADIOLOGY (ESOR)

For the latest news on the European School of Radiology visit the ESOR Info Desk in the ESOR & Rising Stars Lounge in the M Building. And don’t miss the ‘ESOR Ten-Year Anniversary’ Session on Friday, March 3, 12:15–13:00 in Room A (2nd level)!

See page 64.
EUROSAFE IMAGING

EuroSafe Imaging is the ESR’s flagship initiative in radiation protection. It aims to promote the safe and appropriate use of medical imaging in Europe and around the world. Please view the EuroSafe Imaging Poster Exhibition in the ECR Online & EPOS™ Lounge on the 1st level, with submissions from all over Europe and beyond. And stop by the EuroSafe Imaging Café and Booth on the 1st level (next to Room N) to learn all about this important initiative.

EXPO HALLS & EXPO FOYER D

Opening hours:
Thursday, March 2 to Saturday, March 4: 10:00–17:00
Sunday, March 5: 10:00–14:00

Visit the additional technical exhibition area on the 1st level of the congress venue:

EXPO Gallery (First Level)
Opening hours:
Wednesday, March 1: 14:00–17:00
Thursday, March 2 to Saturday, March 4: 10:00–17:00
Sunday, March 5: 10:00–15:30

FREE PUBLICATIONS

The ESR again presents a ‘Free Publications’ Booth, located on the entrance level, right after the main entrance on the left side, next to the café. Pick up free copies of radiology journals and magazines.

FUTURE MEETINGS DESK

This area – located in the ECR Online & EPOS™ Lounge on the 1st level – offers you an overview of future meetings in the field of radiology and related disciplines, from all over the world. Feel free to contribute flyers and posters to promote your own meetings and courses.

HEADLINE SESSIONS

For details on the Opening Ceremony, the anniversary sessions for ESOR and European Radiology, and the Honorary Lectures by Mauricio Castillo, Fiona J. Gilbert and Mathias Prokop, and the Guest Lecture by Maria de Fátima Vasco Aragão see pages 22–23.

‘INSIGHTS INTO IMAGING’

Insights into Imaging is the ESR’s online journal for education and guidelines. It is open access and PubMed indexed.

INDUSTRY WORKSHOPS

At ECR 2017 there are various Industry Workshops scheduled, organised by Bayer, Flensburg University of Applied Sciences, Fujifilm, GE HealthCare, Hologic, Mammotome, Materialise, Pantavision, Philips and Toshiba Medical Systems. Please note that Industry Workshops are no longer CME-accredited. See separate booklet for details.

INTERACTIVE PROGRAMME PLANNER

The ESR is again proud to present this popular interactive tool for ECR 2017. The IPP provides a convenient way to explore and customise the congress programme online, in both traditional browser and mobile device versions. Featuring various search and browse functions for sessions as well as posters, the IPP also includes a ‘basket’ option, which enables users to collate items from the programme to create their own personal calendar and even print a personalised Book of Abstracts. The IPP is integrated into the new platform ECR Online. Link: ecronline.myESR.org

JARDIN DES PUBLICATIONS

In the entrance hall, you can visit the Jardin des publications (Garden of Publications) and pick up the European Radiology 25th Anniversary Special Edition, containing 25 of the most remarkable articles published in European Radiology in the past quarter century. Also on display are the marvellous books that were produced by the ESR for the International Day of Radiology (IDoR) over the last four years. These books on thoracic imaging, neuroimaging, paediatric imaging and breast imaging are available for you to purchase.

(JUNIOR) IMAGE INTERPRETATION QUIZ

The Image Interpretation Quizzes are two traditional highlights of every ECR. This year’s themes are ‘There’s a patient behind every interesting case’ and ‘Building our youth for the future’ (see page 153).

LIABILITY

The ESR and the Austria Center Vienna are free from all liabilities that may arise from the delegates’ and presenters’ participation in ECR 2017 and its activities.

LOST AND FOUND

Lost and found articles may be picked up or handed in at the ECR Information Desk located in the entrance area.
**MEDITATION & PRAYER ZONE**
The Meditation & Prayer Zone is located on the lower level next to Room K. You will find it marked on the Floor Plan.

**MEETING ROOMS**
Meeting rooms at ECR 2017 are to be found here:

**In the Austria Center Vienna**
Entrance level: Meeting Room 0.96-97
1st level: Meeting Rooms 1.85, 1.86

**In the adjoining M Building**
Entrance level: Meeting Rooms M6, M7, M8, M9, M24, M25, M26, M27, M28, M29, M30, M31, M32, M33, M34.

You will find them marked on the Floor Plans (see pages 25–34). Please contact the Info Service Desk in the main lobby of the M Building for onsite booking of meeting rooms; on Sunday please contact the Meeting Room Service Desk at the registration desks.

**MEMBERSHIP**
For membership application and renewal, please go to the membership desk in the entrance hall.

**MINI COURSE**
ECR 2017 features again the joint course of the ESR and RSNA (Radiological Society of North America), which will this year focus on ‘Hybrid Imaging’.
The sessions will be interactive with electronic voting/self assessment.
Places for all courses are allocated on a first-come, first-served basis. Please refer to pages 105–106 for the course’s programme.

**MULTIDISCIPLINARY SESSIONS**
The concept of these sessions is to promote a multidisciplinary approach to detection and treatment, integrating radiologists and other clinicians to share their expertise.
The topics that are covered this year are: neuroimaging and mental health disorders, primary bone tumours, transcatheter aortic valve implantation and virtual autopsy imaging in children.
Please refer to pages 81–82 for the programme of the sessions.

**NEW HORIZONS SESSIONS**
The aim of the New Horizons Sessions is to provide practitioners with an overview of the new developments in a specific area of practice e.g. specialty, technique, or disease. These developments may become routine within a few years, or may indicate a new direction for research and clinical application. There are three New Horizons Sessions at ECR 2017, entitled ‘Hyperpolarised MRI: imaging tissue metabolism in real time’, ‘The increasing clinical impact of MR/PET’ and ‘Large cohorts: imaging biobanks’. Session places are allocated on a first-come, first-served basis. Please refer to pages 67–68 for the programme of the sessions.

**OPENING CEREMONY**
The ECR 2017 Opening Ceremony will take place Wednesday, March 1, 17:45–19:00 in Room A (2nd level).
**ESR Honorary Membership** will be awarded to Richard L. Baron, James A. Brink and Gloria Soto Giordani; José Ignacio Bilbao, Guy Frija and Stephen J. Golding will receive the **ESR Gold Medal**. See page 22.

**PRESS**
The ECR 2017 **Opening Press Conference** takes place on Wednesday, March 1, at 09:30 at the Austria Center Vienna, Room 2.95, 2nd level. For press accreditation, please contact the Press Office & Business Centre on the entrance level. To obtain a press badge, you must present an international press ID or a confirmation letter from the relevant medium.
Delegates and exhibitors may display their press kits in the **Press Office & Business Centre**. There are also several publicly available computer terminals as well as workspace and plug points for you to work with your personal laptop.

**Opening hours:**
Wednesday, March 1 to Saturday, March 4: 08:00–18:00
Sunday, March 5: 08:00–16:00
More information: www.myESR.org/press
PREVIEW CENTRE

Speakers are reminded to check in at the Preview Centre’s welcome desk at least two hours prior to their scheduled presentation, even if they have already uploaded their presentation prior to the conference. Six speaker welcome desks will be at the speakers’ disposal.

Onsite presentation upload procedure:
» Check in at the Preview Centre Welcome Desks
» Log into an available computer and upload your presentation
» Presentations can be checked and edited onsite

The Preview Centre is located on the 1st level, next to the ECR Online & EPOS™ Lounge.

Opening hours:
Tuesday, February 28: .................... 12:00–18:00
Wednesday, March 1 to Saturday, March 4: 07:30–18:00
Sunday, March 5: ......................... 07:30–16:00

Please note that only digital material will be accepted for oral presentations. Presenters may submit their presentation material, with their login details, prior to the congress. All material must be in English and be provided on CD-ROM, DVD or USB devices. All presentations will be transferred to the session rooms electronically. The material remains the property of the speakers.

PROFESSIONAL CHALLENGES SESSIONS

These sessions are intended to communicate and exchange issues on radiological training and education, research networking, radiological management and professional developments. This year’s topics are ‘Will emerging technology replace the radiologist?’, ‘Excellence and innovation in undergraduate teaching of radiology’, ‘Design and implementation of structured reporting’, ‘How to make best use of cardiac imaging in a radiology department’, ‘Implementing and evaluating clinical decision support (CDS) for imaging referral guidelines’, ‘Radiography and radiology: more than the sum of their parts’, ‘Burnout of radiologists’, ‘Radiology at the core of interdisciplinary communication’, ‘A team approach towards ensuring patient safety and care’ and ‘Ensuring the future role of radiologists’.

Places are allocated on a first-come, first-served basis. Please refer to pages 77–79 for the sessions’ programme.

PUBLIC TRANSPORT

Tickets for public transportation are available online at shop.wienerlinien.at or at any underground station.

Underground map: see page 24.

RADIOGRAPHERS

The ECR is now recognised as the official annual scientific meeting in medical imaging for radiographers by both the European Federation of Radiographer Societies (EFRS) and the European Society of Radiology (ESR). The ESR is therefore pleased to announce that all radiographer sessions taking place in Room K will be simultaneously translated into German, Italian, Polish and Spanish. See separate programme for radiographers for details of all sessions. Participants making use of the simultaneous translation are asked to return their receivers and headsets when leaving Room K or the adjacent Broadcast Zone/Radiographer Lounge.

Visit the Radiographers Lounge on the lower level (next to Room K) to meet and network with your colleagues.

RADIOLOGY TRAINEES FORUM (RTF)

The RTF promotes and coordinates the efforts of radiology trainees at a European level in order to improve the progress of radiology and related sciences. One of the RTF’s most important goals is to provide an equal level of radiological knowledge and skills for radiology trainees all over Europe.

Highlighted Lectures organised by the RTF will be given on Saturday, March 4, 10:30–12:00 in Room O on the 1st level (see page 90).

The RTF General Assembly (RTF delegates meeting) takes place on Thursday, March 2, 16:00-17:30, in Meeting Room 0.96/0.97 (entrance level). For more detailed information please visit the RTF Meeting Point in the ESOR & Rising Stars Lounge.

Don’t miss the Meet & Greet Session with ESR President Paul M. Parizel (Thursday, March 2, 13:30-13:50) in the ESOR & Rising Stars Lounge.

And join us at the RTF Quiz with Quizmasters José Cáceres and José Vilar on Thursday, March 2, 12:30-13:30 in Room B (2nd level).

RECORDING / PHOTOGRAPHY

Video or audio recording of presentations is not allowed without the speaker’s/exhibitor’s and ECR’s prior permission. Flash photography is not permitted during presentations. Interviews must take place outside the lecture room.

For queries, please contact the ESR Press Office.
REFRESHER COURSES
74 Refresher Courses have been organised by the various scientific subcommittees for ECR 2017. Based on the topic of the session, some refresher courses are presented in an ‘integrated’ format with an organised panel discussion, similar to Special Focus Sessions.
Places are allocated on a first-come, first-served basis. Please refer to pages 117–141 for the programme of the sessions.

REGISTRATION OPENING HOURS
Tuesday, February 28: .................... 12:00–18:00
Wednesday, March 1: ..................... 07:00–18:00
Thursday, March 2: ....................... 07:30–18:00
Friday, March 3: .......................... 07:30–18:00
Saturday, March 4: ....................... 07:30–18:00
Sunday, March 5: ........................ 07:30–16:00

RESTAURANT RESERVATIONS
Our staff at the Dining & Shopping Desk in the entrance hall will be pleased to recommend places to eat close to your hotel or near a certain theatre, and will be happy to reserve a table for you.

RISING STARS LOUNGE / RESIDENTS & STUDENTS LOUNGE
The ESOR & Rising Stars Lounge for residents and students is located on the entrance level of the M Building. In the lounge you will find information on the European School of Radiology, the European Diploma of Radiology and the Radiology Trainees Forum.
Don’t miss the Meet & Greet Session with ESR President Paul M. Parizel (Thursday, March 2, 13:30–13:50).

RISING STARS PROGRAMME
The E³ – Rising Stars Programme is part of the E³ – European Excellence in Education programme. See pages 85–90.

SATELLITE SYMPOSIA
Industrial Satellite Symposia are presented by international companies. Please note that Satellite Symposia are no longer CME-accredited. Places are allocated on a first-come, first-served basis. See separate booklet for details.

SCIENTIFIC PRESENTATION AWARDS
The authors of the best scientific papers and scientific/educational exhibits will be presented with a certificate and given free ECR 2018 registration.

Scientific Papers: The award will be assigned to the best paper presentation of each topic based on the evaluation by session moderators and subcommittee members. Selection criteria comprise quality of presentation, scientific content and overall impression of the performance.
The award winners will be informed after the congress and will be published on the ESR website.

Scientific/educational exhibits: The EPOS reviewer team and the scientific subcommittee members evaluate all submitted posters. Authors of the best-rated posters will receive diplomas, which will be awarded on Friday, March 3, 09:30 in the ECR Online & EPOS Lounge.

SCIENTIFIC SESSIONS
Accepted papers for oral presentation are presented in the Scientific Sessions. Places are allocated on a first-come, first-served basis. Please refer to pages 117–141 for the programme of the sessions.

SECURITY / SAFETY
The safety of all congress attendees is of utmost importance to the European Society of Radiology. The Austria Center Vienna and the ESR have taken security precautions to ensure the maximum possible safety for all ECR participants. Please inform our staff, especially our room attendants, immediately if security problems occur. The ESR reserves the right to check your identification upon admission to the congress centre and/or inside the building. You may be asked at any time to present adequate proof of identity by showing your passport, driver’s licence, national or military identification, or student ID, all with photograph and signature.

SMOKING
Smoking is not permitted inside the Austria Center Vienna. The ECR is a non-smoking congress. Outside the building, we kindly ask you to use the ashtrays provided. Please note that smoking is prohibited in front of the main entrance.

SOCIAL MEDIA
The official congress hashtag for Twitter and Instagram is #ECR2017.
SOCIETY BOOTHS
More than 50 national and international radiological societies present their meetings and societies in the society booths area, which is located on the entrance level, next to the registration desks and the coat checks.

SPECIAL ASSISTANCE
Delegates with special needs may park on the lower level with direct elevator access to the Austria Center. All lecture rooms are accessible by wheelchair.

SPECIAL FOCUS SESSIONS
Special Focus Sessions deal with a topic at the cutting edge of development and clinical application. The topics of these sessions are presented so as to promote debate and to give an in-depth analysis. The chairman introduces each aspect of the topic and the panellists then discuss their different perspectives and opinions. The audience is also given the opportunity to discuss their ideas with the lecturers. Places are allocated on a first-come, first-served basis. Please refer to pages 71–75 for the programme of the sessions.

STATE OF THE ART SYMPOSIA
These sessions are intended to inform the audience about the ‘real state of the art’ of a given subject. Each of the lecturers is an expert on the topic as a whole or on some specific aspect of the topic, which will be the subject of the respective session. The presentations are followed by a discussion conducted by the panellists, led by the chairman. Places are allocated on a first-come, first-served basis. Please refer to pages 69–70 for the programme of the sessions.

STUDENTS’ SESSIONS
At ECR 2017, students have again the chance to present their own abstracts in front of a huge audience. The submitters of the best 32 abstracts have been invited to Vienna to present their work in dedicated sessions. See pages 88–89.

TECHNICAL EXHIBITION
Opening hours:
EXPO Halls and EXPO Foyer D
Thursday, March 2 to Saturday, March 4: ........................ 10:00–17:00
Sunday, March 5: ............................................. 10:00–14:00

EXPO Gallery (First Level)
Wednesday, March 1: ................................. 14:00–17:00
Thursday, March 2 to Saturday, March 4: ........................ 10:00–17:00
Sunday, March 5: ............................................. 10:00–15:30

Detailed information on the Technical Exhibition can be found in the ‘Industry Programme & On-Show Guide’.

TRAVEL SERVICE
The ESR and ECR are proud to offer their delegates services that should facilitate their travel arrangements and make their stay in Vienna as pleasant as possible. The ESR’s Travel Service Desk is located in the entrance hall of the Austria Center Vienna.
Opening hours:
Tuesday, February 28: .............................. 12:00–18:00
Wednesday, March 1 to Saturday, March 4: ........................ 08:00–17:30
Sunday, March 5: ............................................. 08:00–12:00

VOICE OF EPOS SESSIONS
Authors of the best posters will present their work in person. Sessions are grouped by topic or language/region, and take place on three different stages in and around the ECR Online & EPOS Lounge on the 1st level (Floor Plan page 28). Please refer to pages 109–115 for the programme of the sessions.

WIRELESS LAN
Free wireless LAN access is available throughout the congress venue and all lecture rooms. The name of the public WiFi is ‘ECR2017’.

TAXI
There is a taxi stand outside the main entrance.
CME AT ECR 2017

GENERAL INFORMATION

Europe
Each ECR delegate has access to confirmation of all activities attended (CME Confirmation and Record of Attendance). For Europe, the event has been accredited by the UEMS-EACCME and it is possible to claim up to 28 CME credits. Please note that this number may differ from the maximum number of credits your national jurisdiction approves for your continuous medical education. For more information, see CME CONFIRMATION.

The Österreichische Ärztekammer (Austrian Medical Chamber) has granted a maximum of 40 DFP (Diplom-Fortbildungs-Programm der Österreichischen Akademie der Ärzte) credits for ECR 2017.

USA and Canada
Based on the agreements on the mutual recognition of credits between the AMA (American Medical Association), RCPSC (Royal College of Physicians and Surgeons of Canada) and the UEMS-EACCME, American and Canadian physicians attending an event in Europe will have their credits converted to AMA PRA Category 1 in the USA and MOC Section 1 in Canada.

Worldwide
CME points claimed at the ECR are accepted by the majority of national CME authorities worldwide where CME is mandatory for physicians. Please consult your national jurisdiction for the maximum number of CME points it will approve following your attendance at ECR 2017.

CME ACQUISITION PROCEDURE

The ESR is happy to provide you with a fully digital CME acquisition system for ECR 2017. Please note that we no longer provide printed CME stickers.

Evaluation and CME acquisition will be possible via

» The official ECR app, ECR 2017, available via the App Store (iOS) and Google play (Android)
» More than 130 laptops in the ECR Online & EPOS Lounge located on the 1st level
» The CME & Evaluation terminals located on the 1st level

Please note that evaluation of the sessions is only possible March 1–6, 2017. No evaluation is possible after this date and no CME credits can be obtained. So please make sure to submit your evaluations of the sessions during the congress!

CME credits will only be awarded if

» You are logged into http://eval.myESR.org with your username (last name) and Personal ID (printed on your badge)
» You have fully completed the electronic questionnaire for each session

The combined participation and evaluation questionnaire is of great value to the organising committee when selecting topics for future ECRs. Evaluation forms differ depending on the type of scientific event.
CMEASY
The ESR is always proud to introduce new technology. When you arrive at the congress venue, please pick up a bluetooth ‘tag’ in the entrance hall and attach it to your badge. With a personalised tag (personalisation is possible at the CMEasy counters in the entrance hall), we can track which sessions you attend, meaning you can claim CME credits in the easiest way possible – automatically! Shortly after leaving a lecture room, we will send you an email confirming your attendance and granting your CME credits. For more information, visit myESR.org

GUIDANCE
Confirmation of participation in the scientific programme may be obtained as follows:

Scientific Sessions
1. Attend the session.
2. Log in to http://eval.myESR.org or use the ECR 2017 app to evaluate the session.
3. Fill out this form completely during or after the session.

If you do not have a smartphone, tablet or laptop with you, please visit one of the locations mentioned above and evaluate the session(s) you visited on one of the CME & Evaluation terminals there.

Scientific Exhibition
1. Enter EPOS™ (Electronic Presentation Online System) on one of the 130 laptops in the ECR Online & EPOS™ Lounge and view posters.
2. Log in to http://eval.myESR.org or use the ECR 2017 app to evaluate the session.
3. Fill out this form completely after visiting the electronic scientific exhibition.

A maximum of 3 hours of attendance at the scientific exhibition will be listed if the participant has completed and submitted the online evaluation form.

CME CONFIRMATION
Each ECR delegate has access to confirmation of all activities attended (CME Confirmation and Record of Attendance) on the condition that the above procedures have been carried out. After the congress, delegates can go online any time to the MyUserArea and print out their ‘CME Confirmation’ sheet. This sheet lists in exact detail all the sessions visited and evaluated during the congress as well as the number of hours attended. The number of hours is identical to the number of CME credits awarded. If you tally the listed hours yourself and there is a discrepancy to the ‘Total hours earned’ position, this may have several reasons.

The UEMS-EACCME has accredited the ECR congress with a maximum of 28 CME credits. According to its regulations, a maximum of 6 CME credits may be awarded per day. So if you attend 8 hours of sessions on a given day this will be listed on your ‘CME Confirmation’ sheet though only 6 credits will be calculated into your total. The maximum for the entire congress is 28 CME credits, so the ‘Total hours earned’ position on your ‘CME Confirmation’ sheet will never show more, even if the sum of all hours attended may be greater.

Please note that there are 0 CME points for industry workshops and satellite symposia, though they are also listed in the ‘CME Confirmation’ sheet. Although participants may partially attend multiple concurrent sessions, the total number of hours printed at the end of the list limits the credit to the equivalent of a single session during that time slot.

This service will be available from March 7 onwards via the MyUserArea on the ESR website.

Please note that your Personal ID, which is printed on your badge, is required for login.

The printout of your record should be submitted to your national jurisdiction (usually responsible for accreditation) for approval of your CME points. Please note that the record of attendance will be issued only to the participant. It will not be supplied to any accreditation agency or other organisation.

For further information, please contact ECR CME Support at cme@myESR.org.
OPENING CEREMONY
Wednesday, March 1
17:45–19:00, Room A

PAUL M. PARIZEI
Antwerp/BE
ESR PRESIDENT

PRESENTATION OF HONORARY MEMBERSHIP
Richard L. Baron; Chicago, IL/US
James A. Brink; Boston, MA/US
Gloria Soto Giordani; Santiago/CL

PRESENTATION OF GOLD MEDALS
José Ignacio Bilbao; Pamplona/ES
Guy Frija; Paris/FR
Stephen J. Golding; Oxford/UK

GUEST LECTURE
BREAKING NEWS FROM LATIN AMERICA
How to recognise Zika virus infections on imaging studies [A-070]

Wednesday, March 1
12:15-12:45, Room B

MARIA DE FÁTIMA VASCO ARAGÃO
Recife, PE/BR

WILHELM CONRAD RÖNTGEN HONORARY LECTURE
Dissatisfaction, burnout and inequality: three major challenges in radiology [A-261]
Thursday, March 2
12:15–12:45, Room A

MAURICIO CASTILLO
Chapel Hill, NC/US

JOSEF LISSNER HONORARY LECTURE
The future of CT: from hardware to software [A-465]
Friday, March 3
13:00–13:30, Room A

MATHIAS PROKOP
Nijmegen/NL

ARTHUR DE SCHEPPER HONORARY LECTURE
From features to function: breakthroughs in breast imaging [A-682]
Saturday, March 4
12:15–12:45, Room A

FIONA J. GILBERT
Cambridge/UK
ESOR TEN-YEAR ANNIVERSARY SESSION
Friday, March 3 12:15–13:00, Room A

» Introduction [A-458]
P.M. Parizel; Antwerp/BE

» Ten years of ESOR [A-459]
N. Gourtsoyiannis; Athens/GR

» How did ESOR influence my professional development [A-460]
O. Abeyakoon; Cambridge/UK

» Teaching in ESOR: tutoring scholars and fellows [A-461]
C. Loewe; Vienna/AT

» Celebration

EUROPEAN RADIOLOGY 25TH ANNIVERSARY SESSION
Friday, March 3 16:00–17:30, Room Z

Moderators:
MAXIMILIAN F. REISER Munich/DE
ALBERT L. BAERT Leuven/BE
ADRIAN K. DIXON Cambridge/UK

IMAGE INTERPRETATION QUIZ
There’s a patient behind every interesting case
Friday, March 3 14:00–15:30, Room A

Moderator:
JOSÉ M. GARCÍA SANTOS Murcia/ES

JUNIOR IMAGE INTERPRETATION QUIZ
Building our youth for the future
Saturday, March 4 12:55–13:55, Room A

Moderator:
ANNEMIE SNOECKX Antwerp/BE
FLOOR PLANS
0 – ENTRANCE LEVEL ACV + M BUILDING
1 – FIRST LEVEL

ACV

Floor Plans

BAYER
Industry Workshop
Room 1.61-62

Meeting Room 1.85
Meeting Room 1.86

EVALUATION & CME TERMINALS

EUROSAFE IMAGING
CAFE
PREVIEW CENTRE

Room
STUDIO 2017

ECR ONLINE &
EPOST™ LOUNGE
FUTURE MEETINGS

Voice of EPOST™ Stages 1 & 2

Voice of EPOST™ Stage 3

Room
L8

Room
O

Room
N

EXPO GALLERY

BROADCAST ZONE

BROADCAST ZONE
All purple Rooms on this level - with the exception of Room M1 - are Meeting Rooms.
1 - FIRST LEVEL M BUILDING

- Room M4
- Room M2
- Room M3

Broadcast Zone
2 – SECOND LEVEL M BUILDING

Room M5

BROADCAST ZONE
ESR
DIGNITARIES
ESR DIGNITARIES

RICHARD L. BARON
Chicago, United States
HONORARY MEMBER

In recognition of his contribution to the advancement of liver imaging and his commitment to research and education, Professor Richard L. Baron from Chicago, United States, will receive ESR Honorary Membership at ECR 2017.

Richard L. Baron is professor and chair emeritus of radiology at the University of Chicago, where he also previously served as dean for clinical practice. He is the immediate past president of the Radiological Society of North America (RSNA).

Prof. Baron completed his undergraduate education at Yale University with a cum laude award and graduated from Washington University (WU), St. Louis School of Medicine. He completed his training in internal medicine at Yale University and his residency in radiology at the Mallinckrodt Institute of Radiology at WU. He later served as chairman of the department of radiology at the University of Pittsburgh.

His research interests are liver and biliary imaging, and he has authored more than 150 publications, 28 book chapters and one book. He has served as a visiting professor at more than 50 institutions, and has delivered numerous named lectures, including the Wilhelm Conrad Röntgen Lecture at ECR 2011.

Prof. Baron has also served as associate editor for Radiology and Liver Transplantation, and served in leadership roles for many radiology societies.

He and his generation were the first physicians to work with modalities like CT, which at the time required extensive research. Later on he also took roles in education, and has now focused his attention on patient care and teaching the new generation of radiologists.

Prof. Baron has received the Walter Cannon Medal from the Society of Abdominal Radiology, the Gold Medal of the Asian Oceanian Society of Radiology, and honorary fellowship of the European Society of Abdominal and Gastrointestinal Radiology.

At ECR 2017, Richard L. Baron will be awarded Honorary Membership of the European Society of Radiology.

JAMES A. BRINK
Boston, United States
HONORARY MEMBER

In recognition of his outstanding achievements in imaging and radiation protection, Professor James A. Brink from Boston, MA, United States, will be presented with ESR Honorary Membership at ECR 2017.

James A. Brink is radiologist-in-chief at Massachusetts General Hospital (MGH), Boston, and the Juan M. Taveras professor of radiology at Harvard Medical School.

Prof. Brink received his medical degree from Indiana University and completed his radiology residency and fellowship at MGH in 1990.

He joined the faculty at the Mallinckrodt Institute of Radiology, Washington University School of Medicine in St. Louis, where he rose to the rank of associate professor, and he served as chair of the department of diagnostic radiology at Yale University from 2006 to 2013 before returning to MGH.

His work focuses on utilisation and management of imaging resources, and monitoring and control of medical radiation exposure.

Prof. Brink currently serves as scientific vice-president for radiation protection in medicine on the National Council on Radiation Protection and Measurements and vice-chair of the nuclear and radiation studies board for the National Academies of Sciences, Engineering and Medicine. He is also past-president of the American Roentgen Ray Society and currently serves as chair of the board of chancellors for the American College of Radiology.

Prof. Brink has written more than 140 publications and given more than 270 presentations all over the world.

At ECR 2017, James A. Brink will be awarded Honorary Membership of the European Society of Radiology.
GLORIA SOTO GIORDANI
Santiago, Chile
HONORARY MEMBER

In recognition of her contribution to paediatric imaging and her involvement in the advancement of the field, especially in Latin America, Professor Gloria Soto Giordani from Santiago, Chile, will be awarded ESR Honorary Membership at ECR 2017.

Prof. Gloria Soto Giordani is a paediatric radiologist at the German Hospital in Santiago, having previously headed the department of radiology of Roberto del Río Children’s Hospital in the same city.

She graduated with the best graduate award from the Pontifical Catholic University of Chile. After completing her residency in radiology at Roberto del Río Children’s Hospital, she did a one-year fellowship at the Hospital for Sick Children in Toronto, Canada.

Back in Chile, Prof. Soto played an active role in the implementation of paediatric ultrasound in her country. Her main fields of interest are whole-body imaging, paediatric ultrasound and foetal MRI.

She took on the role of president of the World Federation of Pediatric Imaging (WFPI) in 2016, and she has also served as a consultant to the World Health Organization, filling in as an invited speaker during the 68th World Health Assembly side event ‘Imaging for Saving Kids – the Inside Story about Patient Safety in Paediatric Radiology’.

Prof. Soto has also served as president of the Chilean Society of Radiology, the Latin American Society of Paediatric Radiology and the Inter American College of Radiology, where she is currently Director of Education. She sits on the executive committee of LatinSafe, an initiative to promote imaging safety in the region.

Prof. Soto has lectured in most Latin American countries, and at the ECR, RSNA and international paediatric radiology meetings. She has published numerous papers and authored or co-authored six books.

At ECR 2017, Gloria Soto Giordani will be awarded Honorary Membership of the European Society of Radiology.

JOSÉ IGNACIO BILBAO JAUREGUIZAR
Pamplona, Spain
GOLD MEDALLIST

In recognition of his pioneering contribution to the advancement of interventional radiology, Professor José Ignacio Bilbao Jaureguizar, from Pamplona, Spain, will be awarded the ESR Gold Medal at ECR 2017.

José Ignacio Bilbao Jaureguizar is professor of radiology, head of interventional radiology, and a consultant radiologist at the University Clinic of Navarra (UCN), where he was also previously chairman of the radiology department.

Prof. Bilbao received his medical degree from the medical faculty of Navarra University and completed his residency in radiology at UCN. He trained in interventional radiology at MD Anderson Cancer Center in Houston, United States, and received his PhD with a cum laude award from Navarre University.

His research interests are portal hypertension, gene therapy, and percutaneous treatment of tumours, including chemotherapy and embolisation, especially in liver tumours. He is very actively involved in research to this day. Prof. Bilbao is also working together with the Engineers School at Navarra University on fluid dynamics and the distribution of radioembolisation particles based on computational models.

Prof. Bilbao is a co-founding member and past-president of the Spanish Society of Vascular and Interventional Radiology. He has served as congress co-chairman of the Cardiovascular and Interventional Radiological Society of Europe (CIRSE) and as a member of its executive committee.

He has authored close to 200 publications and 40 book chapters, and sits on several editorial boards. He has received the Gold Medal of the Spanish Society of Radiology and the Gold Medal of CIRSE.

Prof. Bilbao has served at many levels within the ESR – he was notably a member of the Executive Committee of the European Association of Radiology, the precursor to the ESR –, and was Congress President of ECR 2013. At ECR 2017, José Ignacio Bilbao Jaureguizar will receive the Gold Medal of the European Society of Radiology.
GUY FRIJA
Paris, France
GOLD MEDALLIST

In recognition of his lifelong achievements in radiology and work in radiation protection, Professor Guy Frija from Paris, France, will receive the ESR Gold Medal at ECR 2017.

Guy Frija is professor emeritus of radiology and consultant at the imaging department of Paris Georges Pompidou European Hospital (GPEH), where he has previously served as chairman. He is also a part-time professor of radiology at the faculty of health sciences of McMaster University in Ontario, Canada.

Prof. Frija is a recognised expert in thoracic imaging and contrast products and has also helped to introduce information technologies to daily radiological practice. Recently, his main area of research has been radiation protection and he has cooperated in the establishment of guidelines and protocols in France.

He is a member of the scientific committee of the Institute for Radiological Protection and Nuclear Safety, co-chair of the imaging section of MEDICEN, a French business cluster specialising in biomedical engineering, and chair of the steering committee of EuroSafe Imaging.

Prof. Frija has served in many leadership roles, notably as president of the European Society of Radiology from 2013 to 2014. He has also presided over the French Society of Radiology for 12 years, turning it into the most important scientific society in France, and the International Society for Strategic Studies in Radiology in 2007.

He was advisor to the French Ministry of Health for the deployment of PACS in the country and is a former IAEA consultant.

Prof. Frija is Doctor Honoris Causa of the University of Montreal, and an honorary fellow of several radiological societies. He was appointed Knight of the French Order of the Legion of Honour in 2001.

He has published more than 175 papers in peer-reviewed journals and co-written 30 books.

At ECR 2017, Guy Frija will be awarded the Gold Medal of the European Society of Radiology.

STEPHEN J. GOLDFING
Oxford, UK
GOLD MEDALLIST

In recognition of his major contribution to radiology, especially in the fields of oncology and education, and more recently radiation protection, Professor Stephen J. Golding from Oxford, UK, will be presented with the ESR Gold Medal at ECR 2017.

Stephen J. Golding is a radiology fellow at Oxford University College, having previously served as lecturer and chairman of radiology at Oxford University Hospitals.

Prof. Golding received his medical degree from London University and, after training in surgery, he completed his residency in general radiology at Guy’s Hospital. He became senior research fellow to Prof. Dame Janet Husband at the UK Institute of Cancer Research, to work on the then new technique of CT. His special interests at the institute included paediatric and head and neck tumours, and his main interest throughout his career has been oncology imaging.

Like many radiologists of his generation working with CT, he was also invited to plan, design and commission the local services for MRI when it became generally available. He was Oxford MRI Centre’s director for five years between 1989 and 1994.

Prof. Golding was appointed a fellow at University College in 1988 and was postgraduate tutor for radiology in the Oxford Health Region from 1990. He notably co-created the university’s first Master’s course in radiology and has personally supervised more than 80 students taking higher degrees in radiology.

Recently he has been busy with contributions to establish national and international undergraduate curricular standards for radiology. He chaired the Royal College of Radiologists’ working party on undergraduate education from 2003 to 2005 in the UK, and led the new ESR initiative on undergraduate radiology for six years until last year.

Prof. Golding has also served as president of the British Institute of Radiology, the UK Congress of Radiology and the European Society of Head and Neck Radiology.

At ECR 2017, Stephen J. Golding will receive the Gold Medal of the European Society of Radiology.
MARIA DE FÁTIMA VASCO ARAGÃO
Recife, Brazil
GUEST LECTURER

In recognition of her major achievements in neuroimaging and advancement of the field, Professor Maria de Fátima Vasco Aragão from Recife, Pernambuco, Brazil, will present the Guest Lecture at ECR 2017.

Maria de Fátima Vasco Aragão is professor of radiology at the Mauricio de Nassau University and Scientific Director of the Multimagem Diagnostic Centre in Recife, Brazil. She is also financial director of the Diagnostica Endoscopy and Radiology Clinic in Recife.

Prof. Vasco Aragão received her medical degree from Pernambuco Federal University in 1987 and completed her residency in radiology at Ribeirão Preto Faculty of Medicine, University of São Paulo. She did fellowships in CT and MRI and in neuroradiology at the Med Imagem Beneficencia Portuguesa, São Paulo, and later completed a research fellowship at Mount Sinai Hospital Center in New York, US.

Prof. Vasco Aragão’s main interest is neuroimaging and she completed her PhD in neuroscience at Pernambuco Federal University in Recife in 2010. She is a founding member of the Brazilian Society of Neuroradiology and a member of many radiology societies, including the American Society of Neuroradiology.

Recently most of her research has focused on the use of radiology techniques to help diagnose microcephaly, caused by Zika virus infection.

Prof. Vasco Aragão served as president of the Pernambuco Radiology Society from 2014 to 2016, being recently re-elected for the 2016-18 term. She has received various awards and distinctions for her work.

At ECR 2017, Maria de Fátima Vasco Aragão will present the Guest Lecture, titled ‘Breaking News from Latin America: How to recognise Zika virus infections on imaging studies’.

MAURICIO CASTILLO
Chapel Hill, United States
HONORARY LECTURER

In recognition of his significant impact on the field of neuroimaging and his service to organised radiology, Professor Mauricio Castillo from Chapel Hill, NC, United States, has been invited to deliver the Wilhelm Conrad Röntgen Honorary Lecture at ECR 2017.

Mauricio Castillo is the James H. Scatliff distinguished professor of radiology, chief and programme director of neuroradiology at the University of North Carolina in Chapel Hill. He is currently president of the American Roentgen Ray Society.

Originally from Guatemala, Prof. Castillo completed his radiology and neuroradiology training at the University of Miami School of Medicine, Jackson Memorial Medical Center, and Emory University School of Medicine, Affiliated Hospitals in Atlanta respectively.

Prof. Castillo’s research interests include paediatric neuroradiography, application of new imaging techniques and medical literature editing.

He has authored more than 640 articles and 27 books including the famous Neuroradiology Companion, a reference work covering the fundamentals of neuroradiology for residents, fellows and practitioners, now in its fifth edition. He has delivered more than 1,000 invited lectures all over the world.

Today Prof. Castillo continues to work in clinical research with innovative techniques, especially MRI.

He has served as president of the American Society of Neuroradiology and is editor emeritus of the American Journal of Neuroradiology. He is a fellow of the American College of Radiology and a founding member of the American Society of Pediatric Neuroradiology (ASPNR), which he has also served as chair of the Research Committee and Education Committee.

At ECR 2017, Mauricio Castillo will present the Wilhelm Conrad Röntgen Honorary Lecture, titled ‘Dissatisfaction, burnout and inequality: three major challenges in radiology’.
ESR Dignitaries

FIONA J. GILBERT
Cambridge, UK
HONORARY LECTURER

In recognition of her contribution to cancer imaging and passionate work in education and research, Professor Fiona J. Gilbert from Cambridge, UK, has been invited to deliver the Arthur de Schepper Honorary Lecture at ECR 2017.

Fiona J. Gilbert is professor of radiology and head of the department of radiology at Cambridge University. She is also an honorary consultant radiologist at Addenbrooke’s Hospital in Cambridge and previously served as head of the Aberdeen Biomedical Imaging centre at the University of Aberdeen.

Prof. Gilbert is primarily interested in imaging breast cancer, and more specifically multimodal functional imaging of the tumour microenvironment in breast cancer to map the tumour genetic profile. She is also very interested in assessing new imaging technologies, especially related to breast cancer and in oncology generally.

Over the last ten years, Prof. Gilbert has been awarded grants in excess of £33m from the Medical Research Council, the Engineering & Physics Research Council, the British National Institute for Health Research (NIHR) Health Technology Assessment Board, and Cancer Research UK.

She is responsible for radiology research and radiological undergraduate teaching at Cambridge University.

Prof. Gilbert has authored more than 180 peer-reviewed publications, six book chapters and many conference abstracts.

She has worked to advance the discipline at the national level and is the immediate past chair of the academic committee of the Royal College of Radiologists. She has also served in leadership roles for various organisations, including the UK National Cancer Research Institute Imaging Advisory Group.

Prof. Gilbert is a regular speaker at international radiology conferences including the European Congress of Radiology, the annual meeting of the European Society of Breast Imaging and the Radiological Society of North America meeting.

At ECR 2017, Fiona J. Gilbert will present the Arthur de Schepper Honorary Lecture, titled ‘From features to function: breakthroughs in breast imaging’.

MATHIAS PROKOP
Nijmegen, the Netherlands
HONORARY LECTURER

In recognition of his achievements in new imaging technologies, particularly in cardiovascular and thoracic applications, Professor Mathias Prokop from Nijmegen, the Netherlands, has been invited to deliver the Josef Lissner Honorary Lecture at ECR 2017.

Mathias Prokop is head of the department of radiology and nuclear medicine at Radboud University Nijmegen and professor of radiology at UMC Utrecht, the Netherlands.

Prof. Prokop received his bachelor of science in physics from Philipps-Universität Marburg and trained as a radiologist at Hanover Medical School in Germany. In 1998 he was appointed associate professor of radiology at the University of Vienna Medical School, Austria.

His main research interests are body imaging with a special focus on multislice CT and new imaging technologies in cardiovascular and thoracic applications.

Prof. Prokop has authored more than 250 articles in peer-reviewed scientific journals, 50 book chapters, 300 scientific abstracts, and 300 invited lectures. He has also published a textbook on spiral and multislice CT of the body.

He has served on several industry advisory boards and scientific committees, and has served as vice chairman of the Dutch Radiological Society.

At ECR 2017, Mathias Prokop will present the Josef Lissner Honorary Lecture, titled ‘The future of CT: from hardware to software’.
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EUROPEAN EXCELLENCE IN EDUCATION (E3)
E3 – Rising Stars Programme .............................................................................
M. Szczepan-Trójanowska; Lublin/PL

E3 – European Diploma Prep Sessions ............................................................... B. Ertl-Wagner; Munich/DE
E3 – ECR Academies
Tips and Tricks in Liver, Bile Ducts and Pancreas Imaging .................................. Y. Menu; Paris/FR
Spinal Imaging .................................................................................................... E. Llopis; Valencia/ES,
Neuroradiology: from Morphology to Function ................................................. L. van den Hauwe; Antwerp/BE
Multiparametric Ultrasound (MPUS) ................................................................ G.H. Mostbeck; Vienna/AT
Interactive Teaching Sessions for Young (and not so Young) Radiologists .......... M.G. Mack; Munich/DE

CASAS OF THE DAY ...........................................................................................
M. Sánchez; Barcelona/ES

IMAGE INTERPRETATION QUIZ ......................................................................
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JUNIOR IMAGE INTERPRETATION QUIZ .........................................................
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**MINI COURSE**

**Joint Course of ESR and RSNA**
(Radiological Society of North America): Hybrid Imaging
- A. Drzezga; Cologne/DE
- K. Riklund; Umeå/SE

**MULTIDISCIPLINARY SESSIONS**

Bone tumours: A.M. Davies; Birmingham/UK
Virtual autopsy imaging the role of pathologist vs radiologist: one big happy family?: C. Owens; London/UK
Brain malfunction: MRI and PET in the diagnosis of psychiatric disorders: T.A. Yousry; London/UK
Transcatheter aortic valve implantation: A. Cribier; Rouen/FR

**PROS AND CONS SESSION**

Providing an effective ultrasound service: L. Derchi; Genoa/IT

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**WEDNESDAY, MARCH 1**

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<th>Room/Time</th>
<th>A 2nd Level (ACV)</th>
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<tr>
<td>08:30-09:00</td>
<td>E¹ 121 E¹ - ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists Emergency radiology I</td>
<td>RC 101 GI Tract Assessing inflammation and fibrosis in Crohn’s disease</td>
<td>RC 104 Chest Pneumonia</td>
<td>WG 1 ESR Working Group on Ultrasound Ultrasound of the lung parenchyma: a diagnostic tool for the paediatric radiologist or for the clinician?</td>
<td>SF 1 Special Focus Session Assessing age, based on bone maturation: scientific and ethical aspects</td>
<td>RC 108 Head and Neck Head and neck imaging: don’t sell your ultrasound yet!</td>
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<td>09:00-09:30</td>
<td>E¹ 221 E¹ - ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists MR imaging in sports medicine I</td>
<td>SS 201a Abdominal Viscera Hepatocellular carcinoma (HCC): detection, characterisation and therapeutic response</td>
<td>SS 201b GI Tract Rectal cancer: response assessment and diagnostic biomarkers</td>
<td>SS 215 Vascular Blood flow assessment/ experimental</td>
<td>SS 209 Interventional Radiology Oncological embolisation</td>
<td>SS 204 Chest Lung cancer: from diagnosis to prognosis</td>
<td>SS 207 Genitourinary Kidney and urinary tract I</td>
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<td>09:30-10:00</td>
<td>E¹ - ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists MR imaging in sports medicine I</td>
<td>SS 201a Abdominal Viscera Liver: advances in CT and MRI</td>
<td>SS 201b GI Tract Imaging of the colon and pelvic floor</td>
<td>SS 215 Vascular Carotid / cerebrovascular imaging</td>
<td>SS 309 Interventional Radiology Radioprotection in interventional radiology (IR)</td>
<td>SS 304 Chest Interstitial lung disease (ILD) and COPD: quantification and function</td>
<td>SS 307 Genitourinary Kidney and urinary tract II</td>
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**17:45–19:00 Room A:** Opening Ceremony / Presentation of Honorary Membership / Presentation of Gold Medals

**Registration:** Tuesday, February 28: 12:00–18:00 / Wednesday, March 1: 07:00–18:00
**WEDNESDAY, MARCH 1**

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<td>RC 111 Neuro Management of acute stroke</td>
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<td>Basic Session 1 E* - Rising Stars Programme Neuroradiology</td>
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<td>RC 110 Musculoskeletal The elbow: a comprehensive approach</td>
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<td>RC 114 Radiographers MRI technology and techniques</td>
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**Technical Exhibition**: EXPO Gallery (First Level): 14:00-17:00

ECR Online & EPOS™ Lounge / EPOS™ - Scientific Exhibition: 08:00-18:00

* Not CME accredited

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**WEDNESDAY, MARCH 1**

**Programme Overviews**

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**Programme Overviews**

**Technical Exhibition**: EXPO Gallery (First Level): 14:00-17:00

ECR Online & EPOS™ Lounge / EPOS™ - Scientific Exhibition: 08:00-18:00

* Not CME accredited
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<thead>
<tr>
<th>Time</th>
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<tr>
<td>08:30</td>
<td>A</td>
<td>E1 521 E-ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists Integrating diagnostic tools in breast imaging</td>
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<td>E1 526a E-ECR Masterclass The obesity epidemic: what is radiology’s role?</td>
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<td>A</td>
<td>SS 601a Abdominal Viscera Focal liver lesions: characterisation and therapeutic response</td>
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<td>10:00</td>
<td>A</td>
<td>SS 601b GI Tract New insights into inflammatory bowel disease</td>
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<td>A</td>
<td>SS 609 Interventional Radiology Urgent interventions</td>
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<td>11:00</td>
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<td>SS 604 Chest Pulmonary nodules and screening</td>
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<td>SS 607 Genitourinary Malignant urogenital system I</td>
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<td>SY 5 Satellite Symposium*</td>
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<td>SY 8 Satellite Symposium*</td>
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<td>SS 701a Abdominal Viscera Benign and malignant pancreatic disease: advances in imaging</td>
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<td>SS 701b GI Tract Bowel imaging: inflammation, obstruction and beyond</td>
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<td>Student Session 1 E1: Rising Stars Programme Gastro -</td>
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<td>SS 709 Interventional Radiology Non-vascular interventions</td>
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<td>SS 704 Chest Pulmonary vessels and perfusion</td>
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<td>SS 707 Genitourinary Prostate cancer: diagnosis, imaging and PIRADS scoring</td>
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<td>Joint Session of the ESR and EERS Novel strategies in idiopathic interstitial pneumonia</td>
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<td>SS 708 Head and Neck Temporal bone imaging: hearing loss and vestibular symptoms</td>
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<td>RC 808 Head and Neck Pitfalls in interpretation of head and neck disease</td>
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<td>RC 807 Genitourinary Imaging of the prostate</td>
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<td>EU 3 EuroSafe Imaging Session European Alliance for Medical Radiation Protection Research (EURAMED)</td>
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<td>E3-ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists (for the general radiologist)</td>
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<td>SF 8 Special Focus Session The post-operative abdomen: lost in translation?</td>
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<td>RC 804 Chest CT - patterns in chest radiology: back to basics and beyond</td>
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<td>Joint Session of the ESR and EORTC Imaging biomarker education for multicentre clinical oncological trials</td>
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<td>WG 4 ESR Working Group on Ultrasound Minimising the risk of cross-infection: how to keep patients safe in ultrasound</td>
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<td>PC 8 ESR Working Group on Ultrasound Simulation training in ultrasound</td>
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<td>RC 808 Head and Neck Pitfalls in interpretation of head and neck disease</td>
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<td>RC 807 Genitourinary Imaging of the prostate</td>
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<td>SF 8 Special Focus Session The post-operative abdomen: lost in translation?</td>
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<td>EU 3 EuroSafe Imaging Session European Alliance for Medical Radiation Protection Research (EURAMED)</td>
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**Registration:** 07:30–18:00

ECR Online & EPOS® Lounge / EPOS® – Scientific Exhibition: 08:00–18:00

**ECR Online & EPOS® Lounge / EPOS® – Scientific Exhibition:**

**Thursday, March 2**

**Programme Overviews**
## THURSDAY, MARCH 2

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<td>VoE 8 / Stage 1 Endovascular therapy</td>
<td>ESR Audit and Standards Session: How (Euro) safe is your department?</td>
<td>E1® - ECR Academies: Interventional Radiology: Introduction to percutaneous interventional procedures, a practical guide</td>
<td>VoE 9 / Stage 1 Arterial (ECR)</td>
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<td>VoE 10 / Stage 1 Arterial</td>
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<td>VoE 39 / Stage 2 Physics in Radiology</td>
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<td>RC 215 Computer Applications: Daily use of mobile devices in radiotherapy</td>
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<td>RC 509 Interventional Radiology: Imaging and endovascular treatment of pulmonary embolism</td>
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<td>E1® - ECR Academies: Spinal Imaging</td>
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### Programme Overviews

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<th>G Lower Level (ACV)</th>
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<th>Room/Time</th>
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<td>SF 5a Special Focus Session Stroke, beyond the usual suspects</td>
<td>Basic Session 5 E1 - Rising Stars Programme Head and Neck</td>
<td>RC 516 Oncologic Imaging A multidisciplinary approach to prostate cancer: can we make a difference?</td>
<td>RC 510 Musculoskeletal Musculoskeletal ultrasound in the management of sports injuries</td>
<td>SF 5b Special Focus Session Diffusion-weighted imaging (DWI): from physics to practice</td>
<td>RC 514 Radiographers CT imaging: the role of the radiographer and technological developments</td>
<td>VoE 8 / Stage 1 Endovascular therapy</td>
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<td>VoE 39 / Stage 2 Physics in Radiology</td>
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<td>VoE 10 / Stage 1 Arterial</td>
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### Technical Exhibition

- **Expo Gallery (First Level):** 10:00-17:00
- **Expo Halls and Expo Foyer D:** 10:00-17:00

* Not CME accredited
# TODAY’S HIGHLIGHTS

**Thursday, March 2**

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<td>08:30-09:00</td>
<td>SS 1016a Radiologists Imaging Imaging in prostate cancer</td>
<td>SS 1001 Abdominal Viscera New techniques in abdominal imaging</td>
<td>SS 1004 Breast CT dose reduction and image quality</td>
<td>SS 1007 Genitourinary Male urogenital system II</td>
<td>SS 1016b Oncologic Imaging Hybrid imaging in oncology</td>
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**Registration:** 07:30-18:00

ECR Online & EPOS™ Lounge / EPOS™ – Scientific Exhibition: 08:00–18:00
**FRIDAY, MARCH 3**

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<thead>
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<th>Programme Overviews</th>
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<td><strong>RC 915</strong> Vascular Post-treatment evaluation: what every radiologist should know</td>
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<td><strong>ECR Live &amp; EPOS™ Lounge</strong></td>
<td><strong>EIBIR 2</strong> EU Research in cancer imaging</td>
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<td><strong>RC 906</strong> Molecular imaging: Translational research in molecular imaging: how to do the translation</td>
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<td><strong>E² 919</strong> E² - ECR: Academic: Imaging Spinal imaging: Degenerative cervical spine</td>
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<td><strong>E² 926</strong> E² - ECR: Master Class Multimodality imaging of the acute female pelvis</td>
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**FRIDAY, MARCH 3**

| **SF 12b** Special Focus Session | **EU 6** EuroSafe Imaging Stars |
| Challenges in the diagnosis of acute appendicitis | **PIER Session 3** Professional Issues and Economics in Radiology: Tailoring radiology departments towards patient’s needs |
| **SF 12c** Special Focus Session | **EU 7** Interventional Radiology |
| Reporting the degenerative lumbar spine | **Gadolinium contrast agents: A Yin and Yang story** |
| **SF 12d** Special Focus Session | **EU 8** 1st Level (M Building) |
| Challenges in the diagnosis of acute appendicitis | **PIER Session 2** Professional Issues and Economics in Radiology: Perspectives on radiology equipment management |

**Technical Exhibition:** EXPO Gallery (First Level): 10:00-17:00

**Technical Exhibition:** EXPO Halls and EXPO Foyer D: 10:00-17:00

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* Not CME accredited

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**Programme Overviews**

- **RC 902** Breast Multimodality imaging
- **RC 911** Neuro Cerebrovascular disease
- **SF 9** Special Focus Session The revival of lymphangiography
- **MS 9** Multidisciplinary Session Primary bone tumours
- **EF 1** EPOS Workshop Radiation incidents and accidents in medical imaging and their management (part I)
- **RC 914** Radiographers: Patient safety: professional and clinical responsibility of the radiographer
- **VoE 15** / Stage 1 Interventional CT
- **VoE 45** / Stage 2 Lung: ischaemia and perfusion imaging
- **VoE 75** / Stage 3 Liver and perfusion
- **VoE 46** / Stage 2 Head and Neck
- **VoE 76** / Stage 3 Emergencies
- **VoE 47** / Stage 2 Portugal
- **VoE 77** / Stage 3 Latin America (Portuguese)
- **VoE 48** / Stage 1 China
- **VoE 78** / Stage 3 Asia
- **VoE 49** / Stage 2 Latin America (Spanish)
- **VoE 79** / Stage 3 Italy
- **EM 4** EPOS meets Belgium
- **EU 4** EuroSafe Imaging Session European CT dose repository
- **EU 9** Interventional Radiology: Portal hypertension and interventional radiology (IR)
- **EU 10** Special Focus Session Gaddolinium contrast agents: A Yin and Yang story

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**Room/Time**

- **09:00-10:00**
- **10:30-11:00**
- **11:30-12:00**
- **12:30-13:00**
- **13:30-14:00**
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- **17:00-17:30**

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**www.myESR.org**

**Final Programme | ECR 2017**

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**www.myESR.org**
**TODAY’S HIGHLIGHTS**

**Friday, March 3**

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<tr>
<th>Room A</th>
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<th>ESOR Ten-Year Anniversary Session</th>
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<td>The future of CT: from hardware to software</td>
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<th>Joint Session of the ESR and ESTRO</th>
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<td>Imaging of abdominal tumours</td>
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| Studio 2017 PC 9 | 08:30–10:00 | Implementing and evaluating clinical decision support (CDS) for imaging referral guidelines |

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<th>ESR meets Belgium</th>
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<td>Emergency radiology</td>
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<th>I/JQ</th>
<th>IMAGE INTERPRETATION QUIZ</th>
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<td>There’s a patient behind every interesting case</td>
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<th>EFRS meets Belgium</th>
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<td>(European Society for Magnetic Resonance in Medicine and Biology)</td>
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<td>MR imaging biomarkers: what we have and what we need</td>
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<th>The increasing clinical impact of MR/PET</th>
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<th>Providing an effective ultrasound service: how and by whom?</th>
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<td>(European Association of Nuclear Medicine)</td>
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<td>Common diagnostic guidelines on diabetic foot, osteomyelitis and prosthetic joint infection</td>
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### SATURDAY, MARCH 4

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<th>D 2nd Level (ACV)</th>
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<td>08:30–09:00</td>
<td>E1 1321</td>
<td>E1 – ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists</td>
<td>Imaging of abdominal tumours</td>
<td>RC 1301</td>
<td>GI Tract Difficult challenges in imaging the acute abdomen</td>
<td>SF 13a</td>
<td>Special Focus Session: Imaging of abdominal masses</td>
<td>Student Session 3</td>
<td>E1 – Rising Stars Programme: Neuroimaging</td>
<td>Joint Session of the ESR and the CIRSE</td>
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<td>E1 1421</td>
<td>E1 – ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists</td>
<td>Genitourinary and gastrointestinal radiology</td>
<td>EM 2</td>
<td>ESR meets the United States of America: Precision imaging of patient experience</td>
<td>SS 1401</td>
<td>Abdominal Viscera Pancreas and bile ducts: Imaging assessment</td>
<td>SS 1415</td>
<td>Vascular Access, venous and lymphatic diseases</td>
<td>SS 1409</td>
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<td>E1 1521</td>
<td>E1 – ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists</td>
<td>Imaging of the skull base</td>
<td>SF 15a</td>
<td>Special Focus Session: Imaging of abdominal masses</td>
<td>E1 1526a</td>
<td>E1 – ECR Master Class: Imaging of the skull base (of Basic relevance)</td>
<td>SF 13b</td>
<td>Special Focus Session: Cardiac Imaging and Quality of Care in Clinical Cardiology</td>
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<td>16:00–16:30</td>
<td>E1 1621</td>
<td>E1 – ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists</td>
<td>Imaging of the chest</td>
<td>RC 1601</td>
<td>Abdominal Viscera: MRI: from standard to advanced protocols</td>
<td>SA 16</td>
<td>State of the Art Symposium: Detection and management of small renal masses</td>
<td>RC 1612</td>
<td>Paediatric imaging children with cancer</td>
<td>RC 1603</td>
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**Registration:** 07:30–18:00

**ECR Online & EPOS Lounge / EPOS – Scientific Exhibition:** 08:00–18:00

**www.myESR.org**
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<th>Room/Time</th>
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<tr>
<td>Breast carcinoma in situ (DCIS)</td>
<td>White spots in the brain</td>
<td>Musculoskeletal</td>
<td>Acute pain hallmark in emergency radiology</td>
<td>Musculoskeletal</td>
<td>Motion management in medical imaging</td>
<td>Chest</td>
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<td>SS 1402a Breast Imaging the axilla</td>
<td>SS 1411 Neuro</td>
<td>E1 1423 E - European Diploma Prep</td>
<td>SS 1410 Musculoskeletal</td>
<td>SS 1413 Radiographers</td>
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<td>Imaging the axilla</td>
<td>The ageing brain: cognition and dementia</td>
<td>Breast cancer risk estimation</td>
<td>Spine</td>
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<td>Satellite Symposium*</td>
<td>Breast cancer screening in the early detection: the time is now</td>
<td>Musculoskeletal</td>
<td>The latest updates in imaging of polyoma patients</td>
<td>Musculoskeletal</td>
<td>Dose reduction using iterative image reconstruction in CT</td>
<td>ECR Master Class</td>
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**SATURDAY, MARCH 4**

**Technical Exhibition:** EXPO Gallery (First Level): 10:00-17:00

**Technical Exhibition:** EXPO Halls and EXPO Foyer D: 10:00-17:00
**TODAY’S HIGHLIGHTS**

**Saturday, March 4**

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<tr>
<td></td>
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<td>From features to function: breakthroughs in breast imaging</td>
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<td>Fiona J. Gilbert; Cambridge/UK</td>
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**Room B**

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**Room D**

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**SUNDAY, MARCH 5**

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<td>E1 1721 E7 - ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists</td>
<td>Brain tumours</td>
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<td>E1 1821 E7 - ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists</td>
<td>Dementia and movement disorders</td>
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<td>E1 25E E7 - The Beauty of Basic Knowledge: Still tricky after all these years</td>
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<td>14:00-14:30</td>
<td>SS 1901a GI Tract Gastric cancer and upper GI tract diseases</td>
<td>SS 1901b Abdominal Viscera Pancreatic and biliary inflammation</td>
<td>SS 1901c Abdominal Viscera Liver fat, iron and fibrosis assessment and quantification</td>
<td>SS 1915 Vascular Aortic Imaging</td>
<td>SS 1909 Interventional Radiology Musculoskeletal Interventions</td>
<td>SS 1904 Chest Imaging and intervention</td>
<td>SS 1907 Genitourinary Oncologic Imaging Haematological malignancies and lymphadenopathy revised</td>
<td>SS 1916 Oncologic Imaging Head and Neck Parathyroid and thyroid imaging: how to improve diagnosis</td>
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## SUNDAY, MARCH 5

### Programme Overviews

| E1 | Entrance Level (ACV) | E2 | Entrance Level (ACV) | F1 | Entrance Level (ACV) | F2 | Entrance Level (ACV) | D | Lower Level (ACV) | G | Lower Level (ACV) | K | Lower Level (ACV) | ECR Live & EPOS™ Lounge | Room/Time |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| E1 1726b | E1 - ECR Master Class Taking clinical breast MRI to the next level | E1 1726c | E1 - ECR Master Class Imaging of traumatic brain injury | SF 17b | Special Focus Session Errors in emergency radiology | RC 1716 Oncologic Imaging Diffusion-weighted imaging (DWI) in oncology how do I do it | RC 1710 Musculoskeletal MRI of articular cartilage and bone areas imaging confusion and practical solutions | RC 1713 Physics in Radiology Artifacts and pitfalls in tomography | SF 17c | Special Focus Session Errors in emergency radiology how do I do it | | | | ECR Live & EPOS™ Stages 1-3 (VoE) | 08:30-09:00 |
| | | | | | | | | | | | | | | | VoE 28 / Stage 1 Neuro |
| | | | | | | | | | | | | | | VoE 58 / Stage 2 Interventional |
| | | | | | | | | | | | | | | VoE 29 / Stage 1 Breast |
| | | | | | | | | | | | | | | VoE 59 / Stage 2 Chest |
| | | | | | | | | | | | | | | VoE 30 / Stage 1 Chest |
| | | | | | | | | | | | | | | VoE 60 / Stage 2 Interventional |
| | | | | | | | | | | | | | | 10:00-10:30 |
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| | | | | | | | | | | | | | | 14:30-15:00 |
| | | | | | | | | | | | | | | 15:00-15:30 |
| S5 1802a | Breast Breast MRI: diffusion-weighted imaging | S5 1811a | Neuro Spine and peripheral nerves | E1 1823 | E1 - European Diploma Prep Session Principles of imaging and radiation protection | S5 1802b | Breast Breast cancer screening | S5 1810a | Musculo-skeletal Musculoskeletal interventions | S5 1810b | Musculo-skeletal Hip and foot | S5 1814 | Radio-graphers Topics in general and paediatric imaging | S5 1805 | Computer Applications Clinical decision support and structured reporting | 10:30-11:00 |
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**Technical Exhibition:** EXPO Gallery (First Level): 10:00–15:30

**Technical Exhibition:** EXPO Halls and EXPO Foyer D: 10:00–14:00
### Sunday, March 5

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<td>Room O SF 17a Paediatric parenchymal lung disease: what imaging technique to choose?</td>
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<td>08:30-10:00</td>
<td>Room F1 SF 17b Errors in emergency radiology</td>
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<td>Room E</td>
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<td>Room A</td>
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<td>Room A E1 1821 Peru in the radiological world</td>
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<td>Room C E1 25E E1 25E The Beauty of Basic Knowledge: Chest Imaging:</td>
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<td>Room D</td>
<td>12:30-13:30</td>
<td>Room D E1 24E The Beauty of Basic Knowledge: Musculoskeletal Imaging: Infective/inflammatory disorders</td>
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<td>Room E1</td>
<td>13:30-15:30</td>
<td>Room E1 CBCT Rising Stars Programme: Case-Based Diagnosis Training Special programme for residents and general radiologists</td>
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Please note that sessions are marked with a logo to indicate their classification according to the European Training Curriculum.

**LEVEL I**  First three years of training

**LEVEL II**  Fourth and fifth years of training  
(general radiologist standard)

**LEVEL III**  Subspeciality training standard

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Celebrating 25 YEARS of European Radiology
EUROPEAN RADIOLGY
25TH ANNIVERSARY SESSION

Friday, March 3, 16:00–17:30, Room Z

Moderators: M.F. Reiser; Munich/DE
A.L. Baert; Leuven/BE
A.K. Dixon; Cambridge/UK

Introduction: 25 years of European Radiology [A-500]
M.F. Reiser; Munich/DE

How to present research data consistently in a scientific paper [A-501]
M. Laniado; Dresden/DE

Cost considerations regarding an integrated CT-PET system [A-502]
G.K. von Schulthess; Zurich/CH

Role of contrast-enhanced helical CT in the evaluation of acute thoracic aortic injuries after blunt chest trauma [A-503]
M. Scaglione; Castel Volturno/IT

CT angiography of pulmonary embolism in patients with underlying respiratory disease: impact of multislice CT on image quality and negative predictive value [A-504]
M. Rémy-Jardin; Lille/FR

CT colonography: effect of experience and training on reader performance [A-505]
S. Halligan; Leeds/UK

First performance evaluation of a dual-source CT (DSCT) system [A-506]
T.G. Flohr; Forchheim/DE

Gd-EOB-DTPA-enhanced magnetic resonance images of hepatocellular carcinoma: correlation with histological grading and portal blood flow [A-507]
T. Murakami; Osaka/JP

ESUR prostate MR guidelines 2012 [A-508]
J.O. Barentsz; Nijmegen/NL

Nephrogenic systemic fibrosis and gadolinium-based contrast media: updated ESUR Contrast Medium Safety Committee guidelines [A-509]
H.S. Thomsen; Herlev/DK

Iterative reconstruction techniques for computed tomography Part 1: Technical principles [A-510]
M.J. Willemink; Utrecht/NL
ESOR Ten-Year Anniversary Session
Friday, March 3, 12:15–13:00
Room A

Introduction
Paul M. Parizel, Antwerp/BE
ESR President

Ten years of ESOR
Nicholas Gourtsoyiannis, Athens/GR
ESOR Scientific/Educational Director

How did ESOR influence my professional development
Oshaani Abeyakoon, Cambridge/UK

Teaching for ESOR: Tutoring scholars and fellows
Christian Loewe, Vienna/AT

Celebration

Education in partnership

For further information on the detailed programmes and registration, please visit myESR.org/esor
Once again, the ESR will welcome a number of guest countries to the ECR as part of the ‘ESR meets’ programme.

The national radiological societies of Belgium, Peru, and the United States of America (represented by both the ACR and the RSNA), will present their most recent scientific developments in joint sessions with the ESR, and try to strengthen links between professionals from different countries and disciplines. The European Federation of Radiographer Societies (EFRS) will also host its own ‘meets’ session for radiographers, in conjunction with representatives of the Association des Professionnels en Imagerie Médicale (APIM) and the Vereniging Medisch Beeldvormers (VMBv).

Both the ESR and the EFRS warmly welcome these societies and hope to see ECR delegates attend the sessions in large numbers.
ESR/EFRS MEETS SESSIONS

3 March  
Friday, March 3, 10:30–12:00, Room B

ESR meets Belgium

EM 1  Emergency radiology

Presiding: G. Villeirs; Ghent/BE  
P.M. Parizel; Antwerp/BE

» Introduction  [A-440]
G. Villeirs; Ghent/BE

» Additional value of dual-energy CT in abdominal emergencies  [A-441]
E. Danse; Brussels/BE

» High-end CT imaging in forensic medicine: experience after recent Brussels terror attacks  [A-442]
W. Develter; Leuven/BE

» Interlude: Imaging Belgian food  [A-443]
K. Verstraete; Ghent/BE

» Imaging genetics and beyond: facial reconstruction and identification  [A-444]
P. Claes; Leuven/BE

R. Viggelen; Brussels/BE

» Panel discussion: Acute pathology: emergency radiologists or organ subspecialists?

3 March  
Friday, March 3, 14:00–15:30, Room K

EFRS meets Belgium

(European Federation of Radiographer Societies)

EM 4

Presiding: H.H. Hjemly; Oslo/NO  
S. Bogaert; Ghent/BE  
A. Tempels; Lodelinsart/BE

Moderators: G. Alleman; Beernem/BE  
J.-L. Greffe; Lodelinsart/BE

» Introduction  [A-466]
H.H. Hjemly; Oslo/NO  
S. Bogaert; Ghent/BE  
A. Tempels; Lodelinsart/BE

» A picture of the radiographers’ profession and education  [A-469]
P. Van Laer; Lovendegem/BE

» Belgium: the beautiful ‘city’  [A-470]
K. Van Belle; Sint-Andries/BE

» Patient safety and quality improvement in Belgian radiology departments  [A-471]
S. Germonpré; Brussels/BE

» Radiation protection in Belgium  [A-472]
O. Bran; Louette-Saint-Pierre/BE

» Panel discussion

4 March  
Saturday, March 4, 10:30–12:00, Room B

ESR meets the United States of America

EM 2  Precision imaging and patient experience

Presiding: J.A. Brink; Boston, MA/US  
R.L. Ehman; Rochester, MN/US  
P.M. Parizel; Antwerp/BE

» Introduction  [A-654]
J.A. Brink; Boston, MA/US  
R.L. Ehman; Rochester, MN/US

» Clinical decision support  [A-655]
K.J. Dreyer; Boston, MA/US

» Interlude/Commentary:  
Future directions in decision support  
ESR/ACR/RSNA Leaders

» Quantitative Imaging Biomarkers Alliance  [A-658]
E.F. Jackson; Madison, WI/US

» Interlude/Commentary:  
Future directions in quantitative imaging  
ESR/ACR/RSNA Leaders

» Imaging 3.0/Radiology Cares  [A-659]
G. McGinty; New York, NY/US  
R.L. Ehman; Rochester, MN/US

» Interlude/Commentary:  
Future directions in patient experience  
ESR/ACR/RSNA Leaders

5 March  
Sunday, March 5, 10:30–12:00, Room B

ESR meets Peru

EM 3  Peru in the radiological world

Presiding: L. Carrillo Diaz; Lima/PE  
P.M. Parizel; Antwerp/BE

» Introduction: Peruvian radiology: how is it going?  [A-875]
L. Carrillo Diaz, P. Tapia Puente Arnao; Lima/PE

» MRI findings in CNS tuberculosis  [A-876]
R. Marquina Diaz; Lima/PE

» Interlude: From Peruvian mummies to bones: use of x-rays in Peruvian archaeology (part 1)  [A-877]
P. Tapia Puente Arnao; Lima/PE

» MRI findings in non-tuberculosis infectious diseases in the CNS  [A-878]
P. Tapia Puente Arnao; Lima/PE

» Interlude: From Peruvian mummies to bones: use of x-rays in Peruvian archaeology (part 2)  [A-879]
P. Tapia Puente Arnao; Lima/PE

» Non-diagnosed spondyloarthritids in MRI of the spine for lower back pain  [A-880]
J. Carpio; Lima/PE

» Panel discussion: Is MRI the gold standard in CNS infection disease?
NEW HORIZONS SESSIONS

The New Horizons Sessions aim to provide practitioners with an overview of the new developments in a specific area of practice, whether it is a subspecialty, a particular technique, or certain diseases.

These developments may become routine within a few years, or may indicate a new direction for research and clinical application.

Each session is 90 minutes long and features an introduction from a chairman, followed by three or four brief presentations on different aspects of the main subject, and concluded by a panel discussion that will hopefully answer some critical questions.

Places are allocated on a first-come, first-served basis.
### Thursday, March 2, 08:30–10:00, Studio 2017

**NH 5  Hyperpolarised MRI: imaging tissue metabolism in real time**

- **Chairman’s introduction** [A-188]
  J.M. Gomori; Jerusalem/IL
- **Hyperpolarised MRI in oncology** [A-189]
  F.A. Gallagher; Cambridge/UK
- **Hyperpolarised MRI in cardiology** [A-190]
  A. Comment; Lausanne/CH
- **Hyperpolarised MRI in respirology** [A-191]
  J. Vogel-Claussen; Hannover/DE
- **Available and potential hyperpolarised molecular targets** [A-192]
  R. Katz-Brull; Jerusalem/IL
- **Panel discussion: Is hyperpolarisation worth all the hype?**

### Friday, March 3, 16:00–17:30, Room B

**NH 12  The increasing clinical impact of MR/PET**

- **Chairman’s introduction** [A-487]
  L. Umutlu; Essen/DE
- **MR/PET in paediatric oncology?** [A-488]
  P.D. Humphries; London/UK
- **MR/PET in cardiac imaging?** [A-489]
  M. Dewey; Berlin/DE
- **MR/PET in head and neck imaging?** [A-490]
  M. Becker; Geneva/CH
- **MR/PET in musculoskeletal imaging?** [A-491]
  G. Andreisek; Münsterlingen/CH
- **Panel discussion: Are we ready to fully integrate MR/PET into clinical diagnostic work-up?**

### Saturday, March 4, 14:00–15:30, Studio 2017

**NH 15  Large cohorts: imaging biobanks**

- **Chairmen’s introduction** [A-709]
  M.H. Fuchsjäger; Graz/AT
  M. Pasterk; Graz/AT
- **Why biobanks should include imaging data** [A-711]
  R.L. Vanninen; Kuopio/FI
- **Incidental findings in large cohorts**
  (German national cohort) [A-712]
  S. Weckbach; Heidelberg/DE
- **Analysis of big imaging data (UK Biobank)** [A-713]
  A. Jackson; Manchester/UK
- **Panel discussion: What are the benefits of linking imaging and biobanks?**
STATE OF THE ART SYMPOSIA

These sessions will inform the audience about the ‘real state of the art’ of a given subject. Each of the lecturers is an expert on the given topic as a whole or on a specific aspect of the topic.

The 90-minute sessions are chaired by a moderator who will introduce three to four speakers addressing various issues within wider subjects such as anatomical regions, specific diseases, or particular techniques. The presentations will be followed by a discussion conducted by the panellists, led by the chairman.

Places are allocated on a first-come, first-served basis.
STATE OF THE ART SYMPOSIA

Thursday, March 2, 08:30–10:00, Room C
SA 5 Lung cancer screening: past, present, future

- Chairman’s introduction [A-169] L. Bonomo; Rome/IT
- What did we know: NLST and previous trials [A-170] S. Diederich; Düsseldorf/DE
- What do we know: latest insights from European trials, modelling studies and current screening programmes [A-171] M. Prokop; Nijmegen/NL
- What don’t we know: opportunities for future research [A-172] A. Devaraj; London/UK
- Panel discussion: How to implement lung cancer screening in Europe

Thursday, March 2, 16:00–17:30, Room G
SA 8 Forensic and post-mortem imaging

- Chairman’s introduction [A-337] P.A.M. Hofman; Maastricht/NL
- Introduction to post-mortem radiology [A-338] T. Ruder; Zurich/CH
- Post-mortem imaging: a pathologist’s perspective [A-339] D. Ranson; Melbourne/AU
- Paediatric forensic post-mortem radiology [A-340] R.R. van Rijn; Amsterdam/NL
- Post-mortem CT and MRI: imaging techniques [A-341] A. Persson; Linköping/SE
- Panel discussion: What should be the focus of future research?
- Chairman’s closing remarks P.A.M. Hofman; Maastricht/NL

Saturday, March 4, 16:00–17:30, Room C
SA 16 Detection and management of small renal masses

- Chairman’s introduction [A-759] H.C. Thoeny; Berne/CH
- Detection and characterisation of small renal masses [A-760] N. Grenier; Bordeaux/FR
- Image-guided minimally invasive treatment [A-761] M. Krokidis; Cambridge/UK
- Treatment monitoring with imaging [A-762] G. Cardone; Milan/IT
- Panel discussion: What to do with small renal masses?
SPECIAL FOCUS SESSIONS

The concept of a Special Focus Session is to deal with a topic at the cutting edge of development and clinical application. A traditional approach is inappropriate for such a session, which should reflect the lecturers’ forthright personal views on a developing subject. The topics of these sessions should be presented in such a way as to promote debate and give an in-depth analysis.

The chairman will introduce each aspect of the topic and the panellists will then discuss their different perspectives and opinions. The audience will have the opportunity to discuss their ideas with the lecturers.

Session length: 90 minutes; three to four speakers.

Places are allocated on a first-come, first-served basis.
SPECIAL FOCUS SESSIONS

**March 1**
Wednesday, March 1, 08:30-10:00, Room O

**SF 1** Assessing age, based on bone maturation: scientific and ethical aspects [LEVEL I]

- Chairman's introduction [A-014] K. Rosendahl; Bergen/NO
- Bone age assessment: indications and methods [A-015] F. Dedouit; Lausanne/CH
- Precision and accuracy of MRI [A-017] S. Diaz; Stockholm/SE
- Ethical and legal aspects of using bone age to determine age [A-018] K. Chaumoitre; Marseille/FR
- Panel discussion: Should bone age be used to estimate chronological age - alone or in combination with additional methods?

**March 1**
Wednesday, March 1, 16:00-17:30, Room F2

**SF 4a** Image-guided interventions in oncology: the pieces of the jigsaw [LEVEL II]

- How molecular imaging and image fusion are shaping oncology [A-128] E. de Kerviler; Paris/FR
- Clinical practice: why it matters and how to do it [A-130] A. Adam; London/UK
- Panel discussion: What will be the future of image-guided interventions in oncology?

**March 2**
Thursday, March 2, 08:30-10:00, Room E2

**SF 5a** Stroke, beyond the usual suspects [LEVEL II]

- Chairman's introduction [A-201] O. Jansen; Kiel/DE
- Understanding watershed infarcts [A-202] P. Mordasini; Berne/CH
- Reversible cerebral vasoconstriction syndrome [A-203] J. Linn; Munich/DE
- Thrombosis of cerebral veins and dural sinuses [A-204] V. Costalat; Montpellier/FR
- Panel discussion: Rational imaging in patients with acute stroke symptoms

**March 2**
Thursday, March 2, 16:00-17:30, Room B

**SF 8** The postoperative abdomen: lost in translation? [LEVEL II]

- Chairman's introduction: Presentation of a challenging case [A-287] Y. Menu; Paris/FR
- Inflammatory complications (peritonitis, abscess) [A-288] Z. Tarján; Budapest/HU
- Vascular complications (bleeding, thrombosis, ischaemia) [A-289] R. Nolz; Vienna/AT
- Postoperative obstruction [A-290] A. Palkó; Szeged/HU
- Panel discussion: Where might we go wrong and how can we avoid it?
**SPECIAL FOCUS SESSIONS**

**Friday, March 3, 08:30–10:00, Room F2**

**SF 9** The revival of lymphangiography

- Chairman’s introduction [A-406]
  B.A. Radeleff; Heidelberg/DE
- “Theranostic” lymphangiography [A-407]
  E. Santos Martín; New York, NY/US
- MR lymphangiography [A-408]
  L. Arrivé; Paris/FR
- Thoracic duct embolisation [A-409]
  H.H. Schild; Bonn/DE
- Panel discussion: Lymphangiography, are you convinced?

**Friday, March 3, 16:00–17:30, Room N**

**SF 12a** My most scary head and neck mistakes

- Chairman’s introduction: Misses, misinterpretations and mistakes [A-514]
  A. Borges; Lisbon/PT
- What I missed and why [A-515]
  M.G. Mack; Munich/DE
- What I misinterpreted and why [A-516]
  L. Ginsberg; Houston, TX/US
- How to deal with mistakes: the report, the radiologist and the department [A-517]
  S.J. Golding; Oxford/UK
- Panel discussion: Mistakes - can they be avoided and how?

**Friday, March 3, 16:00–17:30, Room E1**

**SF 12b** Challenges in the diagnosis of acute appendicitis

- Chairman’s introduction [A-522]
  J. Stoker; Amsterdam/NL
- Acute appendicitis during pregnancy: high-end ultrasonography, ultra-low dose CT or unenhanced MRI? [A-523]
  P.-A. Poletti;Geneva/CH
- Imaging algorithms for acute appendicitis in difficult patients (obese, elderly, other) [A-524]
  J.B.C.M. Puylaert; The Hague/NL
- What is the cost-effectiveness of different imaging modalities in acute appendicitis? [A-525]
  M. Zins; Paris/FR
- Evidence-based treatment of acute appendicitis: conservative vs surgical management? [A-526]
  M.A. Boermeester; Amsterdam/NL
- Panel discussion: How to avoid common mistakes in the interpretation of chest imaging?
**SPECIAL FOCUS SESSIONS**

**March 4** Saturday, March 4, 08:30–10:00, Room O

SF 13b Cardiac imaging in prevention and screening: who, when and how? [LEVEL II]

- Chairman’s introduction [A-590]
  T. Leiner; Utrecht/NL
- Cardiac imaging in athletes: what is normal, what is abnormal? [A-591]
  B.K. Velthuis; Utrecht/NL
- Screening of individuals with cardiac risk factors: what to look for? [A-592]
  M. Dewey; Berlin/DE
- Evidence base and guidelines for screening genetic cardiac diseases [A-593]
  J. Moon; London/UK
- Panel discussion: Who, when and how to screen?

**March 4** Saturday, March 4, 14:00–15:30, Room B

SF 15a My three top tips for abdominal imaging [LEVEL II]

- Chairman’s introduction [A-688]
  M. Zins; Paris/FR
- Postoperative abdomen [A-689]
  D.J.M. Tolan; Leeds/UK
- Appendicitis [A-690]
  J.B.C.M. Puylaert; The Hague/NL
- Bile duct stones [A-691]
  J.A. Guthrie; Leeds/UK
- Dilated pancreatic duct [A-692]
  R. Manfredi; Rome/IT
- Liver biopsy [A-693]
  V. Vilgrain; Clichy/FR
- Bowel ischaemia [A-694]
  A. Filippone; Chieti/IT
- Colon polyp [A-695]
  F. Iafrate; Rome/IT
- Acute pancreatitis [A-696]
  W. Schima; Vienna/AT
- Crohn’s disease [A-697]
  J. Rimola; Barcelona/ES
- Liver metastases follow-up [A-698]
  Y. Menu; Paris/FR

**March 4** Saturday, March 4, 14:00–15:30, Room E1

SF 15b Breast cancer screening with tomosynthesis: the time is now [LEVEL II]

- Chairman’s introduction [A-718]
  P. Skaane; Oslo/NO
- Screening with digital breast tomosynthesis in the USA: performance indicators and breast density [A-719]
  E.A. Morris; New York, NY/US
- Screening with digital breast tomosynthesis in Europe: tumour characteristics and potential harms including overdiagnosis [A-720]
  F.J. Gilbert; Cambridge/UK
- Which challenges should we consider prior to tomosynthesis screening implementation? [A-721]
  G. Gennaro; Padua/IT
- Panel discussion: Is tomosynthesis ready for replacing 2D mammography in organised breast cancer screening?

**March 4** Saturday, March 4, 16:00–17:30, Studio 2017

SF 16a The male pelvis [LEVEL II]

- Chairman’s introduction [A-769]
  J.J. Fütterer; Nijmegen/NL
- Update on prostate MR [A-770]
  O. Rouvière; Lyon/FR
- Template biopsy vs TRUS/MR-fusion guided biopsy [A-771]
  T. Fischer; Berlin/DE
- Imaging after focal prostate therapy [A-772]
  C. Allen; London/UK
- Biopsy strategy [A-773]
  A. Briganti; Milan/IT
- Panel discussion: Is there a role for MR imaging to steer the biopsy?

**March 4** Saturday, March 4, 16:00–17:30, Room E2

SF 16b Black and white spots in the brain [LEVEL II]

- Chairman’s introduction [A-783]
  H.R. Jäger; London/UK
- White spots in the brain on T2 and FLAIR: what are they? [A-784]
  A. Rovira-Cañellas; Barcelona/ES
- Black spots in the brain on SWI: differential diagnosis [A-785]
  M. Vernooij; Rotterdam/NL
- Advanced MR imaging and quantification techniques: do they help? [A-786]
  S. Haller; Carouge/CH
- Panel discussion: How to image, quantify and report black and white spots in the brain?
**SF 17a Paediatric parenchymal lung disease: what imaging technique to choose?**

- **Chairman's introduction** [A-834]
  H. Ducou le Pointe; Paris/FR
- **Chest x-ray** [A-835]
  P. Tomà; Rome/IT
- **US** [A-836]
  S.P. Deftereos; Alexandroupolis/GR
- **CT** [A-837]
  P. Ciet; Rotterdam/NL
- **MRI** [A-838]
  M.O. Wielpütz; Heidelberg/DE
- **Panel discussion: What imaging modality to choose and when?**

**SF 17b Errors in emergency radiology**

- **Chairman's introduction: Why do radiological errors occur?** [A-853]
  A. Brady; Cork/IE
- **Imaging in multiple trauma** [A-854]
  U. Linsenmaier; Munich/DE
- **Non-traumatic abdominal emergencies** [A-855]
  A. Pinto; Naples/IT
- **How not to fail in emergency radiology** [A-856]
  P. McCoubrie; Bristol/UK
- **Panel discussion: Errors in radiology, inevitable or preventable?**

**SF 17c How do radiographers enhance paediatric imaging?**

- **Chairman's introduction: The role of the radiographer when imaging a paediatric patient**
  L.J.O.C. Lança; Lisbon/PT [A-868]
  E. Sorantin; Graz/AT [A-869]
- **Informed consent: is this possible in paediatric imaging?** [A-870]
  J. Portelli; Msida/MT
- **Dose reduction in paediatric imaging** [A-871]
  G. Paulo; Coimbra/PT
- **Personality traits: a way of maximising cooperation during paediatric imaging** [A-872]
  S.J. MacKay; Liverpool/UK
- **Panel discussion: Challenges and opportunities when imaging paediatric patients**

*This session is part of the EuroSafe Imaging campaign.*
EDUCATION ON DEMAND

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BROUGHT TO YOU BY THE
EUROPEAN SOCIETY OF RADIOLOGY
PROFESSIONAL CHALLENGES
SESSIONS

The idea of these sessions is to communicate and exchange information on professional issues related to radiology, such as training and education, research networking, radiological management and professional developments.

90-minute sessions; introduction by one or two chairmen; three to four lecturers; panel discussion.

Places are allocated on a first-come, first-served basis.
PROFESSIONAL CHALLENGES SESSIONS

**PC 1**  
**Wednesday, March 1, 08:30–10:00, Room E1**  
**Will emerging technology replace the radiologist?**  
**LEVEL II**

- **Chairman's introduction**  
  L. Donoso; Barcelona/ES  
- **Computer-aided and computer-determined diagnosis**  
  K.J. Dreyer; Boston, MA/US  
- **Liquid biopsy: a new kid on the block**  
  M. Ignatiadis; Brussels/BE  
- **Novelties in molecular imaging**  
  K. Riklund; Umeå/SE  
- **Deep learning and biomarkers: the engineer's view**  
  A. Alberich-Bayarri; Valencia/ES  
- **Panel discussion: Should we start to worry?**

**PC 3**  
**Wednesday, March 1, 14:00–15:30, Room M 1**  
**Excellence and innovation in undergraduate teaching of radiology**  
**LEVEL II**

- **Chairman's introduction: Innovative approaches to undergraduate teaching, impact on student learning**  
  V. Válek; Brno/CZ  
- **How to keep students engaged**  
  C. Nyhsen; Sunderland/UK  
- **Excellence in undergraduate teaching**  
  B. Ertl-Wagner; Munich/DE  
- **Teaching with technology: a challenging experience**  
  P. Pokieser; Vienna/AT  
- **Evidence-based radiology for diagnostic imaging: do we need to teach the undergraduates?**  
  R. Iezzi; Rome/IT  
- **Panel discussion: How do new approaches contribute to excellence in undergraduate teaching?**

**PC 4**  
**Wednesday, March 1, 16:00–17:30, Room G**  
**Design and implementation of structured reporting**  
**LEVEL II**

- **Chairman’s introduction**  
  W.H. Sommer; Munich/DE  
- **Beyond templates: modular multilingual structured reporting**  
  M. Fatehi; Tehran/IR  
- **Introducing quality management for radiology reports**  
  C. Wald; Boston, MA/US  
- **Structured reporting: two decades of surveys and subcommittees, but what do we wish to achieve?**  
  J.M.L. Bosmans; Ghent/BE  
- **Panel discussion: Structured reporting in ten years: large-scale or fairy-tale?**

**PC 8**  
**Thursday, March 2, 16:00–17:30, Room O**  
**How to make best use of cardiac imaging in a radiology department**  
**LEVEL III**

- **Chairman’s introduction**  
  G.I. Kirova-Nedialkova; Sofia/BG  
- **Starting a cardiac imaging programme**  
  G.A. Krombach; Giessen/DE  
- **Cost-effectiveness of cardiac imaging**  
  M.G.M. Hunink; Rotterdam/NL  
- **Training cardiac imaging in the radiology department**  
  F. Pugliese; London/UK  
- **Panel discussion: Are we ready to integrate cardiac imaging in routine radiology workload?**

**PC 9**  
**Friday, March 3, 08:30–10:00, Studio 2017**  
**Implementing and evaluating clinical decision support (CDS) for imaging referral guidelines**  
**LEVEL II**

- **Chairman’s introduction**  
  L. Oleaga Zufiría; Barcelona/ES  
- **The role of basic and advanced CDS in value-centred radiology**  
  H.-U. Kauczor; Heidelberg/DE  
- **Evaluating CDS implementation and measuring outcomes**  
  M.G.M. Hunink; Rotterdam/NL  
- **Using CDS: referring physicians' perspective: GPs**  
  J.F.M. Metsemakers; Maastricht/NL  
- **CDS implementation in the classroom: ESR eGuide**  
  L. Donoso; Barcelona/ES  
- **Panel discussion: Introducing CDS for medical imaging referrals: what to do and how to measure
PROFESSIONAL CHALLENGES SESSIONS

Saturday, March 4, 08:30–10:00, Room K

PC 13a Radiography and radiology: more than the sum of their parts

- Chairman’s introduction: Working together
  P. Bezzina; Msida/MT  [A-629]
  P.C. Maly Sundgren; Lund/SE  [A-630]
- Opportunities and challenges facing radiography and radiology  [A-631]
  G. Paulo; Coimbra/PT
- Patient safety culture: a combined responsibility  [A-632]
  S.J. Foley; Dublin/IE
- Skills and competences in care and compassion  [A-633]
  A. England; Salford/UK
- Panel discussion: A winning team: radiographers and radiologists?

PC 13b Burnout of radiologists

- Chairman’s introduction  [A-634]
  M.G.M. Hunink; Rotterdam/NL
- A personal story  [A-635]
  M.F. Berger; Nottwil/CH
- Mindfulness-based interventions for burnout of physicians  [A-636]
  A. Speckens; Nijmegen/NL
- Interventions to prevent and treat burnout  [A-637]
  B. Trück; Brussels/BE
- Panel discussion and discussion with the audience

Saturday, March 4, 14:00–15:30, Room E2

PC 15a Radiology at the core of interdisciplinary communication

- Chairman’s introduction  [A-722]
  E.J. Adam; London/UK
- Sharing information within the hospital  [A-723]
  D. Regge; Turin/IT
- Sharing information beyond the hospital  [A-724]
  W.R. Jaschke; Innsbruck/AT
- Sharing information with the patient  [A-725]
  E. Briërs; Hasselt/BE
- Panel discussion: Conveying information clearly. Do we still need to ‘speak’ to each other?

Saturday, March 4, 14:00–15:30, Room K

PC 15b A team approach towards ensuring patient safety and care

- Chairman’s introduction: A team approach - why is this necessary?  [A-741]
  J. McNulty; Dublin/IE
  T. Owman; Lund/SE
- A team-based approach to delivering safe practice  [A-742]
  J. Damilakis; Iraklion/GR
- The radiographer and radiologist: joint responsibility for reporting  [A-743]
  S. Rowe; London/UK
- A team approach in interventional procedures  [A-744]
  C. McLaren; London/UK
- Panel discussion: Can a team-based approach ensure patient safety?

Saturday, March 4, 16:00–17:30, Room D

PC 16 Ensuring the future role of radiologists

- Chairman’s introduction  [A-794]
  J. Van Goethem; Antwerp/BE
- SWOT analysis of the radiologic profession  [A-795]
  J.-Y. Meuwly; Lausanne/CH
- Turf battles: how to respond to the challenges  [A-796]
  C. Loewe; Vienna/AT
- Always on the forefront: ensuring the future of radiology  [A-797]
  G.P. Krestin; Rotterdam/NL
- Panel discussion: The real challenge for radiologists is “how to change ourselves”
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MULTIDISCIPLINARY SESSIONS

The concept of these sessions is to promote a multidisciplinary approach to detection and treatment, integrating radiologists and other clinicians to share their expertise.

Places are allocated on a first-come, first-served basis.
MULTIDISCIPLINARY SESSIONS

1 March

**Wednesday, March 1, 16:00–17:30, Room E2**

MS 4  Neuroimaging and mental health disorders  LEVEL II

» Chairman’s introduction  [A-120]
  T.A. Yousry; London/UK

» Unpicking obsessive compulsive disorder (OCD) networks with neuroimaging  [A-121]
  E. Joyce; London/UK

» Bridging movement and mind: neuroimaging in Tourette-Syndrome  [A-122]
  T. Foltynie; London/UK

» Precision neurosurgical targeting in Tourette’s and obsessive compulsive disorder (OCD): critical role of neuroimaging  [A-123]
  L. Zrinzo; London/UK

» Multidisciplinary case presentation and discussion

3 March

**Friday, March 3, 08:30–10:00, Room D**

MS 9  Primary bone tumours  LEVEL II

» Chairman’s introduction  [A-410]
  A.M. Davies; Birmingham/UK

» Fundamental imaging  [A-411]
  S.L.J. James; Birmingham/UK

» Why I need the radiologist: the pathologist’s perspective  [A-412]
  L.-G. Kindblom; Gothenburg/SE

» The surgeon’s perspective  [A-413]
  L. Jeys; Birmingham/UK

» Multidisciplinary case presentation and discussion

3 March

**Friday, March 3, 16:00–17:30, Room G**

MS 12  Transcatheter aortic valve implantation (TAVI)  LEVEL III

» Chairman’s introduction: A brief history of TAVI  [A-540]
  A. Cribier; Rouen/FR

» The TAVI procedure  [A-541]
  H. Eltchaninoff; Rouen/FR

» The cardiac surgeon’s perspective  [A-542]
  P.-Y. Litzler; Rouen/FR

» Preinterventional assessment by CT  [A-543]
  J.-N. Dacher; Rouen/FR

» Why use dual-energy CT in TAVI patients?  [A-544]
  B. Dubourg; Rouen/FR

» Common and uncommon complications seen by CT  [A-545]
  J. Caudron; Rouen/FR

» Multidisciplinary case presentation and discussion

4 March

**Saturday, March 4, 16:00–17:30, Room E1**

MS 16  Virtual autopsy imaging in children: the role of pathologist vs radiologist, one big happy family?  LEVEL I

» Chairman’s introduction  [A-779]
  C. Owens; London/UK

» Minimally invasive autopsy: setting the scene - why, how and by whom?  [A-780]
  N.J. Sebire; London/UK

» State-of-the-art post-mortem imaging: the way it works and how we do it  [A-781]
  O.J. Arthurs; London/UK

» Latest advances: the new kid on the block micro-CT - when and how?  [A-782]
  J.C. Hutchinson; London/UK

» Multidisciplinary case presentation and discussion
The E³ programme emphasises the importance of lifelong learning.

It covers the entire range of educational issues, from undergraduate medical education to subspecialised continuing professional development.

For the third time at ECR 2017, the E³ programme is structured according to the different levels defined by the European Training Curriculum for Radiology.

The E³ programme consists of the following five branches, which reflect the different levels of education in radiology, as well as the different stages of an individual’s professional career:

- **Rising Stars Programme**
- **European Diploma Prep Sessions**
- **The Beauty of Basic Knowledge**
- **ECR Academies**
- **ECR Master Classes**
Activities 2017

Visiting Schools and Seminars
ESOR Courses for EDiR
Scholarship Programmes
Fellowship Programmes
Visiting Professorships
Online Courses
Tutorials
E³ RISING STARS PROGRAMME

The Rising Stars Programme is designed especially for residents, students, radiographers and trainee radiographers.

It consists of Basic Sessions, Student Sessions, Joint Sessions with ESOR (European School of Radiology), Case-Based Diagnosis Training sessions, EFRS Radiographers’ Basic Session and the Radiology Trainees Forum Programme including the RTF Highlighted Lectures and the RTF Quiz.
E³ – RISING STARS PROGRAMME

BASIC SESSIONS
Special sessions suitable for residents, students, radiographers and radiographers-in-training

**1 March**
**Wednesday, March 1, 08:30–10:00, Room F1**

**Basic Session 1**
**Neuroradiology**

**Moderator:** E.T. Tali; Ankara/TR

- **White matter disorders** [A-030]
  A. Rovira-Cañellas; Barcelona/ES
- **Brain tumours** [A-031]
  J. Walecki; Warsaw/PL
- **Stroke** [A-032]
  E.T. Tali; Ankara/TR

**1 March**
**Wednesday, March 1, 10:30–12:00, Room F1**

**Basic Session 2**
**Lungs**

**Moderator:** T. Franquet; Barcelona/ES

- **Congenital anomalies** [A-063]
  J. Ley-Zaporozhan; Munich/DE
- **Infection** [A-064]
  T. Franquet; Barcelona/ES
- **Tumours** [A-065]
  I. Hartmann; Rotterdam/NL

**1 March**
**Wednesday, March 1, 14:00–15:30, Room F1**

**Basic Session 3**
**Gastrointestinal diseases**

**Moderator:** N. Papanikolaou; Lisbon/PT

- **Oesophagus** [A-074]
  F.-T. Fork; Malmö/SE
- **Stomach** [A-075]
  M. Laniado; Dresden/DE
- **Small bowel** [A-076]
  N. Papanikolaou; Lisbon/PT
- **Colon** [A-077]
  R.G.H. Beets-Tan; Amsterdam/NL

**1 March**
**Wednesday, March 1, 16:00–17:30, Room F1**

**Basic Session 4**
**Gynaecology and obstetrics**

**Moderator:** M. Bekiesinska-Figatowska; Warsaw/PL

- **Benign gynaecological pathologies** [A-124]
  R.N. Lucas; Lisbon/PT
- **Gynaecological malignancies** [A-125]
  A.G. Rockall; London/UK
- **Foetal imaging** [A-126]
  M. Bekiesinska-Figatowska; Warsaw/PL

**2 March**
**Thursday, March 2, 08:30–10:00, Room F1**

**Basic Session 5**
**Head and Neck**

**Moderator:** S.S. Özbek; Izmir/TR

- **Sinuses** [A-205]
  R. Maroldi; Brescia/IT
- **Thyroid and parathyroid** [A-206]
  H. Imhof; Vienna/AT
- **Salivary glands** [A-207]
  S.J. Golding; Oxford/UK
- **Lymph nodes** [A-208]
  S.S. Özbek; Izmir/TR

**2 March**
**Thursday, March 2, 10:30–12:00, Room F1**

**Basic Session 6**
**Oncologic therapies**

**Moderator:** O. Akhan; Ankara/TR

- **Kidney** [A-249]
  O. Akhan; Ankara/TR
- **Lungs** [A-250]
  M. Bezzi; Rome/IT
- **Bones** [A-251]
  A. Gangi; Strasbourg/FR
- **Liver** [A-252]
  J.I. Bilbao; Pamplona/ES
E³ – RISING STARS PROGRAMME

JOINT SESSIONS
OF THE ESR AND ESOR
(European School of Radiology)

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2 March

**Thursday, March 2, 16:00–17:30, Room F1**

**Joint Session of the ESR and ESOR 1**

Radiologic anatomy: abdomen

**Moderator:** S. Gourtsoyianni; London/UK

- **Liver**  [A-326]
  G. Brancatelli; Palermo/IT
- **Biliary tree**  [A-327]
  O. Benjaminov; Petach Tikva/IL
- **Pancreas**  [A-328]
  M. Dioguardi Burgio; Clichy/FR

3 March

**Friday, March 3, 08:30–10:00, Room F1**

**Joint Session of the ESR and ESOR 2**

Radiologic anatomy: lower extremities

**Moderator:** U. Aydingoz; Ankara/TR

- **Hip**  [A-403]
  A.H. Karantanas; Iraklion/GR
- **Knee**  [A-404]
  M. Klontzas; London/UK
- **Ankle**  [A-405]
  M. Maas; Amsterdam/NL

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3 March

**Friday, March 3, 16:00–17:30, Room F1**

**Joint Session of the ESR and ESOR 3**

Radiologic anatomy: neuro

**Moderator:** M.A. Lucic; Sremska Kamenica/RS

- **Cortical anatomy and primary functional areas**  [A-530]
  T.A. Yousry; London/UK
- **Vascular distribution territories: arterial and venous**  [A-531]
  A. Dörfler; Erlangen/DE
- **The basal ganglia of the brain revisited**  [A-532]
  D. Zlatareva; Sofia/BG

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**STUDENT SESSIONS**

Students will present their work

### Thursday, March 2, 14:00–15:30, Room X

**Student Session 1**

**Gastroenterology**

**Moderator:** J. Votrubová; Prague/CZ

- The accumulation of liposomal doxorubicin in tissues treated by radiofrequency ablation and irreversible electroporation in liver: in vivo experimental study on porcine models
  M. Arbet; Brno/CZ

- Distention level of colon in MRI DWI does make relevant difference in diagnosis of inflammatory bowel disease: comparison among recently published data and authors' newly obtained data of ADC values of colon
  S. Atteka; Riga/LV

- The evaluation of extramedullary foci of haematopoiesis in myeloid metaplasia with myelofibrosis (MMM)
  M.-A. Găman; Bucharest/RO

- Non-invasive assessment of liver stiffness in healthy subjects using supersonic shear wave elastography
  D.D. Muntean; Sibiu/RO

- The role of immuno scintigraphy (SPECT) with different radiopharmaceuticals in the detection of colorectal carcinoma
  J. Petrovic; Belgrade/RS

- Use of the MDCT scan measurement of gas distended gastric volume, pre and post sleeve gastrectomy, and it correlation with one year weight loss
  R. Velazco Ramírez; Barcelona/ES

- A MRI-guided high-intensity focused ultrasound-triggered wax-coated capsule for temporally and spatially supertargeted drug release
  O. Wuerthinger; Zurich/CH

- Evaluation of ultrasound elastography and MR-susceptometry for the estimation of iron overload in children after blood cell transfusion
  G. Wurschi; Jena/DE

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### Friday, March 3, 10:30–12:00, Room X

**Student Session 2**

**Breast Imaging**

**Moderator:** S. Zackrisson; Malmö/SE

- A clinical tool for temporal analysis in 3D automated breast ultrasound
  R. Agarwal; Girona/ES

- Breast diagnostic imaging (US, MRX) vs core biopsy histology - analysis of the causes of mismatch
  G. Bicchierai; Florence/IT

- Prevalence, location and type of extramammaary incidental findings on breast MRI in a breast cancer screening trial
  S.V. de Lange; Utrecht/NL

- Pilot study to evaluate perforator vessels of the anterior abdominal wall prior to deep inferior epigastric perforator (DIEP) flap breast reconstruction using magnetic resonance angiography (MRA)
  J. Gessl; Graz/AT

- The correlation between body mass index, breast density and the risk of breast cancer development - results from a population-based breast cancer screening program
  A. Hatw; Cairo/EG

- Quantitative volumetric assessment of fibroglandular and adipose tissue in breast MRI
  A. Niukkanen; Kuopio/FI

- Early dynamic PET/MR mammography in breast cancer - correlation of semiquantitative parameters with prognostic factors
  A.M. Roßmann; Munich/DE

- Micro-focus cone-beam computed tomography dedicated to the breast
  A. Sarno; Naples/IT
E³ – RISING STARS PROGRAMME

STUDENT SESSIONS

Students will present their work

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**Saturday, March 4, 08:30–10:00, Room X**

**Student Session 3**

Neuroimaging

**Moderator:** M.M. Thurnher; Vienna/AT

» Anomalous-diffusion parameters are sensible to microstructural variations in brain due to aging
  M. Guerreri; Rome/IT

» Study of Machado Joseph disease in transgenic animal model using 9,4T MRI equipment
  C.C. Jordão; Figueira da Foz/PT

» MRI tractography comparing diffusion tensor and kurtosis tensor imaging
  J. Leote; Lisbon/PT

» Novel non-invasive imaging of tissue microstructure and pathology - high-resolution diffusional kurtosis imaging (DKI) and sodium MRI (23 Na-MRI) of normal brain
  A. Maiter; Cambridge/UK

» Mapping of brain regions associated with deception by functional magnetic resonance
  M. Perez; Lisbon/PT

» Insights into white matter damage caused by the Kocher-Monro trajectory used in external ventricular drainages: a tractography-based study
  L. Serra-Garcia; Sant Cugat del Valles/ES

» Acute microinfarcts on diffusion weighted imaging MRI - prevalence and associations in cognitive impairment
  M. Shams Latifi; Jonkoping/SE

» Diagnostic accuracy of the perilymphatic signal drop on a 3D-FIESTA-C sequence at 3 Tesla to differentiate vestibular schwannomas from meningiomas of the internal auditory canal
  A. Venkatasamy; Strasbourg/FR

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**Saturday, March 4, 14:00–15:30, Room X**

**Student Session 4**

**Student Projects**

**Moderator:** S.J. Golding; Abingdon/UK

» Radiogenomics: the new perspectives of medical education
  P. Illjuk; Lviv/UA

» The role of social network in education of medical students
  G. Kalchenko; Moscow/RU

» E-schoolapius: improving medical learning through online interactive clinical cases
  J. Marin; Pisa/IT

» Radiological anatomy for undergraduated medicine students as a tool to facilitate the learning of radiology - a peer-assisted learning model
  R.V.L.V. Menezes; Salvador/BR

» Education about ionising radiations - students or patients: who knows best?
  A. Milani; Gallarate/IT

» A simple tool for learning the normal brain sonographic morphology - the brain phantom
  I.M. Pop; Cluj-Napoca/RO

» Centre for Scientific Career - making a difference
  N. Sushentsev; Moscow/RU

» A comprehensive educational project for medical students through a radiology journal, a student-editor and a board of students
  C. Trejo Gallego; Murcia/ES

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**Sunday, March 5, 08:30–10:00, Room X**

**Final Student Session 5**

**Moderator:** M. Szczerbo-Trojanowska; Lublin/PL

Programme to be announced
E³ – RISING STARS PROGRAMME

EFRS RADIOGRAPHERS’ BASIC SESSION
(European Federation of Radiographer Societies)

Saturday, March 4, 08:30–10:00, Room L 8

BR The professional roles of the radiographer

» Introduction
  H. Hjemly; Oslo/NO [A-601]
  D. Katsifarakis; Athens/GR [A-602]

» Becoming a clinical radiographer:
  role, role development and specialisation [A-603]
  N.H. Woznitza; London/UK

» Becoming a clinical manager [A-604]
  E. Kelly; Galway/IE

» Becoming an academic and/or researcher [A-605]
  S.J. MacKay; Liverpool/UK

» Working in industry [A-606]
  P. Doherty; Forchheim/DE

» Discussion, questions and conclusion

CASE-BASED DIAGNOSIS TRAINING
Special programme for residents and general radiologists

Sunday, March 5, 13:00–14:00, Room E1

CBDT I Case-Based Diagnosis Training - Part I

Moderators: K.M. Friedrich; Vienna/AT
            S. Robinson; Vienna/AT

» Liver [A-888]
  L. Martí-Bonmatí; Valencia/ES

» Neuro [A-889]
  D. Prayer; Vienna/AT

» Maxillofacial [A-890]
  S. Robinson; Vienna/AT

» Musculoskeletal [A-891]
  F. Kainberger; Vienna/AT

» Genitourinary [A-892]
  M. Toepker; Vienna/AT

Sunday, March 5, 14:00–14:30, Room E1

Case-Based Diagnosis Training

» Interlude:
  Musculoskeletal manifestations of systemic disease [A-893]
  K. Bohndorf; Vienna/AT

Saturday, March 4, 10:30–12:00, Room O

TF Highlighted Lectures

Moderators: A. Søre; Riga/LV
            L. Andrade; Coimbra/PT

» Ovarian cancer staging: where and what to look for? [A-661]
  M.M. Otero-García; Santiago de Compostela/ES

» Update in breast ultrasound [A-662]
  B. Brkljačić; Zagreb/HR

» Multiparametric MRI evaluation in brain tumours [A-663]
  A. Santa; Sibiu/RO

RADIOLOGY TRAINEES FORUM PROGRAMME

Thursday, March 2, 12:30–13:30, Room B

RTF Quiz

Moderators: J. Cáceres; Barcelona/ES
            J. Vilar; Valencia/ES

Saturday, March 4, 10:30–12:00, Room O

Moderators: A. Svare; Riga/LV
            L. Andrade; Coimbra/PT

» Ovarian cancer staging: where and what to look for? [A-661]
  M.M. Otero-García; Santiago de Compostela/ES

» Update in breast ultrasound [A-662]
  B. Brkljačić; Zagreb/HR

» Multiparametric MRI evaluation in brain tumours [A-663]
  A. Santa; Sibiu/RO
The European Diploma Prep Sessions aim to prepare prospective candidates for the European Diploma in Radiology (EDiR).

They are also suitable for residents who want an overview of the various topics relevant to imaging and for those preparing for their national board examinations.

The content of the programme reflects Level I and Level II European Training Curriculum (ETC) learning objectives across a two-year cycle. The sessions are held in close cooperation with the European Board of Radiology (EBR).

Each of the six sessions is led by three lecturers and moderated by one chairman.
E³ – EUROPEAN DIPLOMA PREP SESSIONS

Saturday, March 4, 08:30–10:00, Room F1

E³ 1323 Chest

» Chairman’s introduction [A-613]
  J. Vilar; Valencia/ES
A. Fundamentals of chest imaging [A-614]
  D. Tack; Baudour/BE
B. Inflammation and tumours of the lung [A-615]
  H. Prosch; Vienna/AT
C. Mediastinum, pleura and chest wall [A-616]
  N. Howarth; Chêne-Bougeries/CH

Saturday, March 4, 10:30–12:00, Room F1

E³ 1423 Gastrointestinal and abdominal

» Chairman’s introduction [A-670]
  C. Stoupis; Männedorf/CH
A. Hepatobiliary system [A-671]
  Y. Menu; Paris/FR
B. Pancreas and spleen [A-672]
  W. Schima; Vienna/AT
C. Imaging of the gastrointestinal tract [A-673]
  R.G.H. Beets-Tan; Amsterdam/NL

Saturday, March 4, 14:00–15:30, Room F1

E³ 1523 Musculoskeletal

» Chairman’s introduction [A-726]
  F.M.H.M. Vanhoenacker; Antwerp/BE
A. Traumatic disorders of the musculoskeletal system [A-727]
  M. Maas; Amsterdam/NL
B. Bone tumours [A-728]
  S.L.J. James; Birmingham/UK
C. Degenerative and inflammatory disorders of the musculoskeletal system [A-729]
  D. Spira; Heidelberg/DE

Saturday, March 4, 16:00–17:30, Room F1

E³ 1623 Breast

» Chairman’s introduction [A-787]
  F. Pediconi; Rome/IT
A. Fundamentals of mammography [A-788]
  S. Barter; Cambridge/UK
B. Breast cancer diagnosis and interventions [A-789]
  M. Müller-Schimpfle; Frankfurt a. Main/DE
C. Advanced imaging of the female breast [A-790]
  R.M. Mann; Nijmegen/NL

Sunday, March 5, 10:30–12:00, Room F1

E³ 1823 Principles of imaging and radiation protection

» Chairman’s introduction [A-881]
  P. Vock; Spiegel/CH
A. Principles of computed tomography [A-882]
  W.A. Kalender; Erlangen/DE
B. Principles of magnetic resonance imaging [A-883]
  T. Metens; Brussels/BE
C. Radiation protection [A-884]
  M. Mahesh; Baltimore, MD/US

Sunday, March 5, 14:00–15:30, Room F1

E³ 1923 Neuro

» Chairman’s introduction [A-894]
  C. Manelfe; Toulouse/FR
A. Congenital and white matter disorders of the brain [A-895]
  A. Rossi; Genoa/IT
B. Neurovascular disorders and trauma of the brain [A-896]
  M. Forsting; Essen/DE
C. Tumours of the brain and spine [A-897]
  M.M. Thurnher; Vienna/AT
The Beauty of Basic Knowledge programmes focus on knowledge essential to the daily practice of radiology. The format of these sessions reflects the tradition of conventional teaching sessions, in which experienced teachers share their insights into a topic of particular relevance with a group of attendees.

A Beauty of Basic Knowledge session either consists of 45-minute lectures held by one or two speakers (plus 10–15 minutes of discussion per lecture), or two 25-minute lectures and a general discussion. The teaching format is usually case-based, and features some interaction with the attendees.

The content of the sessions is mostly tied to the Level I European Training Curriculum (ETC) learning objectives. The Beauty of Basic Knowledge sessions are suited to residents and board-certified radiologists who want to refresh their knowledge of basic topics in imaging and image-guided therapy.
<table>
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<tr>
<th>Date</th>
<th>Wednesday, March 1, 12:30–13:30, Room D</th>
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<tbody>
<tr>
<td>1</td>
<td>E3 24A Degenerative disorders [LEVEL 1]</td>
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<td>A. Cotten; Lille/FR [A-073]</td>
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<td>Thursday, March 2, 12:30–13:30, Room D</td>
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<td>E3 24B Chronic trauma: spectrum of bone response [LEVEL 1]</td>
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<td>A.H. Karantanas; Iraklion/GR [A-264]</td>
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<td>E3 24C Bone tumours [LEVEL 1]</td>
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<td>K. Wörtler; Munich/DE [A-464]</td>
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<td>E3 24D Acute trauma: patterns in the peripheral skeleton [LEVEL 1]</td>
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<td>J. Teh; Oxford/UK [A-685]</td>
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<td>E3 24E Infective/inflammatory disorders [LEVEL 1]</td>
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<td>F.M.H.M. Vanhoenacker; Antwerp/BE [A-887]</td>
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<tr>
<td>1</td>
<td>E3 25A Useful signs in chest radiology [LEVEL 1]</td>
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<td>A. Lung parenchyma [A-071]</td>
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<td>G.R. Ferretti; Grenoble/FR</td>
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<td>B. Mediastinum and chest wall [A-072]</td>
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<td>N. Howarth; Chêne-Bougeries/CH</td>
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<td>E3 25B How to avoid misdiagnosis on the chest x-ray [LEVEL 1]</td>
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<td>A. Neoplastic lesions [A-262]</td>
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<td>J. Vlahos; London/UK</td>
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<td>B. Non-neoplastic lesions [A-263]</td>
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<td>A.R. Larici; Rome/IT</td>
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<td>3</td>
<td>Friday, March 3, 12:30–13:30, Room C</td>
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<td>E3 25C Reporting interstitial lung disease made easy [LEVEL 1]</td>
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<td>A. Five golden rules [A-462]</td>
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<td>S.R. Desai; London/UK</td>
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<td>B. Multidisciplinary approach to diagnosis in interstitial lung disease: the role of HRCT [A-463]</td>
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<td>N. Sverzellati; Parma/IT</td>
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<td>E3 25D The most important measurements you need to know in chest radiology [LEVEL 1]</td>
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<td>A. Heart and great vessels: how, why, when? [A-683]</td>
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<td>G. Fassa-Ashrafpoor; Chêne-Bougeries/CH</td>
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<td>B. Lung nodules: is volume better than size? [A-684]</td>
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<td>M. Prokop; Nijmegen/NL</td>
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<td>E3 25E Still tricky after all these years [LEVEL 1]</td>
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<td>A. The hila [A-885]</td>
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<td>B. Ghaye; Brussels/BE</td>
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<td>B. The mediastinum [A-886]</td>
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<td>M. Occhipinti; Florence/IT</td>
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</table>
The ECR Academies consist of a series of four to six sessions relevant to a particular area of radiology. This may be a classic organ-based field or a technically oriented area of another field related to radiology, such as management. Each ECR Academy spans several days, in which the different facets of the area in question are covered by experts in the field. An ECR Academy is a coherent course in which the different sessions complement one another in order to reflect the entirety of the field.

The ECR Academies are particularly suited to general radiologists or radiologists with a subspecialisation.
TIPS AND TRICKS IN LIVER, BILE DUCTS AND PANCREAS IMAGING

1 March Wednesday, March 1, 08:30–10:00, Room M 4

E3 118 Liver, bile ducts and pancreas: improving your technique with advanced tools

» Chairman’s introduction [A-054]
Y. Menu; Paris/FR

A. Liver specific contrast: how, why, when? [A-055]
E. Neri; Pisa/IT

B. Diffusion-weighted imaging (DWI): how, why, when? [A-056]
D.-M. Koh; Sutton/UK

C. Advances in hybrid imaging: new tracers and MR/PET [A-057]
E.J. Rummeny; Munich/DE

1 March Wednesday, March 1, 10:30–12:00, Room M 4

E3 218 Benign liver tumours: daily questions

» Chairman’s introduction [A-066]
S.M. Ertürk; Istanbul/TR

A. Cystic lesions: always biliary cysts? [A-067]
O. Benjaminov; Petach Tikva/IL

B. Solid benign lesions: how to solve the conundrum? [A-068]
F. Caseiro-Alves; Coimbra/PT

C. From images to strategy: tough cases of benign liver tumours [A-069]
M. Nadrijanski; Belgrade/RS

1 March Wednesday, March 1, 14:00–15:30, Room M 4

E3 318 Chronic liver disease: guidelines for the radiologist

» Chairman’s introduction [A-083]
B.J. Op de Beeck; Antwerp/BE

A. Measuring fat and iron with MRI: how accurate? [A-084]
M.M. França; Porto/PT

B. Can we reliably identify/quantify liver fibrosis and cirrhosis [A-085]
V. Vilgrain; Clichy/FR

C. The small liver nodule and chronic liver disease [A-086]
G. Brancatelli; Palermo/IT

1 March Wednesday, March 1, 16:00–17:30, Room M 4

E3 418 Bile ducts imaging: not so simple

» Chairman’s introduction [A-154]
S.A. Jackson; Plymouth/UK

A. Cholangiocarcinoma [A-155]
S.Y. Kim; Seoul/KR

B. Chronic cholangitis [A-156]
M. Ronot; Clichy/FR

C. Tough clinical cases [A-157]
E.M. Merkle; Basle/CH

2 March Thursday, March 2, 08:30–10:00, Room M 4

E3 518 New challenges of pancreatitis

» Chairman’s introduction [A-234]
G. Zamboni; Verona/IT

A. Understanding the Atlanta 2012 classification of acute pancreatitis [A-235]
W. Schima; Vienna/AT

B. Autoimmune pancreatitis and its relatives [A-236]
G. Morana; Treviso/IT

C. Tough clinical cases of cystic pancreatic lesions [A-237]
M. Karcaaltincaba; Ankara/TR

2 March Thursday, March 2, 10:30–12:00, Room M 4

E3 618 Pancreatic tumours

» Chairman’s introduction [A-253]
J. Votruba; Prague/CZ

A. Staging adenocarcinoma [A-254]
N. Kartalis; Stockholm/SE

B. Neuroendocrine tumours [A-255]
R. Manfredi; Rome/IT

C. Tough clinical cases [A-256]
T.C. Lauenstein; Essen/DE

= Interactive session with electronic voting/self assessment
SPINAL IMAGING

**March 2, Thursday, 14:00-15:30, Room M 4**

**E3 719 Spine: osseous lesions**

- Chairman's introduction [A-277]
  F. Kainberger; Vienna/AT
- A. Primary bone tumours [A-278]
  J.L. Bloem; Leiden/NL
- B. Early diagnosis of spondyloarthropathies [A-279]
  J.A. Narváez; Barcelona/ES
- C. Diffuse bone marrow disorders: myeloma and metastases [A-280]
  A. Baur-Melnyk; Munich/DE

**March 2, Thursday, 16:00-17:30, Room M 4**

**E3 819 Spinal trauma**

- Chairman's introduction [A-356]
  L. Manfrè; Catania/IT
- A. Looking for fractures [A-357]
  E.J. Ulbrich; Zurich/CH
- B. Looking for spinal cord and soft tissue injuries [A-358]
  F. Bonneville; Toulouse/FR
- C. Looking for spinal injuries in children [A-359]
  P.C. Maly Sundgren; Lund/SE

**March 3, Friday, 08:30-10:00, Room M 4**

**E3 919 Degenerative cervical spine**

- Chairman's introduction [A-433]
  V.N. Cassar-Pullicino; Oswestry/UK
- A. Normal ageing process [A-434]
  C.W.A. Pfirrmann; Zurich/CH
- B. MR findings: what's relevant? [A-435]
  M.-A. Weber; Heidelberg/DE
- C. Spinal stenosis: what is it? [A-436]
  M. Muto; Naples/IT

**March 3, Friday, 10:30-12:00, Room M 4**

**E3 1019 Spinal cord abnormalities**

- Chairman's introduction [A-454]
  S. Gaudino; Rome/IT
- A. MR imaging of the spinal cord: how to do it? [A-455]
  J. Van Goethem; Antwerp/BE
- B. Differentiating intradural mass lesions [A-456]
  G. Lycklama à Nijeholt; The Hague/NL
- C. Pattern recognition of non-tumoural spinal cord lesions [A-457]
  M.M. Thurnher; Vienna/AT

**March 4, Saturday, 08:30-10:00, Room M 4**

**E3 1320 Multiparametric US in paediatric radiology**

- Chairman's introduction [A-644]
  K. Rosendahl; Bergen/NO
- A. Contrast-enhanced US (CEUS) in paediatric trauma [A-645]
  M. Riccabona; Graz/AT
- B. CEUS in paediatrics: liver, kidney and beyond [A-646]
  E.-M. Jung; Regensburg/DE
- C. Multiparametric US of the paediatric chest: more than effusion [A-647]
  P. Tomà; Rome/IT

**March 4, Saturday, 10:30-12:00, Room M 4**

**E3 1420 Multiparametric US of small parts**

- Chairman's introduction [A-674]
  D.A. Clevert; Munich/DE
- A. Thyroid [A-675]
  S.S. Özbek; Izmir/TR
- B. Lymph nodes [A-676]
  P.-Y. Marcy; Ollioules/FR
- C. Scrotum [A-677]
  M. Bertolotto; Trieste/IT

**March 4, Saturday, 14:00-15:30, Room M 4**

**E3 1520 Vascular multiparametric US**

- Chairman's introduction [A-745]
  P.S. Sidhu; London/UK
- A. Deep venous thrombosis and chronic venous insufficiency of the lower extremity [A-746]
  G. O’Sullivan; Galway/IE
- B. Abdominal vascular emergencies: ruptures and occlusions [A-747]
  D.A. Clevert; Munich/DE
- C. Upper and lower extremity arterial emergencies [A-748]
  B. Brklijačić; Zagreb/HR

**March 4, Saturday, 16:00-17:30, Room M 4**

**E3 1620 Multiparametric US in musculoskeletal applications**

- Chairman's introduction [A-817]
  P. Peetrons; Brussels/BE
- A. Sports-related lower extremity injuries [A-818]
  P.J. O'Connor; Leeds/UK
- B. Entrapment neuropathies of extremity nerves [A-819]
  H. Gruber; Innsbruck/AT
- C. Inflammatory joint disease [A-820]
  A. Klauser; Innsbruck/AT

= Interactive session with electronic voting/self assessment

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**1 March**
**Wednesday, March 1, 08:30–10:00, Room A**

**E3 121 Emergency radiology I** LEVEL II

A. **Brain trauma** [A-001]
   - M. Smits; Rotterdam/NL
B. **Peripheral vascular injury** [A-002]
   - J. Ferda; Plzen/CZ

**1 March**
**Wednesday, March 1, 10:30–12:00, Room A**

**E3 221 MR imaging in sports medicine I** LEVEL II

A. **Muscle injury in sports** [A-061]
   - M.G. Mack; Munich/DE
B. **Knee trauma** [A-062]
   - M. Shahabpour; Brussels/BE

**2 March**
**Thursday, March 2, 08:30–10:00, Room A**

**E3 521 Integrating diagnostic tools in breast imaging** LEVEL II

A. **Multimodality breast imaging** [A-162]
   - K. Kinkel; Chêne-Bougeries/CH
B. **Multimetric breast MRI** [A-163]
   - J. Camps Herrero; Valencia/ES

**2 March**
**Thursday, March 2, 10:30–12:00, Room A**

**E3 621 Emergency radiology II** LEVEL II

A. **Abdominal vascular emergencies** [A-242]
   - A. Palkó; Szeged/HU
B. **Chest trauma** [A-243]
   - J. Biederer; Heidelberg/DE

**2 March**
**Thursday, March 2, 14:00–15:30, Room A**

**E3 721 MR imaging in sports medicine II** LEVEL II

A. **Sports injuries of the ankle** [A-265]
   - P. Robinson; Leeds/UK
B. **Shoulder injury** [A-266]
   - M. Zanetti; Zurich/CH

**3 March**
**Friday, March 3, 08:30–10:00, Room A**

**E3 821 Paediatric radiology for the general radiologist** LEVEL II

A. **Fractures in children** [A-285]
   - K.J. Johnson; Birmingham/UK
B. **MRI-typical paediatric applications in musculoskeletal imaging** [A-286]
   - K. Rosendahl; Bergen/NO

**3 March**
**Friday, March 3, 16:00–17:30, Room A**

**E3 921 Use of staging and classification systems** LEVEL II

A. **RECIST 1.1 training** [A-364]
   - A. Graser; Munich/DE
B. **Gastrointestinal-abdominal masses** [A-365]
   - A. Ba-Ssalamah; Vienna/AT

**4 March**
**Saturday, March 4, 08:30–10:00, Room A**

**E3 1321 Imaging of abdominal tumours** LEVEL II

A. **Liver tumours** [A-576]
   - A. Luciani; Créteil/FR
B. **Pancreatic tumours** [A-577]
   - C. Matos; Lisbon/PT

**4 March**
**Saturday, March 4, 10:30–12:00, Room A**

**E3 1421 Genitourinary and gastrointestinal radiology** LEVEL II

A. **Prostate MRI using PI-RADS** [A-652]
   - H.C. Thoeny; Berne/CH
B. **New aspects of renal tumours** [A-653]
   - N. Grenier; Bordeaux/FR

= Interactive session with electronic voting/self assessment
March 4
Saturday, March 4, 14:00–15:30, Room A

E3 1521 Imaging of the skull base LEVEL II

A. Non-tumoural pathology of the temporal bone [A-686]
B. Tumours of the skull base [A-687]

B. Ozgen Mocan; Ankara/TR
T. Beale; London/UK

March 4
Saturday, March 4, 16:00–17:30, Room A

E3 1621 Imaging of the chest LEVEL II

A. Fibrosing lung diseases [A-753]
F. Molinari; Lille/FR
B. Pleural disease [A-754]
C. Beigelman; Lausanne/CH

March 5
Sunday, March 5, 08:30–10:00, Room A

E3 1721 Brain tumours LEVEL II

A. Paediatric brain tumours [A-825]
M.I. Argyropoulou; Ioannina/GR
B. Adult brain tumours [A-826]
P.C. Maly Sundgren; Lund/SE

March 5
Sunday, March 5, 10:30–12:00, Room A

E3 1821 Dementia and movement disorders LEVEL II

A. MR contribution to diagnosis and differential diagnosis in dementia [A-873]
M. Sasiadek; Wroclaw/PL
B. Imaging in Parkinsonism and other extrapyramidal disorders [A-874]
T. Stosic-Opincal; Belgrade/RS

March 4
Saturday, March 4, 14:00–15:30, Room M 5

E3 1522 Cerebral blood flow quantification LEVEL III

» Chairman’s introduction [A-648]
T. van der Zijden; Edegem/BE
A. Functional imaging of cerebral perfusion [A-649]
A. Krainik; Grenoble/FR
B. Cerebral blood flow measurements with arterial spin-labelling [A-650]
X. Golay; London/UK
C. Cerebrovascular reserve imaging and the consequences of neurovascular uncoupling [A-651]
J. Hendrikse; Utrecht/NL

March 4
Saturday, March 4, 16:00–17:30, Room M 5

E3 1622 Functional imaging of the spine LEVEL III

» Chairman’s introduction [A-678]
P.C. Maly Sundgren; Lund/SE
A. Clinical utility of perfusion imaging for differentiating brain tumours [A-679]
I.N. Pronin; Moscow/RI
B. Clinical applications of amino acid PET in brain tumour patients [A-680]
N. Galldiks; Cologne/DE
C. Assessment of brain tumour perfusion and abnormal vascular structure using arterial spin-labelling [A-681]
X. Golay; London/UK

March 4
Saturday, March 4, 08:30–10:00, Room M 5

E3 1322 Cerebral blood flow quantification LEVEL III

» Chairman’s introduction [A-648]
T. van der Zijden; Edegem/BE
A. Functional imaging of cerebral perfusion [A-649]
A. Krainik; Grenoble/FR
B. Cerebral blood flow measurements with arterial spin-labelling [A-650]
X. Golay; London/UK
C. Cerebrovascular reserve imaging and the consequences of neurovascular uncoupling [A-651]
J. Hendrikse; Utrecht/NL

March 4
Saturday, March 4, 10:30–12:00, Room M 5

E3 1422 Advanced imaging techniques in brain tumours LEVEL III

» Chairman’s introduction [A-678]
P.C. Maly Sundgren; Lund/SE
A. Clinical utility of perfusion imaging for differentiating brain tumours [A-679]
I.N. Pronin; Moscow/RI
B. Clinical applications of amino acid PET in brain tumour patients [A-680]
N. Galldiks; Cologne/DE
C. Assessment of brain tumour perfusion and abnormal vascular structure using arterial spin-labelling [A-681]
X. Golay; London/UK

March 4
Saturday, March 4, 14:00–15:30, Room M 5

E3 1522 Cerebral blood flow quantification LEVEL III

» Chairman’s introduction [A-749]
T.A. Yousry; London/UK
A. No function without structure: challenges in diffusion MRI and fibre tractography for clinical research [A-750]
C. Tax; Cardiff/UK
B. Clinical utility of fMRI for preoperative brain mapping [A-751]
H. Urbach; Freiburg/DE
C. Introduction to resting state fMRI and functional connectomics [A-752]
M. Oldehinkel; Nijmegen/NL

March 4
Saturday, March 4, 16:00–17:30, Room M 5

E3 1622 Functional imaging of the spine LEVEL III

» Chairman’s introduction [A-821]
D. Balériaux; Brussels/BE
A. Measuring CSF flow: technique and clinical usefulness [A-822]
B. Erlt-Wagner; Munich/DE
B. Diffusion tensor imaging of the spinal cord in the assessment of intramedullary changes [A-823]
M. Sasiadek; Wroclaw/PL
C. Dynamic MR lumbar evaluation in degenerative spine disease [A-824]
M. Muto; Naples/IT

= Interactive session with electronic voting/self assessment
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E3 – ECR MASTER CLASSES

1 March

**Wednesday, March 1, 08:30–10:00, Room F2**

**Oncologic Imaging**

E3 126a  Oncologic imaging in the age of precision medicine  LEVEL III

Moderator: H. Hricak; New York, NY/US  

A. Precision medicine  [A-033]  
G. Frija; Paris/FR

B. Radiomics: the role of imaging in precision medicine  [A-034]  
R. Kikinis; Boston, MA/US

C. Precision medicine and imaging-guided interventions  [A-035]  
F.E. Boas; New York, NY/US

» Panel discussion: Precision medicine in oncology: what can imaging provide?

1 March

**Wednesday, March 1, 08:30–10:00, Room M 5**  LEVEL III

**Genitourinary**

E3 126b  Functional MRI of the kidneys: ready for prime time?  LEVEL III

Moderator: H.C. Thoeny; Berne/CH  

A. Diffusion-weighted MRI  [A-058]  
N. Grenier; Bordeaux/FR

B. Perfusion MRI  [A-059]  
M. Claudon; Vandoeuvre-les-Nancy/FR

C. BOLD and ASL  [A-060]  
A. Boss; Zurich/CH

2 March

**Thursday, March 2, 08:30–10:00, Room B**

**Abdominal and Gastrointestinal**

E3 526a  The obesity epidemic: what is radiology’s role?  LEVEL III

» Chairman’s introduction  [A-164]  
E.M. Merkle; Basle/CH

A. The metabolic syndrome: what the radiologist needs to understand  [A-165]  
H.J. Lamb; Leiden/NL

B. Imaging the obese patient presenting as an emergency: challenges and solutions  [A-166]  
M. Rengo; Latina/IT

C. Evidence and recommendations for quantification of hepatic and visceral fat  [A-167]  
C.B. Sirlin; San Diego, CA/US

D. Bariatric surgery: normal postoperative imaging appearances and spectrum of complications  [A-168]  
A. Blachar; Tel Aviv/IL

2 March

**Thursday, March 2, 08:30–10:00, Room M 1**  LEVEL III

**Vascular**

E3 526b  What’s new in arterial embolisation? Current and future trends

Moderator: D.K. Tsetis; Iraklion/GR

A. New beads and new drugs: new indications  [A-223]  
S.N. Goldberg; Jerusalem/IL

B. Prostate arterial embolisation  [A-224]  
H. Rio Tinto; Lisbon/PT

C. Haemorrhoid embolisation  [A-225]  
T. Jargiello; Lublin/PL

3 March

**Friday, March 3, 08:30–10:00, Room M 5**

**Emergency Radiology**

E3 926  Multimodality imaging of the acute female pelvis  LEVEL III

Moderator: R. Basilico; Chieti/IT

A. Ultrasound: making a more specific diagnosis  [A-437]  
M. Weston; Leeds/UK

B. When can CT give a definite answer?  [A-438]  
I. Millet; Montpellier/FR

C. Is MRI a game-changer?  [A-439]  
G. Masselli; Rome/IT

4 March

**Saturday, March 4, 08:30–10:00, Room M 3**

**Interventional Radiology**

E3 1326  Image-guided liver interventions: update and level of evidence

Moderator: P.L. Pereira; Heilbronn/DE

A. Hepatocellular carcinoma (HCC)  [A-641]  
L. Crocetti; Pisa/IT

B. Liver metastases of colorectal cancer (mCRC)  [A-642]  
T.K. Helmberger; Munich/DE

C. Liver metastases of neuro-endocrine tumours (NET)  [A-643]  
J. Kettenbach; St. Pölten/AT
E3 – ECR MASTER CLASSES

Saturday, March 4, 14:00–15:30, Room C

**Chest**

E3 1526a  Large airway disease  [LEVEL II]

**Moderator:** M. Occhipinti; Florence/IT

A. Diseases of the trachea  [A-699]
P.A. Grenier; Paris/FR

B. Tracheobronchial instability  [A-700]
M.O. Wielpütz; Heidelberg/DE

C. Quantitative analysis and imaging biomarkers of chronic obstructive pulmonary disease (COPD)  [A-701]
H. Gietema; Enschede/NL

Saturday, March 4, 14:00–15:30, Room O

**Paediatric**

E3 1526b  Imaging in child abuse: an update  [LEVEL II]

**Moderator:** G.M. Magnano; Genoa/IT

A. Skeletal fractures  [A-702]
R.R. van Rijn; Amsterdam/NL

B. Abusive head trauma  [A-703]
C. Adamsbaum; Le Kremlin-Bicêtre/FR

C. The medico-legal issues  [A-704]
A.C. Offiah; Sheffield/UK

Saturday, March 4, 14:00–15:30, Room D

**Musculoskeletal**

E3 1526c  MRI developments and techniques in musculoskeletal (MSK) radiology  [LEVEL II]

**Moderator:** C.W.A. Pfirrmann; Zurich/CH

A. Whole-body MRI (WBMRI) and diffusion-weighted imaging (DWI) in MSK: where is it (not) useful and how do I do it?  [A-734]
F.E. Lecouvet; Brussels/BE

B. MR neurography: how to optimise and interpret your images  [A-735]
G. Andreisek; Münsterlingen/CH

C. 3D-spin echo (3D-SE) and radial imaging: uses and limitations  [A-736]
J. Fritz; Tübingen/DE

Saturday, March 4, 16:00–17:30, Room M 3

**Molecular Imaging**

E3 1626  Molecular imaging in oncology  [LEVEL II]

» Chairman’s introduction  [A-812]
K. Nikolau; Tübingen/DE

A. Imaging of hypoxia  [A-813]
V.J. Goh; London/UK

B. Imaging of proliferation  [A-814]
A. Kjaer; Copenhagen/DK

C. Imaging of metabolism  [A-815]
C. Nanni; Bologna/IT

D. Biomarker Imaging with MR  [A-816]
M.E. Mayerhöfer; Vienna/AT

» Panel discussion: The pros and cons of molecular imaging in oncology

Sunday, March 5, 08:30–10:00, Room N

**Head and Neck**

E3 1726a  Functional imaging in head and neck radiology: beyond morphology  [LEVEL II]

**Moderator:** M.M. Lemmerling; Ghent/BE

A. Diffusion-weighted MRI: apparent diffusion coefficient (ADC) and beyond  [A-839]
A.D. King; Hong Kong/HK

B. Perfusion imaging in head and neck: what is new?  [A-840]
R. Maroldi; Brescia/IT

C. MR/PET: the way to go  [A-841]
M. Becker; Geneva/CH

Sunday, March 5, 08:30–10:00, Room E1

**Breast**

E3 1726b  Taking clinical breast MRI to the next level  [LEVEL II]

» Chairman’s introduction  [A-846]
J. Camps Herrero; Valencia/ES

A. Breast MRI biomarkers for the clinical setting  [A-847]
E.A. Morris; New York, NY/US

B. Preoperative MRI: which changes to expect after the MIPA trial?  [A-848]
F. Sardanelli; San Donato Milanese/IT

C. Is breast MRI increasing the number of high-risk lesions?  [A-849]
C.K. Kuhl; Aachen/DE

» Panel discussion: Breast MRI: what more evidence do we need?

Sunday, March 5, 08:30–10:00, Room E2

**Neuro**

E3 1726c  Imaging of traumatic brain injury  [LEVEL II]

**Moderator:** M. Karlović-Vidaković; Mostar/BA

A. New MRI techniques in the diagnosis of patients with traumatic brain injury  [A-850]
D. Galanaud; Paris/FR

B. Computer-aided diagnosis in trauma imaging: status and developments and the role of deep learning  [A-851]
R. Manniesing; Nijmegen/NL

T. Vande Vyvere; Antwerp/BE
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September 11 (Linköping, Sweden)
September 17 (Islamabad, Pakistan)
November 11 (Istanbul, Turkey)
December 4 (Paris, France)

More information on
www.myEBR.org
This year, the Joint Course of the ESR and RSNA (Radiological Society of North America) focuses on hybrid imaging.

Places are allocated on a first-come, first-served basis.

Please note that you can only take part in electronic voting via your own device (smartphone, tablet, laptop) by connecting to the WiFi network of the lecture room you are in. Once connected, you will be automatically directed to the voting website. No app required.
### Joint Course of the ESR and RSNA

**Hybrid Imaging**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
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<th>Level</th>
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<tbody>
<tr>
<td>MC 528</td>
<td>The ABCs of hybrid imaging</td>
<td>March 2, 2017</td>
<td>08:30–10:00</td>
<td>Room M 5</td>
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<tr>
<td>MC 628</td>
<td>Hybrid imaging in the female</td>
<td>March 2, 2017</td>
<td>10:30–12:00</td>
<td>Room M 5</td>
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<tr>
<td>MC 728</td>
<td>Hybrid imaging of the brain</td>
<td>March 2, 2017</td>
<td>14:00–15:30</td>
<td>Room M 5</td>
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<tr>
<td>MC 828</td>
<td>Hybrid imaging in the male</td>
<td>March 2, 2017</td>
<td>16:00–17:30</td>
<td>Room M 5</td>
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</table>

**Moderators:** A. Drzezga; Cologne/DE  
K. Riklund; Umeå/SE

**A. What you need to know about PET-physics**  
J. Axelsson; Umeå/SE

**B. How MR physics influence image quality in hybrid imaging**  
C. Catana; Boston, MA/US

**C. Interactive case discussion**  
J. Axelsson; Umeå/SE  
C. Catana; Boston, MA/US

**A. Pelvic tumours**  
F. Dehdashti; St. Louis, MO/US

**B. Breast cancer**  
O. Ratib; Geneva/CH

**C. Interactive case discussion**  
F. Dehdashti; St. Louis, MO/US  
O. Ratib; Geneva/CH

**A. Neurodegenerative disorders**  
H. Barthel; Leipzig/DE

**B. Brain tumours**  
J. McConathy; St. Louis, MO/US

**C. Interactive case discussion**  
H. Barthel; Leipzig/DE  
J. McConathy; St. Louis, MO/US

**A. Prostate cancer: novel tracers**  
S.P. Rowe; Baltimore, MD/US

**B. Prostate cancer: PET, MR or both?**  
M. Eiber; Los Angeles, CA/US

**C. Interactive case discussion**  
M. Eiber; Los Angeles, CA/US  
S.P. Rowe; Baltimore, MD/US

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= Interactive session with electronic voting/self assessment
The Pros & Cons Session will examine the controversial topic: ‘Providing an effective ultrasound service: how and by whom?’ The session will be split into one interactive and one non-interactive part.

**Friday, March 3, 16:00–17:30, Room K**

**PS 1227 Providing an effective ultrasound service: how and by whom?**

**Moderators:** L.E. Derchi; Genoa/IT  
V. Gibbs; Bristol/UK

A. Who provides US services? The situation in Europe  
H. Edwards; Stevenage/UK

B. Should US services be provided by radiologists? (performed and reported on)  
M. Claudon; Vandoeuvre-les-Nancy/FR

C. Can or should US services be provided by radiographers/sonographers? Educational needs  
G. Harrison; London/UK

D. Is it possible to standardise a ‘real-time’ examination?  
Sometimes it is possible, but not always  
C. Nyhsen; Sunderland/UK

» Discussion on the pros and cons  
L.E. Derchi; Genoa/IT  
V. Gibbs; Bristol/UK
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myESR.org/epos
The Voice of EPOS™ will again offer a platform for poster authors to present their work in moderated poster sessions to an international audience at ECR 2017.

NEW: Due to the record in abstract submissions and applications for The Voice of EPOS™, ECR 2017 will feature three stages!

Presentations will take place from Wednesday to Sunday, and will also be broadcast online via the ECR Live streaming service and recorded for ECR Online.

In addition to organ-based topics, The Voice of EPOS™ will feature new exciting sessions such as Computer Applications, Molecular Imaging, Physics in Radiology, Radiographers and Radioprotection.

To strengthen the exchange within the communities and serve a multilingual and international audience, there will be sessions dedicated to a multitude of languages and countries.
# THE VOICE OF EPOS

## Stage 1

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<td>VoE 1 Abdominal Viscera</td>
<td>E. Kotter; Freiburg/DE</td>
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<td>VoE 2 Polish</td>
<td>T. Popiela; Krakow/PL</td>
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<td>VoE 3 Emergency</td>
<td>E. Kotter; Freiburg/DE</td>
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<td><strong>1 March</strong></td>
<td><strong>Wednesday, March 1, 12:00-13:00</strong></td>
<td>VoE 4 Russian</td>
<td>E. Mershina; Moscow/ RU</td>
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<td><strong>1 March</strong></td>
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<td>VoE 5 Cardiac</td>
<td>A. Alberich-Bayarri; Valencia/ES</td>
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<td><strong>1 March</strong></td>
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<td>VoE 6 India</td>
<td>B. Ahuja; Agra/IN</td>
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<td><strong>1 March</strong></td>
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<td>VoE 7 Chest</td>
<td>M. Toepker; Vienna/AT</td>
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<td><strong>2 March</strong></td>
<td><strong>Thursday, March 2, 09:00-10:00</strong></td>
<td>VoE 8 Paediatric</td>
<td>E. Blumfield; New York, NY/US</td>
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<td><strong>2 March</strong></td>
<td><strong>Thursday, March 2, 10:00-11:00</strong></td>
<td>VoE 9 Italian</td>
<td>G. Zamboni; Verona/ IT</td>
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<td><strong>2 March</strong></td>
<td><strong>Thursday, March 2, 11:00-12:00</strong></td>
<td>VoE 10 Genitourinary</td>
<td>V.F. Muglia; Ribeirao Preto/BR</td>
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<td><strong>2 March</strong></td>
<td><strong>Thursday, March 2, 12:00-13:00</strong></td>
<td>VoE 11 Arabic (Egypt)</td>
<td>T. El-Diasty; Mansoura/EG</td>
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<td><strong>2 March</strong></td>
<td><strong>Thursday, March 2, 13:00-14:00</strong></td>
<td>VoE 12 Radioprotection/Radiation Dose</td>
<td>D. Tack; Braine-L’Alleud/BE</td>
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<td><strong>2 March</strong></td>
<td><strong>Thursday, March 2, 14:00-15:00</strong></td>
<td>VoE 13 Latin America (Portuguese)</td>
<td>V.F. Muglia; Ribeirao Preto/BR</td>
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<td>VoE 14 Head and Neck</td>
<td>E. Ada; Izmir/TR</td>
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<tr>
<td>Date</td>
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<td><strong>3</strong></td>
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<td><strong>Friday, March 3</strong></td>
<td><strong>09:00-10:00</strong> Intervventional Moderator: I. Bargellini; Pisa/IT</td>
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<td><strong>3</strong></td>
<td><strong>March</strong></td>
<td><strong>Friday, March 3</strong></td>
<td><strong>10:00-11:00</strong> Japanese Moderator: Y.O. Tanaka; Tsukuba/JP</td>
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<td><strong>3</strong></td>
<td><strong>March</strong></td>
<td><strong>Friday, March 3</strong></td>
<td><strong>11:00-12:00</strong> Computer Applications Moderator: D. Wormanns; Berlin/DE</td>
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<td><strong>3</strong></td>
<td><strong>March</strong></td>
<td><strong>Friday, March 3</strong></td>
<td><strong>12:00-13:00</strong> Spain Moderator: A. Alberich-Bayarri; Valencia/ES</td>
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<td><strong>3</strong></td>
<td><strong>March</strong></td>
<td><strong>Friday, March 3</strong></td>
<td><strong>13:00-14:00</strong> Musculoskeletal Moderator: J.L. del Cura Rodríguez; Bilbao/ES</td>
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<td><strong>Friday, March 3</strong></td>
<td><strong>14:00-15:00</strong> French Moderator: S. Nougaret; St. Clement de Riviere/FR</td>
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<td><strong>March</strong></td>
<td><strong>Friday, March 3</strong></td>
<td><strong>15:00-16:00</strong> Breast Moderator: P. Wunderlich; Radebeul/DE</td>
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<td><strong>4</strong></td>
<td><strong>March</strong></td>
<td><strong>Saturday, March 4</strong></td>
<td><strong>09:00-10:00</strong> Oncology Moderator: S. Delorme; Heidelberg/DE</td>
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<td><strong>4</strong></td>
<td><strong>March</strong></td>
<td><strong>Saturday, March 4</strong></td>
<td><strong>10:00-11:00</strong> German Moderator: P. Wunderlich; Radebeul/DE</td>
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<td><strong>4</strong></td>
<td><strong>March</strong></td>
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<td><strong>11:00-12:00</strong> EuroSafe Imaging Moderator: G. Frija; Paris/FR</td>
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<td><strong>4</strong></td>
<td><strong>March</strong></td>
<td><strong>Saturday, March 4</strong></td>
<td><strong>12:00-13:00</strong> Turkish Moderator: C. Calli; Izmir/TR</td>
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<td><strong>4</strong></td>
<td><strong>March</strong></td>
<td><strong>Saturday, March 4</strong></td>
<td><strong>13:00-14:00</strong> Vascular Moderator: A. Mahnken; Marburg/DE</td>
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<td><strong>14:00-15:00</strong> Latin America (Spanish) Moderator: P. Tapia Puente Arnao; Lima/PE</td>
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<td><strong>March</strong></td>
<td><strong>Sunday, March 5</strong></td>
<td><strong>09:00-10:00</strong> Neuro Moderator: C. Calli; Izmir/TR</td>
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<td><strong>5</strong></td>
<td><strong>March</strong></td>
<td><strong>Sunday, March 5</strong></td>
<td><strong>10:00-11:00</strong> Breast Moderator: E. Fleury; Sao Paulo/BR</td>
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<td><strong>Sunday, March 5</strong></td>
<td><strong>11:00-12:00</strong> Chest Moderator: D. Wormanns; Berlin/DE</td>
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THE VOICE OF EPOS
Stage 2

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VoE 31  Vascular  
Moderator: S. Deftereos; Alexandroupolis/GR

1 March  
**Wednesday, March 1, 10:00-11:00**
VoE 32  Paediatric  
Moderator: S. Deftereos; Alexandroupolis/GR

1 March  
**Wednesday, March 1, 11:00-12:00**
VoE 33  Greek  
Moderator: G. Kapsas; Alexandroupolis/GR

1 March  
**Wednesday, March 1, 12:00-13:00**
VoE 34  Oncology  
Moderator: Y.O. Tanaka; Tsukuba/JP

1 March  
**Wednesday, March 1, 13:00-14:00**
VoE 35  Italian  
Moderator: A. Barile; L’Aquila/IT

1 March  
**Wednesday, March 1, 14:00-15:00**
VoE 36  Musculoskeletal  
Moderator: E. Blumfield; New York, NY/US

1 March  
**Wednesday, March 1, 15:00-16:00**
VoE 37  Nordic  
Moderator: M. Torkzad; Godalming/UK

2 March  
**Thursday, March 2, 09:00-10:00**
VoE 38  Neuro  
Moderator: G. Kapsas; Alexandroupolis/GR

2 March  
**Thursday, March 2, 10:00-11:00**
VoE 39  Physics in Radiology  
Moderator: J. Heverhagen; Berne/CH

2 March  
**Thursday, March 2, 11:00-12:00**
VoE 40  Chinese  
Moderator: V. Chong; Singapore/SG

2 March  
**Thursday, March 2, 12:00-13:00**
VoE 41  Molecular Imaging  
Moderator: F. Frauscher; Innsbruck/AT

2 March  
**Thursday, March 2, 13:00-14:00**
VoE 42  Korean  
Moderator: J.M. Goo; Seoul/KR

2 March  
**Thursday, March 2, 14:00-15:00**
VoE 43  Interventional  
Moderator: T. Popiela; Krakow/PL

2 March  
**Thursday, March 2, 15:00-16:00**
VoE 44  Spain  
Moderator: A. Rovira-Canellas; Barcelona/ES
### March 3

**VoE 45**  
**Genitourinary**  
**Moderator:** L. Pallwein-Prettner; Linz/AT

**VoE 46**  
**Head and Neck**  
**Moderator:** K. Bhatia; Hong Kong/HK

**VoE 47**  
**Portugal**  
**Moderator:** L. Lança; Lisbon/PT

**VoE 48**  
**GI Tract**  
**Moderator:** M. Torkzad; Godalming/UK

**VoE 49**  
**Latin America (Spanish)**  
**Moderator:** G. Soto Giordani; Santiago/CL

**VoE 50**  
**Radiographers**  
**Moderator:** L. Lança; Lisbon/PT

**VoE 51**  
**Romanian**  
**Moderator:** I. Lupescu; Bucharest/RO

### March 4

**VoE 52**  
**Chest**  
**Moderator:** M. Toepker; Vienna/AT

**VoE 53**  
**Cardiac**  
**Moderator:** E. Mershina; Moscow/RU

**VoE 54**  
**Breast**  
**Moderator:** E. Fleury; Sao Paulo/BR

**VoE 55**  
**Abdominal Viscera**  
**Moderator:** I. Lupescu; Bucharest/RO

**VoE 56**  
**Neuro**  
**Moderator:** E. Ada; Izmir/TR

**VoE 57**  
**Oncology**  
**Moderator:** S. Delorme; Heidelberg/DE

**VoE 58**  
**Interventional**  
**Moderator:** A. Mahnken; Marburg/DE

**VoE 59**  
**Chest**  
**Moderator:** S. Delorme; Heidelberg/DE

**VoE 60**  
**Genitourinary**  
**Moderator:** L. Pallwein-Prettner; Linz/AT
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<td>VoE 68 Radiographers</td>
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<td>VoE 72 Russian</td>
<td>VoE 73 Musculoskeletal</td>
<td>VoE 74 Arabic (North Africa)</td>
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<td>Moderator: K. Taylor; Cambridge/UK</td>
<td>Moderator: A. Barile; L’Aquila/IT</td>
<td>Moderator: T. Aoki; Kitakyushu/JP</td>
<td>Moderator: P. Sijens; Groningen/NL</td>
<td>Moderator: M. Vishnyakova; Moscow/RU</td>
<td>Moderator: E. Llopis; Valencia/ES</td>
<td>Moderator: B. Mansouri; Algiers/DZ</td>
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<td>3 Mar</td>
<td>09:00-10:00</td>
<td>VoE 75 Chinese</td>
<td>Singapore</td>
<td>Singapore</td>
<td>T. Lim; Singapore/SG</td>
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<td>VoE 76 Emergency</td>
<td>Cambridge</td>
<td>UK</td>
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<td>3 Mar</td>
<td>11:00-12:00</td>
<td>VoE 77 Latin America (Portuguese)</td>
<td>Ribeirao Preto</td>
<td>BR</td>
<td>V.F. Muglia; Ribeirao Preto/BR</td>
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<td>VoE 78 Abdominal Viscera</td>
<td>Lisbon</td>
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<td>C. Matos; Lisbon/PT</td>
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<td>3 Mar</td>
<td>13:00-14:00</td>
<td>VoE 79 Korean</td>
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<td>J.M. Goo; Seoul/KR</td>
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<td>3 Mar</td>
<td>14:00-15:00</td>
<td>VoE 80 India</td>
<td>Agra</td>
<td>IN</td>
<td>B. Ahuja; Agra/IN</td>
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<td>3 Mar</td>
<td>15:00-16:00</td>
<td>VoE 81 Italian</td>
<td>Verona</td>
<td>IT</td>
<td>G. Zamboni; Verona/IT</td>
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<td>4 Mar</td>
<td>09:00-10:00</td>
<td>VoE 82 Latin America (Spanish)</td>
<td>Lima</td>
<td>PE</td>
<td>P. Tapia Puente Arnao; Lima/PE</td>
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<td>4 Mar</td>
<td>10:00-11:00</td>
<td>VoE 83 Italian</td>
<td>Pisa</td>
<td>IT</td>
<td>I. Bargellini; Pisa/IT</td>
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<td>4 Mar</td>
<td>11:00-12:00</td>
<td>VoE 84 Japanese</td>
<td>Kitakyushu</td>
<td>JP</td>
<td>T. Aoki; Kitakyushu/JP</td>
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<td>4 Mar</td>
<td>12:00-13:00</td>
<td>VoE 85 Portugal</td>
<td>Lisbon</td>
<td>PT</td>
<td>C. Matos; Lisbon/PT</td>
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<td>4 Mar</td>
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<td>VoE 86 Radiographers</td>
<td>Cambridge</td>
<td>UK</td>
<td>K. Taylor; Cambridge/UK</td>
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<td>4 Mar</td>
<td>14:00-15:00</td>
<td>VoE 87 Spain</td>
<td>Valencia</td>
<td>ES</td>
<td>E. Llopis; Valencia/ES</td>
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European Radiology EXPERIMENTAL

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YOUR NEW JOURNAL IN MEDICAL IMAGING FOR BASIC SCIENTIFIC DISCOVERIES, NOVEL APPROACHES AND TECHNIQUES IN EXPERIMENTAL SETTINGS

FULLY OPEN ACCESS
Refresher Courses, as the name suggests, aim to refresh knowledge, reviewing and updating the more basic subjects for those who have not kept up to speed with certain developments, or who just need a reminder – something of interest not only to young radiologists but also experienced doctors.

The length of each course is 90 minutes (classic Refresher Course: three parts of 30 minutes each, including the introduction and time for discussion; integrated Refresher Course: three parts of 23 minutes each, leaving enough time for the introduction by the chairpersons and the panel discussion).

The course will be given by two or three lecturers and led by one or two moderator(s) on a defined subject of clinical imaging, imaging technique, interventional radiology and related subjects.

Accepted papers for oral presentation are presented in the Scientific Sessions. Places are allocated on a first-come, first-served basis.

The authors of the best scientific papers will be presented with a certificate and given free ECR 2018 registration.

The award will be assigned to the best paper presentation of each topic based on the evaluation by session moderators and subcommittee members. Selection criteria comprise quality of presentation, scientific content and overall impression of the performance. The award winners will be informed after the congress and will be published on the ESR website.
REFRESHER COURSES / SCIENTIFIC SESSIONS

Abdominal and Gastrointestinal

Wednesday, March 1, 08:30–10:00, Room B
RC 101 Assessing inflammation and fibrosis in Crohn’s disease

» Chairman’s introduction [A-003]
   A. Laghi; Latina/IT

A. Is sonography (CEUS and elastography) the right tool? [A-004]
   E. Quaia; Edinburgh/UK

B. Is there space for MDCT (spectral imaging, iodine map)? [A-005]
   J. Podgorska; Warsaw/PL

C. Will MRI (DWI and perfusion) solve the problem? [A-006]
   S.A. Taylor; London/UK

» Panel discussion: How do I approach a case in my routine clinical practice?

Wednesday, March 1, 10:30-12:00, Room B
SS 201a Hepatocellular carcinoma (HCC): detection, characterisation and therapeutic response

Moderators: D. Ippolito; Monza/IT
   S.A. Taylor; London/UK

Wednesday, March 1, 10:30-12:00, Room C
SS 201b Rectal cancer: response assessment and diagnostic biomarkers

Moderators: L. Cevasco; Genoa/IT
   S. Schmidt; Lausanne/CH

Wednesday, March 1, 14:00-15:30, Room B
SS 301a Liver: advances in CT and MRI

Moderators: O.V. Kucheruk; Moscow/RU
   L. Martí-Bonmatí; Valencia/ES

Wednesday, March 1, 14:00-15:30, Room C
SS 301b Imaging of the colon and pelvic floor

Moderators: A. Laghi; Latina/IT
   D. Tamandl; Vienna/AT

Wednesday, March 1, 16:00–17:30, Room B
RC 401 The spleen: the forgotten organ

» Chairman’s introduction [A-087]
   L.H. Ros Mendoza; Zaragoza/ES

A. Acute and chronic splenic disease [A-088]
   G. Zamboni; Verona/IT

B. The incidental splenic lesion [A-089]
   M. Laniado; Dresden/DE

C. Malignant lesions [A-090]
   S. Gourtsoyianni; London/UK

» Panel discussion: How to manage incidental findings in clinical routine practice
**Abdominal and Gastrointestinal Sessions**

**Friday, March 3, 08:30–10:00, Room B**

**RC 901: CT colonography today**

- **Chairman’s introduction**  
  M. Hellström; Gothenburg/SE
- **A. How I perform it**  
  P. Lefere; Roeselare/BE
- **B. How I interpret it**  
  T. Mang; Vienna/AT
- **C. Screening with CTC**  
  D. Regge; Turin/IT
- **Panel discussion: Challenging cases from clinical practice**

**Friday, March 3, 10:30-12:00, Room C**

**SS 1001: New techniques in abdominal imaging**

- **Moderators:** D. Prezzi; London/UK  
  C. Stoupis; Männedorf/CH

**Saturday, March 4, 08:30–10:00, Room B**

**RC 1301: Difficult challenges in imaging the acute abdomen**

- **Moderator:** S.K. Puri; New Delhi/IN
- **A. Perforation of the GI tract**  
  V. Maniatis; Aabenraa/DK
- **B. Bowel obstruction**  
  A.J.B.S. Madureira; Porto/PT
- **C. Acute biliary conditions**  
  C.D. Becker; Geneva/CH

**Saturday, March 4, 10:30-12:00, Room C**

**SS 1401: Pancreas and bile ducts: imaging assessment**

- **Moderators:** M. Bonatti; Bolzano/IT  
  B.I. Choi; Seoul/KR

**Saturday, March 4, 16:00–17:30, Room B**

**RC 1601: Abdominal MRI: from standard to advanced protocols**

- **Chairman’s introduction**  
  F. Caseiro-Alves; Coimbra/PT
- **A. Suspected pancreatic tumour**  
  R. Manfredi; Rome/IT
- **B. Inflammatory bowel disease**  
  J. Rimola; Barcelona/ES
- **C. Pelvic floor disorder**  
  D. Weishaupt; Zurich/CH
- **Panel discussion: How to create an efficient MR protocol in abdominal diseases**

**Sunday, March 5, 08:30–10:00, Room B**

**RC 1701: IgG4-related disease: what is it and what do I need to know?**

- **Chairman’s introduction**  
  S.A. Jackson; Plymouth/UK
- **A. Pancreatic manifestations**  
  R. Pozzi-Mucelli; Verona/IT
- **B. Hepatobiliary manifestations**  
  M. Ronot; Clichy/FR
- **C. Systemic manifestations**  
  G. Morana; Treviso/IT
- **Panel discussion: Tips and tricks in clinical practice**

**Sunday, March 5, 10:30-12:00, Room C**

**SS 1801: Technical innovations in liver imaging**

- **Moderators:** C. Matos; Lisbon/PT  
  M. Ronot; Clichy/FR

**Sunday, March 5, 14:00-15:30, Room A**

**SS 1901a: Gastric cancer and upper GI tract diseases**

- **Moderators:** I. Blazic; Belgrade/RS  
  S.A. Jackson; Plymouth/UK

**Sunday, March 5, 14:00-15:30, Room B**

**SS 1901b: Pancreatic and biliary inflammation**

- **Moderators:** M. Maher; Dublin/IE  
  B. Marincek; Kilchberg/CH

**Sunday, March 5, 14:00-15:30, Room C**

**SS 1901c: Liver fat, iron and fibrosis: assessment and quantification**

- **Moderators:** O. Dahlqvist Leinhard; Linkoping/SE  
  B.E. Van Beers; Clichy/FR
REFRESHER COURSES / SCIENTIFIC SESSIONS

**Breast**

**Wednesday, March 1, 10:30-12:00, Room E1**

**SS 202**  
Breast ultrasound and computer-aided diagnosis (CAD) systems  
[B-0077 – B-0087]

**Moderators:**  
A. Domingo; Tarragona/ES  
G. Esen; Istanbul/TR

---

**Wednesday, March 1, 16:00-17:30, Room E1**

**RC 402**  
Screening for breast cancer  
[LEVEL II]

» Chairman's introduction  
E.A. Morris; New York, NY/US

A. Screening with mammography only  
R.M. Pijnappel; Utrecht/NL

B. Screening with mammography and ultrasound  
T.H. Helbich; Vienna/AT

C. Screening with tomosynthesis  
U. Bick; Berlin/DE

» Panel discussion: What is the best modality approach to screen for breast cancer?

---

**Thursday, March 2, 08:30-10:00, Room E1**

**RC 502**  
The high-risk lesions enigma  
[LEVEL III]

**Moderator:** F. Kilburn-Toppin; Cambridge/UK

A. Lesions with an elevated risk for breast cancer  
G. Forrai; Budapest/HU

B. Value of breast MRI: rate of underestimation and impact on treatment decision  
R.M. Mann; Nijmegen/NL

C. Could surgery be avoided?  
S.J. Vinnicombe; Dundee/UK

---

**Thursday, March 2, 10:30-12:00, Room E1**

**SS 602a**  
Breast density and background parenchymal enhancement  
[B-0435 – B-0445]

**Moderators:**  
W. Alomaim; Dublin/IE  
R.A. Kubik-Huch; Baden/CH

---

**Thursday, March 2, 10:30-12:00, Room F2**

**SS 602b**  
Contrast-enhanced spectral mammography and other new techniques  
[B-0456 – B-0466]

**Moderators:**  
E.M. Fallonberg; Berlin/DE  
K. Pinker-Domenig; Vienna/AT

---

**Thursday, March 2, 14:00-15:30, Room E1**

**SS 702a**  
Digital breast tomosynthesis  
[B-0596 – B-0606]

**Moderators:**  
G. Gennaro; Padua/IT  
N. Radovic; Zagreb/HR

---

**Thursday, March 2, 14:00-15:30, Room F2**

**SS 702b**  
Breast MRI  
[B-0629 – B-0639]

**Moderators:**  
C.S. Baletguier; Villejuif/FR  
V. Dominelli; Milan/IT

---

**Thursday, March 2, 16:00-17:30, Room E1**

**RC 802**  
Radio-pathological correlation: more important than you thought  
[LEVEL III]

» Chairman's introduction  
F.J. Gilbert; Cambridge/UK  
M.R. Parizel; Antwerp/BE

A. Pre-treatment planning  
C.K. Kuhl; Aachen/DE

B. Intraoperative specimen evaluation  
J. Camps Herrero; Valencia/ES

C. The breast radiologist sitting down with the pathologist  
T. Tot; Falun/SE

» Panel discussion: How can we overcome resistance of clinical partner specialties to refer eligible women to radiology?

---

**Friday, March 3, 08:30-10:00, Room E1**

**RC 902**  
Minimally-invasive local treatment of breast cancer: the time is now  
[LEVEL III]

» Chairman's introduction  
M. Sklair-Levy; Tel Aviv/IL

A. High intensity focused ultrasound (HIFU) therapy  
K. Pinker-Domenig; Vienna/AT

B. Radiofrequency ablation therapy  
B. Brkljačić; Zagreb/HR

C. Cryotherapy  
M.H. Fuchsjäger; Graz/AT

» Panel discussion: How can we overcome resistance of clinical partner specialties to refer eligible women to radiology?
**Breast**

**Saturday, March 4, 08:30-10:00, Room E1**

**RC 1302** Rethinking ductal carcinoma in situ (DCIS)  
**Level:** II  
**Moderator:** F. Pediconi; Rome/IT

**A. New radiologic-pathologic knowledge on DCIS**  
[A-607]  
A. Frigerio; Turin/IT

**B. Diagnosing DCIS**  
[A-608]  
S. Schrading; Aachen/DE

**C. Reducing overtreatment of DCIS**  
[A-609]  
M.G. Wallis; Cambridge/UK

**Saturday, March 4, 10:30-12:00, Room E1**

**SS 1402a** Imaging the axilla  
[B-0918 – B-0928]  
**Moderators:** K. Kinkel; Chêne-Bougeries/CH  
P.A.C. Teixeira; São Paulo/BR

**Saturday, March 4, 10:30-12:00, Room F2**

**SS 1402b** Breast cancer risk estimation  
[B-0940 – B-0950]  
**Moderators:** D. Badtescu; Bucharest/RO  
A. van Hoyweghen; Edegem/BE

**Sunday, March 5, 08:30-10:00, Room E1**

**SS 1802a** Breast MRI: diffusion-weighted imaging  
[K-22, B-1122 – B-1131]  
**Moderators:** J. Camps Herrero; Valencia/ES  
R.M. Mann; Nijmegen/NL

**Sunday, March 5, 10:30-12:00, Room F2**

**SS 1802b** Breast cancer screening  
[B-1143 – B-1153]  
**Moderators:** F. Kilburn-Toppin; Cambridge/UK  
S. Zackrisson; Malmö/SE

**Sunday, March 5, 14:00-15:30, Room F2**

**SS 1902a** Assessment of the effect of neoadjuvant therapy  
[B-1325 – B-1335]  
**Moderators:** F. Thibault; Paris/FR  
R.M. Trimboi; Milan/IT

**Sunday, March 5, 14:00-15:30, Room M 4**

**SS 1902b** Image-guided breast interventions and radiologic-pathologic correlation  
[K-27, B-1380 – B-1389]  
**Moderators:** G. Forrai; Budapest/HU  
J. Raposo; Lisbon/PT

**Cardiac**

**Wednesday, March 1, 10:30-12:00, Room M 1**

**SS 203** Cardiac CT: contrast agent and radiation dose  
[B-0142 – B-0152]  
**Moderators:** A. Esposito; Milan/IT  
G. Feuchtner; Innsbruck/AT

**Wednesday, March 1, 14:00-15:30, Room M 2**

**SS 303** Cardiac function: what’s hot?  
[B-0326 – B-0336]  
**Moderators:** M. Gardarsdottir; Reykjavik/IS  
B. Graca; Coimbra/PT

**Thursday, March 2, 08:30-10:00, Room N**

**RC 503** Imaging of cardiac valves: new trends  
**Level:** III  
**Moderator:** H. Alkadhi; Zurich/CH

**A. Echocardiography remains the reference technique**  
[A-185]  
F. Knebel; Berlin/DE

**B. MRI is the best comprehensive approach**  
[A-186]  
M. Francone; Rome/IT

**C. Does CT have a role in diagnosing valvular disease?**  
[A-187]  
G. Feuchtner; Innsbruck/AT

**Thursday, March 2, 10:30-12:00, Room M 1**

**SS 603** Myocardial infarction  
[K-07, B-0499 – B-0508]  
**Moderators:** M. Hrabak Paar; Zagreb/HR  
A. Tóth; Budapest/HU

**Thursday, March 2, 14:00-15:30, Room M 1**

**SS 703a** Atherosclerosis and plaque imaging  
[B-0672 – B-0682]  
**Moderators:** T.C. Walter; Berlin/DE  
F. Wolf; Vienna/AT

**Thursday, March 2, 14:00-15:30, Room M 2**

**SS 703b** Acute chest pain and non-ischaemic cardiomyopathies  
[K-12, B-0683 – B-0692]  
**Moderators:** S. Feger; Berlin/DE  
S. Harden; Southampton/UK
**Cardiac**

**Friday, March 3, 08:30-10:00, Room N**

**RC 903** Novel ways to assess myocardial tissue  
**Moderator:** O. Duvernoy; Uppsala/SE
- **A. T1 mapping: technical considerations** [A-388]  
  M.R. Makowski; Berlin/DE
- **B. T2 mapping: technical considerations** [A-389]  
  C. Tessa; Lido di Camaiore/IT
- **C. Clinical use of T1 and T2 mapping** [A-390]  
  H.J. Lamb; Leiden/NL

**Friday, March 3, 10:30-12:00, Room M 1**

**SS 1003** Myocardial ischaemia and perfusion imaging I  
[B-0831 – B-0841]
**Moderators:** P. Klimeczek; Krakow/PL  
M. Pirnat; Maribor/SI

**Saturday, March 4, 10:30-12:00, Room M 1**

**SS 1403a** Myocardial ischaemia and perfusion imaging II  
[B-0983 – B-0993]
**Moderators:** R. Maksimovic; Belgrade/RS  
E. Pershina; Moscow/RU

**Saturday, March 4, 14:00-15:30, Room M 1**

**SS 1503** Coronary angiography  
[B-1017 – B-1026]
**Moderators:** C.K. Atasoy; Ankara/TR  
N. Galea; Rome/IT

**Saturday, March 4, 14:00-15:30, Room N**

**RC 1503** Imaging of cardiac function, perfusion and viability by MR  
**LEVEL III**
- **Chairman’s introduction** [A-705]  
  M. Francone; Rome/IT
- **A. Getting the best image quality** [A-706]  
  B. Jankharia; Mumbai/IN
- **B. Differentiation of ischaemic and non-ischaemic cardiomyopathy** [A-707]  
  P. Croisille; Saint-Etienne/FR
- **C. Best applications in congenital heart disease** [A-708]  
  J. Schäfer; Tübingen/DE
- **Panel discussion: Has MRI matured to a one-stop shop in cardiac imaging?**

**Saturday, March 4, 16:00-17:30, Room M 1**

**SS 1603** Coronary CT angiography: how to get it done?  
**LEVEL II**
**Moderator:** K. Pagonidis; Iraklion/GR
- **A. Beautiful cases from clinical practice I** [A-766]  
  S. Feger; Berlin/DE
- **B. Staff training and technical requirements** [A-767]  
  M. Francone; Rome/IT
- **C. Beautiful cases from clinical practice II** [A-768]  
  F. Plank; Innsbruck/AT

**Sunday, March 5, 10:30-12:00, Room M 1**

**SS 1803** Myocardial tissue characterisation and texture analysis I  
[B-1187 – B-1197]
**Moderators:** U. Reiter; Graz/AT  
R. Vliegenthart; Groningen/NL

**Sunday, March 5, 14:00-15:30, Room M 1**

**SS 1903** Myocardial tissue characterisation and texture analysis II  
[B-1369 – B-1379]
**Moderators:** S. Bayraktaroglu; Izmir/TR  
N. Galea; Rome/IT
## REFRESHER COURSES / SCIENTIFIC SESSIONS

### Chest

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<td><strong>RC 104</strong> Pneumonia</td>
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<td>Chairman's introduction</td>
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<td>I.E. Tyurin; Moscow/RU</td>
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<td>A. Community-acquired pneumonia</td>
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<td>I. Hartmann; Rotterdam/NL</td>
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<td>B. Tuberculosis</td>
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<td>E. Castañer; Sabadell/ES</td>
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<td>C. Fungal pneumonia in immunocompromised hosts</td>
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<td>C.P. Heussel; Heidelberg/DE</td>
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<td>➤ Panel discussion: What is the role of radiologists in the diagnosis and management of lung infections?</td>
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| 1 March    | **SS 204** Lung cancer: from diagnosis to prognosis                    | 10:30-12:00, Room O |
|            | [B-0044 – B-0054]                                                      |                    |           |
|            | Moderators: C.M. Schaefer-Prokop; Amersfoort/NL                       |                    |           |
|            | A. Snoeckx; Antwerp/BE                                                 |                    |           |

| 1 March    | **SS 304** Interstitial lung disease (ILD) and COPD                    | 14:00-15:30, Room O |
|            | Quantification and function                                            |                    |           |
|            | [B-0228 – B-0238]                                                      |                    |           |
|            | Moderators: J. Broncano; Cordoba/ES                                    |                    |           |
|            | P.A. Grenier; Paris/FR                                                 |                    |           |

| 1 March    | **RC 404** Pulmonary embolism: persistent controversies               | 16:00-17:30, Room C |
|            | [A-091]                                                                 |                    |           |
|            | M. Rémy-Jardin; Lille/FR                                               |                    |           |
|            | A. Subsegmental PE, incidental PE: diagnosis and management            |                    |           |
|            | [A-092]                                                                 |                    |           |
|            | C.M. Schaefer-Prokop; Amersfoort/NL                                    |                    |           |
|            | B. CT not available, contraindicated or inconclusive: what to do?      |                    |           |
|            | [A-093]                                                                 |                    |           |
|            | E.J.R. van Beek; Edinburgh/UK                                           |                    |           |
|            | C. Can we predict outcome from imaging?                                |                    |           |
|            | [A-094]                                                                 |                    |           |
|            | B. Ghaye; Brussels/BE                                                  |                    |           |
|            | ➤ Panel discussion: How to optimise patient management?                 |

| 2 March    | **SS 604** Pulmonary nodules and screening                             | 10:30-12:00, Room O |
|            | [B-0392 – B-0402]                                                      |                    |           |
|            | Moderators: M.-P. Revel; Paris/FR                                      |                    |           |
|            | M. Simic; Zagreb/HR                                                    |                    |           |

| 2 March    | **SS 704** Pulmonary vessels and perfusion                             | 14:00-15:30, Room O |
|            | [B-0563 – B-0573]                                                      |                    |           |
|            | Moderators: T.N.H. Matin; Oxford/UK                                    |                    |           |
|            | E. Mershina; Moscow/RU                                                 |                    |           |

| 2 March    | **RC 804** CT - patterns in chest radiology: back to basics and beyond | 16:00-17:30, Room C |
|            | [A-292]                                                                 |                    |           |
|            | H. Prosch; Vienna/AT                                                   |                    |           |
|            | A. Secondary pulmonary lobe anatomy: essential to tackle with the nodular pattern |                    |           |
|            | [A-293]                                                                 |                    |           |
|            | T. Frauenfelder; Zurich/CH                                              |                    |           |
|            | B. Linear and reticular pattern                                          |                    |           |
|            | [A-294]                                                                 |                    |           |
|            | F. Molinari; Lille/FR                                                  |                    |           |
|            | C. Ground glass opacities (GGO) and consolidation                       |                    |           |
|            | [A-295]                                                                 |                    |           |
|            | J. Vogel-Claussen; Hannover/DE                                          |                    |           |
|            | ➤ Panel discussion: Is it always easy to detect a pattern? Tips for success |

| 3 March    | **SS 904** Low-dose and no-dose chest imaging: opportunities and limitations | 08:30–10:00, Room C |
|            | [A-370]                                                                 |                    |           |
|            | C. de Margerie-Mellon; Paris/FR                                         |                    |           |
|            | [A-371]                                                                 |                    |           |
|            | J. Dinkel; Munich/DE                                                    |                    |           |
|            | [A-372]                                                                 |                    |           |
|            | F. Gleeson; Oxford/UK                                                   |                    |           |

| 3 March    | **SS 1004** Chest CT dose reduction and image quality                   | 10:30-12:00, Room O |
|            | [B-0725 – B-0735]                                                      |                    |           |
|            | Moderators: L.F. Alva López; Tlalpan/MX                                |                    |           |
|            | R.W. Bauer; St. Gallen/CH                                               |                    |           |

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Chest

**March 3**
**Friday, March 3, 16:00-17:30, Room C**

**RC 1204**  
**Thoracic manifestations of systemic disease**

*Moderator:* A. Chodorowska; Wroclaw/PL

A. **Systemic sclerosis**  
K-04, B-0262 – B-0271

M. Silva; Parma/IT

B. **Granulomatosis and polyangiitis**  
A-493

S. Bayraktaroglu; Izmir/TR

C. **Histiocytosis and lymphangioleiomyomatosis**  
A-494

A. Oikonomou; Toronto, ON/CA

**March 5**
**Sunday, March 5, 08:30-10:00, Room C**

**RC 1704**  
**Novelties in lung cancer imaging**

*Moderator:* B. Feragalli; Chieti/IT

A. **New approaches to the management of pulmonary nodules**  
A-831

A. Nair; London/UK

B. **CT phenotypes of lung adenocarcinoma**  
A-832

M. Lederlin; Rennes/FR

C. **Imaging of immune-related response criteria (irRC)**  
A-833

O.L. Sedlaczek; Heidelberg/DE

**March 3**
**Sunday, March 5, 10:30-12:00, Room O**

**SS 1804**  
**Are we ready for routine application of MRI of the lung?**

[K-23, B-1079 - B-1088]

*Moderators:* P. Ciet; Rotterdam/NL

X. Montet; Geneva/CH

**March 5**
**Sunday, March 5, 14:00-15:30, Room O**

**SS 1904**  
**Chest imaging and intervention**

[K-28, B-1273 - B-1282]

*Moderators:* P. Dalal; London/UK

E.J. Stern; Seattle, WA/US

Computer Applications

**March 1**
**Wednesday, March 1, 14:00-15:30, Room E1**

**SS 305**  
**Machine learning in image interpretation**

[K-04, B-0262 – B-0271]

*Moderators:* T. Bäuerle; Erlangen/DE

E. Svedström; Turku/FI

**March 2**
**Thursday, March 2, 10:30-12:00, Room M 3**

**SS 605**  
**Image quantification, texture analysis and imaging biomarkers**

[B-0519 – B-0529]

*Moderators:* M.E. Mayerhöfer; Vienna/AT

E.R. Ranschaert; Mol/BE

**March 2**
**Thursday, March 2, 16:00–17:30, Room M 2**

**RC 805**  
**Daily use of mobile devices in radiology**

*Chairman's introduction*  
A-348

O. Ratib; Geneva/CH

A. **What did mobile devices change in radiology education?**  
A-349

E. Kotter; Freiburg/DE

B. **Is it appropriate to read a study on a smartphone or a tablet?**  
A-350

E. Neri; Pisa/IT

C. **Security and ethical issues of mobile device technology**  
A-351

E.R. Ranschaert; Mol/BE

*Panel discussion: Will mobile technology overcome stationary technology in radiology?*

**March 3**
**Friday, March 3, 10:30-12:00, Room M 3**

**SS 1005**  
**Radioprotection and dose management**

[B-0842 – B-0852]

*Moderators:* A. Alberich-Bayarri; Valencia/ES

R. Kikinis; Boston, MA/US
**REFRESHER COURSES / SCIENTIFIC SESSIONS**

**Computer Applications**

**Molecular Imaging**

### March 1

**Wednesday, March 1, 16:00-17:30, Room M 3**

**RC 406 Molecular imaging:**
- **what can we quantify?**

**Moderator:** O. Clément; Paris/FR

A. **Advanced MRI techniques**
- M. Smits; Rotterdam/NL

B. **Advanced PET imaging techniques**
- T. Beyer; Vienna/AT

C. **Clinical applications of quantitative hybrid imaging in oncology**
- L. Umutlu; Essen/DE

### March 2

**Thursday, March 2, 10:30-12:00, Room L 8**

**SS 606 Experimental and preclinical molecular imaging**
- [B-0424 – B-0434]

**Moderators:**
- K.N. De Paepe; Leuven/BE
- F.M.A. Kiessling; Aachen/DE

### March 3

**Friday, March 3, 08:30–10:00, Room M 3**

**RC 906 Translational research in molecular imaging:**
- **how to do the translation**

**Moderator:**
- J. Hodler; Zurich/CH

A. **Preclinical quantitative PET/MR imaging**
- C. Kuntner-Hannes; Seibersdorf/AT

B. **What about nanotechnology?**
- F.M.A. Kiessling; Aachen/DE

C. **The transition from preclinical to clinical**
- A. Kjaer; Copenhagen/DK

**Panel discussion: How to perform translational research in molecular imaging**

### March 5

**Sunday, March 5, 10:30-12:00, Room M 4**

**SS 1805 Clinical decision support and structured reporting**
- [B-1198 – B-1208]

**Moderators:**
- M. Fatehi; Tehran/IR
- N. Pyatigorskaya; Paris/FR
### Genitourinary

#### Wednesday, March 1, 10:30-12:00, Room N

**SS 207**  
Kidney and urinary tract I  
(B-0055 - B-0065)  

**Moderators:** G.P. Krestin; Rotterdam/NL  
R. Salvador; Barcelona/ES

#### Thursday, March 2, 10:30-12:00, Room N

**SS 707**  
Male urogenital system - prostate cancer: diagnosis and PIRADS scoring  
(B-0574 - B-0584)  

**Moderators:** B.K. Barth; Zurich/CH  
P. Puech; Lille/FR

#### Friday, March 3, 10:30-12:00, Room N

**SS 1007**  
Male urogenital system II  
(B-0736 - B-0746)  

**Moderators:** M. Basta Nikolic; Novi Sad/RS  
A. Graser; Munich/DE

#### Thursday, March 2, 16:00-17:30, Studio 2017

**RC 807**  
Imaging of the prostate  

**Moderator:** P. Puech; Lille/FR

A. MRI staging of prostate cancer  
G.M. Villeirs; Ghent/BE

B. Pitfalls in MRI of the prostate  
V. Panebianco; Rome/IT

C. Imaging of PSA recurrence  
H.-P. Schlemmer; Heidelberg/DE

#### Friday, March 3, 16:00-17:30, Studio 2017

**RC 1207**  
MRI for gynaecologic imaging: how I do it  

**Level I**

» Chairman's introduction  
K.H. Härmä; Berne/CH

A. Basics of patient preparation and T2W-imaging  
N.M. deSouza; Sutton/UK

B. Contrast agents  
R.A. Kubik-Huch; Baden/CH

C. Diffusion and ADC  
E. Sala; New York, NY/US

» Panel discussion: Multiparametric MRI of the female pelvis - should it replace tailored protocols?
**Head and Neck**

**March 1, Wednesday, 08:30–10:00, Room N**

**RC 108** Head and neck imaging: don’t sell your ultrasound yet!  
 Moderator: D.W. Tshering Vogel; Berne/CH  
A. Salivary gland imaging with ultrasound  
P. Golofit; Koszalin/PL  
B. Masses of the soft parts of the neck  
P.K. Srivastava; Lucknow/IN  
C. Lymph nodes: differential diagnosis and fine-needle aspiration  
R. Maroldi; Brescia/IT

**March 1, Wednesday, 10:30-12:00, Room L 8**

**SS 208** New technical developments in head and neck imaging  
Moderators: A. Borges; Lisbon/PT  
N.J.M. Freling; Amsterdam/NL

**March 1, Wednesday, 14:00-15:30, Room N**

**SS 308** Head and neck cancer: value of multiparametric and advanced imaging techniques  
Moderators: P. de Graaf; Amsterdam/NL  
N.I. Traykova; Plovdiv/BG

**March 1, Wednesday, 16:00–17:30, Room N**

**RC 408** Pathways for tumour spread  
Moderator: J. Huyskens; Antwerp/BE  
A. Pathways for oral cavity and oropharynx tumour spread  
A. Borges; Lisbon/PT  
B. Pathways for nasopharyngeal tumour spread including perineural spread  
V. Chong; Singapore/SG  
C. Pathway for laryngeal and hypopharyngeal tumour spread  
N. Chidambaranathan; Chennai/IN

**March 2, Thursday, 14:00-15:30, Room L 8**

**SS 708** Temporal bone imaging: hearing loss and vestibular symptoms  
Moderators: P. Golofit; Koszalin/PL  
B. Verbist; Leiden/NL
Head and Neck

Thursday, March 2, 16:00–17:30, Room N

RC 808 Pitfalls in interpretation of head and neck disease

Moderator: S. Robinson; Vienna/AT
A. Anatomical variants without clinical consequence [A-308]
F.A. Pameijer; Utrecht/NL
B. Anatomical variants posing surgical risks [A-309]
D. Farina; Brescia/IT
C. Distinct head and neck disease or systemic disease? [A-310]
M.S. Mack; Munich/DE

Friday, March 3, 10:30–12:00, Room L 8

SS 1008 Skull base and face
[K-15, B-0757 – B-0766]

Moderators: S. Connor; London/UK
M. Ravanelli; Brescia/IT

Saturday, March 4, 08:30–10:00, Room N

RC 1308 Post-treatment imaging of the head and neck

» Chairman’s introduction [A-594]
H.B. Eggesbø; Oslo/NO
A. Normal findings after radiotherapy [A-595]
R. Hermans; Leuven/BE
B. Normal findings after surgery [A-596]
A. Trojanowska; Lublin/PL
C. Treatment monitoring for early detection of recurrence [A-597]
A.D. King; Hong Kong/HK
» Panel discussion: What are the challenges in differentiating post-treatment changes from tumour recurrence?

Sunday, March 5, 14:00–15:30, Room L 8

SS 1908 Parathyroid and thyroid imaging: how to improve diagnosis?
[B-1304 – B-1314]

Moderators: J. Frühwald-Pallamar; Vienna/AT
N.N.

Interventional Radiology

Wednesday, March 1, 08:30–10:00, Room M 3

RC 109 Musculoskeletal interventions: what’s new?

Moderator: A. Gangi; Strasbourg/FR
A. Musculoskeletal ablation and embolisation [A-051]
A. Basile; Catania/IT
B. Vertebral augmentation and discectomy techniques: can we challenge surgery? [A-052]
D. Filippiadis; Athens/GR
C. Bone biopsy and pain treatment using cone-beam CT (CBCT) [A-053]
L. Tselikas; Villejuif/FR

Wednesday, March 1, 10:30–12:00, Room Z

SS 209 Oncological embolisation
[K-01, B-0034 – B-0043]

Moderators: Z. Bánsághi; Budapest/HU
C.M. Sommer; Heidelberg/DE

Wednesday, March 1, 14:00–15:30, Room Z

SS 309 Radioprotection in interventional radiology (IR)
[B-0217 – B-0227]

Moderators: V. Bérczi; Budapest/HU
N. Karunanithy; London/UK

Thursday, March 2, 08:30–10:00, Room M 3

RC 509 Introduction to percutaneous interventional procedures: a practical guide

» Chairman’s introduction [A-230]
R. Iezzi; Rome/IT
A. How to safely perform US-guided procedures [A-231]
D. Akinci; Ankara/TR
B. How to safely perform CT-guided procedures [A-232]
R. García Marcos; Valencia/ES
C. Post-procedure follow-up and complication management [A-233]
M. Seidensticker; Magdeburg/DE
» Panel discussion: Tips and tricks for choosing your first cases. Controversial case-based review of approaches to difficult lesions

Wednesday, March 3, 10:30-12:00, Room Z

SS 209 Oncological embolisation
[K-01, B-0034 – B-0043]

Moderators: Z. Bánsághi; Budapest/HU
C.M. Sommer; Heidelberg/DE

Wednesday, March 4, 08:30–10:00, Room N

RC 1308 Post-treatment imaging of the head and neck

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R. Hermans; Leuven/BE
B. Normal findings after surgery [A-596]
A. Trojanowska; Lublin/PL
C. Treatment monitoring for early detection of recurrence [A-597]
A.D. King; Hong Kong/HK
» Panel discussion: What are the challenges in differentiating post-treatment changes from tumour recurrence?

Thursday, March 4, 16:00–17:30, Room N

RC 1308 Post-treatment imaging of the head and neck

» Chairman’s introduction [A-594]
H.B. Eggesbø; Oslo/NO
A. Normal findings after radiotherapy [A-595]
R. Hermans; Leuven/BE
B. Normal findings after surgery [A-596]
A. Trojanowska; Lublin/PL
C. Treatment monitoring for early detection of recurrence [A-597]
A.D. King; Hong Kong/HK
» Panel discussion: What are the challenges in differentiating post-treatment changes from tumour recurrence?

Friday, March 3, 14:00–15:30, Room L 8

RC 1308 Post-treatment imaging of the head and neck

» Chairman’s introduction [A-594]
H.B. Eggesbø; Oslo/NO
A. Normal findings after radiotherapy [A-595]
R. Hermans; Leuven/BE
B. Normal findings after surgery [A-596]
A. Trojanowska; Lublin/PL
C. Treatment monitoring for early detection of recurrence [A-597]
A.D. King; Hong Kong/HK
» Panel discussion: What are the challenges in differentiating post-treatment changes from tumour recurrence?
**March 2**
**Thursday, March 2, 10:30-12:00, Room Z**

**SS 609** Urogenital interventions  
(B-0381 – B-0391)

**Moderators:** J.M. Pulido; Las Palmas/ES  
A. Rebonato; Perugia/IT

**March 2**
**Thursday, March 2, 14:00-15:30, Room Z**

**SS 709** Non-vascular interventions  
(B-0552 – B-0562)

**Moderators:** B. Kastler; Paris/FR  
L. Ponhold; St. Pölten/AT

**March 2**
**Thursday, March 2, 16:00-17:30, Room M 3**

**RC 809** Imaging and endovascular treatment of pulmonary embolism  
**LEVEL II**

» Chairman’s introduction  
[A-352]  
G. O’Sullivan; Galway/IE

A. Imaging algorithm for pulmonary embolism  
[A-353]  
B. Ghaye; Brussels/BE

B. What is new in the recently published guidelines for pulmonary embolism treatment?  
[A-354]  
R. Uberoi; Oxford/UK

C. Updates on the endovascular treatment of massive and submassive pulmonary embolism  
[A-355]  
S.C. Spiliopoulos; Athens/GR

» Panel discussion: Appropriate diagnosis and risk stratification in the management of acute massive and acute submassive pulmonary embolism

**March 3**
**Friday, March 3, 16:00-17:30, Room M 3**

**RC 1209** Portal hypertension and interventional radiology (IR)  
**LEVEL II**

» Chairman’s introduction  
[A-562]  
V. Vilgrain; Clichy/FR

A. Imaging of portal hypertension  
[A-563]  
I. Bargellini; Pisa/IT

B. Embolisation of varices and splenic artery in portal hypertension  
[A-564]  
I.E. Keussen; Lund/SE

C. Transjugular intrahepatic portosystemic shunt (TIPS): critical appraisal of techniques and guidelines for treatment  
[A-565]  
A. Krajina; Hradec Králové/CZ

» Panel discussion: Appropriate selection of patients for IR including the role of Balloon-Occluded Retrograde Transvenous Obliteration (BRTO) for gastric varices

**March 4**
**Saturday, March 4, 10:30-12:00, Room Z**

**SS 1409** Portal interventions  
(B-0886 – B-0896)

**Moderators:** R. Golfieri; Bologna/IT  
M. Krokidis; Cambridge/UK

**March 5**
**Sunday, March 5, 10:30-12:00, Room Z**

**SS 1809** Vascular interventions  
[K-24, B-1069 – B-1078]

**Moderators:** R.F. Dondelinger; Liège/BE  
P.M. Kitrou; Patras/GR

**March 5**
**Sunday, March 5, 14:00-15:30, Room Z**

**SS 1909** Musculoskeletal interventions  
(B-1262 – B-1272)

**Moderators:** G. Velonakis; Athens/GR  
N.N.
### Musculoskeletal

#### Wednesday, March 1, 08:30–10:00, Room D

**RC 110** The elbow: a comprehensive approach

- **Chairman's introduction** [A-036]
  - Alcalá-Galiano; Madrid/ES
- **A. The tendons: anatomy, pathology and intervention** [A-037]
  - P. Peetrons; Brussels/BE
- **B. Ligament injury and instability: what to look for and what to say** [A-038]
  - M.C. De Jonge; Amsterdam/NL
- **C. Nerve entrapment at the elbow** [A-039]
  - L.M. Sconfienza; San Donato Milanese/IT

- **Panel discussion: US, CT, conventional MR, high field MR: making the right choice**

#### Thursday, March 2, 08:30–10:00, Room D

**RC 510** Musculoskeletal ultrasound in the management of sports injuries

- **Moderator:** C. Cyteval; Montpellier/FR
- **A. Ultrasound of foot and ankle injuries: technique and diagnosis** [A-213]
  - C. Martinoli; Genoa/IT
- **B. Ultrasound of the hip and knee: what is it good for and what are its limitations?** [A-214]
  - E. Rowbotham; Leeds/UK
- **C. Ultrasound-guided intervention in the athlete: indications and techniques** [A-215]
  - H. Guerini; Paris/FR

#### March 2

- **Thursday, March 2, 10:30-12:00, Room D**

**SS 610** Bone health and osteoporosis

- **Moderators:** J.L. Bloem; Leiden/NL
  - T. Zahel; Munich/DE

- **March 2**

- **Thursday, March 2, 14:00-15:30, Room D**

**SS 710** Cartilage and osteoarthritis

- **Moderators:** J. Oudeman; Amsterdam/NL
  - K. Verstraete; Ghent/BE

- **March 2**

- **Thursday, March 2, 16:00–17:30, Room D**

**RC 810** Inflammatory arthritis: beyond the radiograph

- **Moderator:** A. Barile; L'Aquila/IT
- **A. Thoracic and lumbar spine** [A-132]
  - V.N. Cassar-Pullicino; Oswestry/UK
- **B. Pelvis** [A-133]
  - K. Verstraete; Ghent/BE
- **C. Acetabulum** [A-134]
  - A. Kassarjian; Majadahonda/ES
**REFRESHER COURSES / SCIENTIFIC SESSIONS**

**Musculoskeletal**

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**Friday, March 3, 10:30–12:00, Room D**

**SS 1010** Shoulder and wrist  
**(B-0809 - B-0819)**

**Moderators:** P. Omoumi; Lausanne/CH  
C.W.A. Pfirrmann; Zurich/CH

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**Friday, March 3, 16:00–17:30, Room D**

**RC 1210** Imaging the hip and thigh  
**LEVEL II**

**Moderator:** V. Njagulj; Sremska Kamenica/RS

A. Femoroacetabular impingement: what is it, how do I image it and does it matter?  
R. Sutter; Zurich/CH

B. Groin pain in the athlete: what causes it and what does imaging contribute?  
M. Maas; Amsterdam/NL

C. Muscle injury of the hip and thigh  
M.-A. Weber; Heidelberg/DE

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**Saturday, March 4, 08:30–10:00, Room D**

**RC 1310** Shoulder MRI: mastering technique and making my report relevant  
**LEVEL II**

**» Chairman’s introduction**  
[A-621]

J. Kramer; Linz/AT

A. The normal MRI: techniques and anatomy  
[A-622]

E. Llopis; Valencia/ES

B. Rotator cuff tears: what are they and what do they look like?  
[A-623]

K.-F. Kreitner; Mainz/DE

C. Patterns of instability: what does the MRI show?  
[A-624]

A.J. Grainger; Leeds/UK

**» Panel discussion:** How are the indications for MR arthrography in the shoulder changing?

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**Saturday, March 4, 10:30–12:00, Room D**

**SS 1410** Spine  
**(B-0951 - B-0961)**

**Moderators:** I. Boric; Zabok/HR  
N. Farshad-Amacker; Zurich/CH

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**Sunday, March 5, 08:30–10:00, Room D**

**RC 1710** MRI of articular cartilage and bone: areas of imaging confusion and practical solutions  
**LEVEL II**

**Moderator:** O. Papakonstantinou; Athens/GR

A. Bone oedema syndromes and avascular necrosis  
[A-861]

B. Vande Berg; Brussels/BE

B. Osteochondral injury, subchondral fractures and traumatic bone oedema: what is important and how do I describe it?  
[A-862]

F.W. Roemer; Erlangen/DE

C. Is this osteomyelitis? If not what else could it be?  
[A-863]

A.B. Rosskopf; Zurich/CH

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**Sunday, March 5, 10:30–12:00, Room D**

**SS 1810a** Musculoskeletal interventions  
**(B-1154 – B-1164)**

**Moderators:** J.M. Cambronero Gómez; Girona/ES  
A.B. Rosskopf; Zurich/CH

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**Sunday, March 5, 10:30–12:00, Room G**

**SS 1810b** Hip and foot  
**(B-1165 – B-1175)**

**Moderators:** C. Czerny; Vienna/AT  
R. Sutter; Zurich/CH

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**Sunday, March 5, 14:00–15:30, Room D**

**SS 1910a** Performance optimisation in musculoskeletal imaging  
**(B-1336 – B-1346)**

**Moderators:** D. Berritto; Acerra/IT  
J. Hodler; Zurich/CH

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**Sunday, March 5, 14:00–15:30, Room G**

**SS 1910b** Knee  
**(B-1347 – B-1357)**

**Moderators:** M. Shahabpour; Brussels/BE  
E.J. Ulbrich; Zurich/CH
REFRESHER COURSES / SCIENTIFIC SESSIONS

**Neuro**

1 **March**

**Wednesday, March 1, 08:30-10:00, Room E2**

**RC 111** Management of acute stroke  
Moderator: P. Vilela; Almada/PT  
A. A critical appraisal of the current literature  
W. van Zwam; Maastricht/NL  
B. Which techniques can we use to reopen an occluded cerebral blood vessel?  
T. van der Zijden; Edegem/BE

2 **March**

**Thursday, March 2, 10:30-12:00, Room E2**

**SS 611** Stroke: endovascular treatment  
[K-08, B-0446 – B-0455]  
Moderators: S. Rohde; Dortmund/DE  
M.A. van Buchem; Leiden/NL

1 **March**

**Wednesday, March 1, 10:30-12:00, Room E2**

**SS 211a** Stroke: aetiology, diagnosis and prognosis  
[B-0088 – B-0098]  
Moderators: A.Y. Oner; Ankara/TR  
M. Taina; Kuopio/FI

2 **March**

**Thursday, March 2, 14:00-15:30, Room E2**

**SS 711** Brain tumours: lesion characterisation and treatment evaluation  
[B-0607 – B-0617]  
Moderators: M.A. Lucic; Sremska Kamenica/RS  
S. Thust; London/UK

1 **March**

**Wednesday, March 1, 10:30-12:00, Room M 5**

**SS 211b** White matter diseases  
[K-02, B-0175 – B-0184]  
Moderators: E. Avdagic; Sarajevo/BA  
C. Lukas; Bochum/DE

2 **March**

**Thursday, March 2, 16:00-17:30, Room E2**

**RC 811** Toxic brain disorders  
Level: II  
Moderator: P. Due-Tønnessen; Oslo/NO  
A. Alcohol-related changes in the brain  
M. Knauth; Göttingen/DE  
B. Recreational drugs and occupational hazards  
L. van den Hauwe; Antwerp/BE  
C. Treatment-induced effects on the brain parenchyma  
T. Lim; Singapore/SG

1 **March**

**Wednesday, March 1, 14:00-15:30, Room E2**

**SS 311a** Stroke: CT and MRI  
[B-0272 – B-0282]  
Moderators: S. Jefic; Banja Luka/BA  
U. Lamot; Ljubljana/SI

2 **March**

**Friday, March 3, 08:30-10:00, Room E2**

**RC 911** Cerebrovascular disease  
Level: II  
Moderator: A. Krainik; Grenoble/FR  
A. Vascular distribution territories: arterial and venous  
A. Dörfler; Erlangen/DE  
B. Arterial dissection and vasculitis  
P.C. Maly Sundgren; Lund/SE  
C. Cerebral perfusion studies in cerebrovascular disease: techniques, indications and applications  
H.R. Jäger; London/UK

1 **March**

**Wednesday, March 1, 14:00-15:30, Room M 5**

**SS 311b** Functional MRI  
[B-0348 – B-0358]  
Moderators: T. Auer; Egham/UK  
C. Calli; Izmir/TR

3 **March**

**Friday, March 3, 10:30-12:00, Room E2**

**SS 1011a** Brain tumours: imaging techniques  
[B-0778 – B-0788]  
Moderators: M. Herman; Olomouc/CZ  
C. M. Perez Fernandez; Berlin/DE
REFRESHER COURSES / SCIENTIFIC SESSIONS

Neuro

**March 3**  
**Friday, March 3, 10:30-12:00, Room M 5**  
**SS 1011b** Vascular disorders  
(B-0853 – B-0863)  
**Moderators:** P. Due-Tønnessen; Oslo/NO  
I.Q. Grunwald; Southend-on-Sea/UK

**Saturday, March 4, 08:30–10:00, Room E2**  
**RC 1211** Reporting the degenerative lumbar spine  
**LEVEL II**  
**Moderator:** E.T. Tali; Ankara/TR  
A. Disc nomenclature: how I make my report  
E. Arana; Valencia/ES  
B. Don’t forget the facet joints and posterior elements  
L. van den Hauwe; Antwerp/BE  
C. What to say and not to say in your report  
M.M. Thurnher; Vienna/AT

**Saturday, March 4, 10:30-12:00, Room E2**  
**SS 1411** The ageing brain: cognition and dementia  
(B-0929 – B-0939)  
**Moderators:** L. Hermoye; Brussels/BE  
A. Negaard; Lørenskog/NO

**March 5**  
**Sunday, March 5, 10:30-12:00, Room E2**  
**SS 1811a** Spine and peripheral nerves  
(B-1132 – B-1142)  
**Moderators:** D. Maric; Banja Luka/BA  
G. Pellicanò; Florence/IT  
**SS 1811b** Technical developments in CT and MRI improving image quality and lesion analysis  
(B-1209 – B-1219)  
**Moderators:** M. Palm; Maastricht/NL  
R. Riascos; Houston, TX/US

**March 5**  
**Sunday, March 5, 14:00-15:30, Room M 5**  
**SS 1911a** Degenerative diseases of the brain  
(K-30, B-1315 – B-1324)  
**Moderators:** S. Shams; Stockholm/SE  
M. Vasco Aragão; Recife, PE/BR  
**SS 1911b** Epilepsy and brain gadolinium deposition  
(B-1390 – B-1400)  
**Moderators:** N. Bargalló; Barcelona/ES  
T. Rostovtseva; St. Petersburg/RU

**March 4**  
**Saturday, March 4, 10:30-12:00, Room E2**  
**RC 1311** White spots in the brain  
**LEVEL II**  
**Moderator:** E. Maj; Warsaw/PL  
A. White spots and blot in the brain: what are they?  
T.A. Yousry; London/UK  
B. How can I improve my reporting of T2-hyperintense lesions?  
A. Rovira-Cañellas; Barcelona/ES  
C. Is there a need for quantitative reporting of white matter lesions?  
W. van Hecke; Antwerp/BE

**March 4**  
**Saturday, March 4, 14:00-15:30, Room M 3**  
**SS 1511** Brain infection and trauma  
(B-1037 – B-1047)  
**Moderators:** M. Garbajs; Ljubljana/SI  
R.F. Oot; Hollis, NH/US
Paediatric

**Wednesday, March 1, 10:30-12:00, Room M 2**

**SS 212  Paediatric cardiothoracic imaging**  
[B-0153 - B-0163]

**Moderators:** A. Secinaro; Rome/IT  
E. Sorantin; Graz/AT

**Wednesday, March 1, 16:00-17:30, Room O**

**RC 412  Chest imaging in paediatrics**  
**LEVEL II**

**Moderator:** B. Ahuja; Agra/IN

- **A. Congenital anomalies of the chest**  
  M. Haliloglu; Ankara/TR  
  [A-101]

- **B. Lung infection and its complications**  
  M.L. Lobo; Lisbon/PT  
  [A-102]

- **C. Imaging interstitial lung disease in children: update 2017**  
  E. Alexopoulou; Athens/GR  
  [A-103]

**Thursday, March 2, 08:30-10:00, Room O**

**RC 512  Paediatric musculoskeletal imaging**  
**LEVEL II**

**Moderator:** A.C. Offiah; Sheffield/UK

- **A. The occurrence of bone marrow oedema, joint fluid, ganglion cysts and erosion like features in the normal paediatric wrist**  
  D. Avenarius; Tromsø/NO  
  [A-182]

- **B. MRI of the temporomandibular joints: findings that can mimic arthritis**  
  T. von Kalle; Stuttgart/DE  
  [A-183]

- **C. Skeletal trauma in children**  
  I. Barber; Esplugues de Llobregat/ES  
  [A-184]

**Thursday, March 2, 10:30-12:00, Room M 2**

**SS 612  Paediatric abdominal imaging**  
[K-09, B-0509 – B-0518]

**Moderators:** K. Iliadis; Brighton/UK  
M. Raissaki; Iraklion/GR

**Friday, March 3, 08:30-10:00, Room O**

**RC 912  Understanding paediatric neuroradiology**  
**LEVEL II**

**Moderator:** A. Rossi; Genoa/IT

- **A. Imaging of the premature brain**  
  P. Singh; Chandigarh/IN  
  [A-385]

- **B. Abusive head trauma: the role of CT and MRI**  
  C. Adamsbaum; Le Kremlin-Bicêtre/FR  
  [A-386]

- **C. Imaging in hypoxic-ischaemic injury and hypothermia: an update**  
  F.M. Triulzi; Milan/IT  
  [A-387]

**Friday, March 3, 16:00-17:30, Room O**

**RC 1212  Dose reduction: tips and tricks**  
**LEVEL II**

**Moderator:** C. Granata; Genoa/IT

- **A. Dose reduction in paediatric CT**  
  D. Aadnevik; Bergen/NO  
  [A-511]

- **B. Diagnostic reference levels in paediatric imaging: international recommendations**  
  R. Seuri; Helsinki/FI  
  [A-512]

- **C. The impact of dose management systems**  
  L.A. Rainford; Dublin/IE  
  [A-513]

This session is part of the EuroSafe Imaging campaign.

**Saturday, March 4, 10:30-12:00, Room M 2**

**SS 1412  Foetal and paediatric brain imaging**  
[B-0994 – B-1004]

**Moderators:** H.-J. Mentzel; Jena/DE  
S. Stafrace; Doha/QA

**Saturday, March 4, 14:00-15:30, Room M 2**

**SS 1512  Paediatric musculoskeletal and oncological imaging**  
[B-1027 – B-1036]

**Moderators:** R.A.J. Nievelstein; Utrecht/NL  
L.-S. Ording Müller; Oslo/NO

**Saturday, March 4, 16:00–17:30, Room O**

**RC 1612  Imaging children with cancer**  
**LEVEL II**

**Moderator:** C. Balassy; Vienna/AT

- **A. Imaging of abdominal masses at diagnosis: clues for benignity vs malignancy**  
  Ø.E. Olsen; London/UK  
  [A-763]

- **B. From whole-body MRI to MR/PET**  
  W. Hirsch; Leipzig/DE  
  [A-764]

- **C. Imaging of complications of therapy**  
  C. Granata; Genoa/IT  
  [A-765]
**Physics in Medical Imaging**

**March 4, Saturday, 08:30–10:00, Room G**

**RC 1313** Motion management in medical imaging

- **Chairman’s introduction** [A-625]
  - A. Torresin; Milan/IT

- **A. Managing respiratory motion with CT and CBCT: conventional approaches and motion compensating techniques** [A-626]
  - J. Cant; Wilrijk/BE

- **B. Managing cardiac motion with CT and CBCT: conventional approaches and motion compensating techniques** [A-627]
  - M. Kachelrieß; Heidelberg/DE

- **C. Motion compensation in MR and PET imaging** [A-628]
  - C. Kolbitsch; Berlin/DE

- **Panel discussion: How many ‘energies’ do we need in CT?**

**March 4, Saturday, 10:30-12:00, Room G**

**SS 1413** Advances in medical imaging methodology

- **Moderators:** M. Costagli; Pisa/IT
  
- J.N. Vassileva; Vienna/AT

**March 4, Saturday, 14:00–15:30, Room G**

**RC 1513** Dose reduction using iterative image reconstruction in CT

- **Chairman’s introduction** [A-737]
  - V. Gershan; Skopje/MK

- **A. Basics of iterative image reconstruction in CT** [A-738]
  - M. Kortesniemi; Helsinki/FI

- **B. Iterative image reconstruction in clinical practice (dos and don’ts)** [A-739]
  - H. Alkadhi; Zurich/CH

- **C. Image quality assessment of iterative reconstruction: pitfalls and future directions** [A-740]
  - C. Ghetti; Parma/IT

- **Panel discussion: How low can we go?**

This session is part of the EuroSafe Imaging campaign.
Physics in Medical Imaging

**March 4 Saturday, March 4, 16:00-17:30, Room G**

**RC 1613** MR: artefacts and devices

» Chairman’s introduction [A-798]
  M. Tosetti; Pisa/IT

A. Image artefacts in MRI and their mitigation [A-799]
  D.J. Lurie; Aberdeen/UK

B. Imaging around metal implants: artefact reduction in MRI [A-800]
  A. Fagan; Dublin/IE

C. Artefacts in perfusion and diffusion MRI [A-801]
  I. Tsougos; Larissa/GR

» Panel discussion: Clinically applicable tools/strategies for minimising/avoiding MR imaging artefacts

**March 5 Sunday, March 5, 08:30-10:00, Room G**

**RC 1713** Artefacts and pitfalls in tomography

» Chairman’s introduction [A-864]
  V. Tsapaki; Athens/GR

A. CT [A-865]
  J. Kuntz; Heidelberg/DE

B. PET/CT [A-866]
  I. Rausch; Vienna/AT

C. MR/PET [A-867]
  H.H. Quick; Essen/DE

» Panel discussion: Imagine imaging without artefacts: dos and don'ts in your clinical practice

**March 5 Sunday, March 5, 10:30-12:00, Room L 8**

**SS 1813** Physics-based approaches to imaging, diffusion and motion [B-1111 – B-1121]

Moderators: I. Seimenis; Alexandropolis/GR
M.J. Willemink; Utrecht/NL

Radiographers

**March 1 Wednesday, March 1, 08:30-10:00, Room K**

**RC 114** MRI technology and techniques

Moderators: V. Syrgiamiotis; Athens/GR
A. Mizzi; Msida/MT

A. Recent developments in structural and quantitative spinal cord imaging at 3T [A-044]
  M.C. Yiannakas; London/UK

B. RF-related heating in clinical MRI [A-045]
  T. Owman; Lund/SE

C. The benefits of diffusion imaging [A-046]
  J. Castillo; Msida/MT

» Discussion and questions: How is patient care affected by MRI technology and techniques?

**March 1 Wednesday, March 1, 10:30-12:00, Room K**

**SS 214** CT imaging [K-03, B-0132 – B-0141]

Moderators: K. Muscat; Birkirkara/MT
A. Palkó; Szeged/HU

**March 1 Wednesday, March 1, 14:00-15:30, Room K**

**SS 314** MR imaging [B-0315 – B-0325]

Moderators: L. Natale; Rome/IT
K. Taylor; Cambridge/UK

**March 1 Wednesday, March 1, 16:00–17:30, Room K**

**RC 414** Modern imaging of major trauma

Moderators: P.H. Hogg; Salford/UK
L. van den Hauwe; Antwerp/BE

A. Use of MSCT in disaster victim identification [A-139]
  J. Kroll; Maastricht/NL

B. Conventional radiography in major trauma: role, technique modification and impact on interpretation [A-140]
  M. Hardy; Bradford/UK

C. Applications of ultrasound in the evaluation of major trauma [A-141]
  T. Herlihy; Dublin/IE

» Discussion and questions: Imaging of major trauma - what are the challenges
REFRESHER COURSES / SCIENTIFIC SESSIONS

Radiographers

2 March

Thursday, March 2, 08:30–10:00, Room K

RC 514 CT imaging: the role of the radiographer and technological developments

Moderators: C. Beardmore; London/UK
R. Siemund; Lund/SE

A. The role of the radiographer in interventional CT procedures [A-220]
J. Santos; Coimbra/PT

B. Optimising CT doses [A-221]
F. Zarb; Msida/MT

C. State-of-the-art CT technology [A-222]
S.D. Mørup; Odense/DK

» Discussion and questions: Optimisation of care in CT: what else may be done?

2 March

Thursday, March 2, 10:30-12:00, Room K

SS 614 Dose optimisation
[B-0488 – B-0498]

Moderators: M. Mechl; Brno/CZ
L.A. Rainford; Dublin/IE

2 March

Thursday, March 2, 14:00-15:30, Room K

SS 714 Breast imaging
[B-0661 – B-0671]

Moderators: C. Falzon; Sta. Lucija/MT
S. Zackrisson; Malmö/SE

2 March

Thursday, March 2, 16:00-17:30, Room K

RC 814 The education and training of radiographers

Moderators: H.H. Hjemly; Oslo/NO
E. Papadaki; Iraklion/GR

A. E-learning and blended learning approaches to continuing professional development (CPD): is this the way forward? [A-342]
E. Metsälä; Helsinki/FI

B. The assessment of clinical knowledge, skills and competences for pre- and post- registration radiographers [A-343]
L. Robinson; Salford/UK

C. Clinical placements: the challenges ahead [A-344]
L.A. Rainford; Dublin/IE

» Discussion and questions: Education and training: what is the way forward?

3 March

Friday, March 3, 08:30-10:00, Room K

RC 914 Patient safety: professional and clinical responsibility of the radiographer

Moderators: T. Roding; Haarlem/NL
P. Due-Tønnessen; Oslo/NO

A. Patient and staff safety in medical imaging: what can be done? [A-418]
S. Mc Fadden; Newtownabbey/UK

B. Aspects of safety: what should be considered? [A-419]
K. Azevedo; Faro/PT

C. Patient safety: opportunities and challenges ahead in medical imaging [A-420]
J. McNulty; Dublin/IE

» Discussion and questions: Ensuring patient safety in medical imaging: what else can be done?

This session is part of the EuroSafe Imaging campaign.

3 March

Friday, March 3, 10:30-12:00, Room K

SS 1014 Professional issues in radiography
[B-0820 – B-0830]

Moderators: M. Hailemichael; Lund/SE
J. Reponen; Raahe/FI

4 March

Saturday, March 4, 10:30-12:00, Room K

SS 1414 Radiography education
[K-20, B-0973 – B-0982]

Moderators: D. Akata; Ankara/TR
P. Cosson; Teeside/UK

5 March

Sunday, March 5, 10:30-12:00, Room K

SS 1814 Topics in general and paediatric imaging
[B-1177 – B-1186]

Moderators: B.T. Andersson; Lund/SE
D. Prayer; Vienna/AT

5 March

Sunday, March 5, 14:00-15:30, Room K

SS 1914 Radiography practice
[B-1358 – B-1368]

Moderators: J.M. Saude; Porto/PT
D. Tscholakoff; Vienna/AT
**REFRESHER COURSES / SCIENTIFIC SESSIONS**

### Vascular

#### Wednesday, March 1, 08:30-10:00, Room M 1
**RC 115** Peripheral vascular malformations: light after darkness

- **Chairman’s introduction** [A-047]
  - J.A. Reekers; Amsterdam/NL
- **A. The diagnostic assessment** [A-048]
  - M. Köcher; Olomouc/CZ
- **B. Percutaneous or endovascular treatment: when and how?** [A-049]
  - B. Peynircioğlu; Ankara/TR
- **C. Paediatric vascular malformations: diagnosis and treatment** [A-050]
  - D. Roebuck; London/UK
- **Panel discussion: How could we improve diagnosis and optimise the results of our interventions?**

#### Wednesday, March 1, 10:30-12:00, Room X
**SS 215** Blood flow assessment / experimental

- **Moderators:** J.I. Bilbao; Pamplona/ES
  - F. Takis; Keratea/GR

#### Wednesday, March 1, 14:00-15:30, Room X
**SS 315** Carotid / cerebrovascular imaging

- **Moderators:** M. Köcher; Olomouc/CZ
  - R.N. Planken; Amsterdam/NL

#### Thursday, March 2, 16:00-17:30, Room M 1
**RC 815** Carotid artery disease: so what's new?

- **Moderator:** T. Jargiello; Lublin/PL
- **A. The diagnostic assessment of carotid arteries: do we still need US?** [A-345]
  - R. Iezzi; Rome/IT
- **B. Carotid stenting vs endarterectomy: is the jury back yet?** [A-346]
  - K.D. Mathias; Hamburg/DE
- **C. Carotid interventions in the setting of acute stroke** [A-347]
  - S. Sencer; Istanbul/TR

#### Friday, March 3, 08:30-10:00, Room M 1
**RC 915** Post-treatment evaluation: what every radiologist should know

- **Chairman’s introduction** [A-421]
  - P. Haage; Wuppertal/DE
- **A. Thoracic aorta** [A-422]
  - T. Leiner; Utrecht/NL
- **B. Abdominal aorta** [A-423]
  - C. Loewe; Vienna/AT
- **C. Peripheral arterial disease** [A-424]
  - M. Anzidei; Rome/IT
- **Panel discussion: How to optimise post-treatment imaging: getting proper diagnosis without performing too many examinations**

#### Friday, March 3, 10:30-12:00, Room Z
**SS 1015** Pulmonary circulation

- **Moderators:** G. Balázs; Budapest/HU
  - S. Haneder; Cologne/DE

#### Saturday, March 4, 10:30-12:00, Room X
**SS 1415** Assessing venous and lymphatic diseases

- **Moderators:** M.A. Aschauer; Graz/AT
  - C. Floridi; Varese/IT

#### Sunday, March 5, 10:30-12:00, Room X
**SS 1815** Peripheral arteries / arteritis

- **Moderators:** B. Merlino; Rome/IT
  - B. Sekovski; Split/HR

#### Sunday, March 5, 14:00-15:30, Room X
**SS 1915** Aortic imaging

- **Moderators:** M. Cejna; Feldkirch/AT
  - M.I. Furmanek; Warsaw/PL
**Oncologic Imaging**

**Wednesday, March 1, 10:30-12:00, Room M3**

**SS 216** Imaging and predicting treatment response and outcome in oncology  
(B-0164 – B-0174)

**Moderators:** A. Fohlen; Caen/FR  
J. Sosna; Jerusalem/IL

**Wednesday, March 1, 14:00-15:30, Room M3**

**SS 316** Female genitourinary cancers  
(B-0337 – B-0347)

**Moderators:** S. Guerrini; Siena/IT  
S. Kharuzhyk; Minsk/BY

**Thursday, March 2, 08:30-10:00, Room F2**

**RC 516** A multidisciplinary approach to prostate cancer: can we make a difference?  
**LEVEL III**

» Chairman's introduction  
[A-209]  
P. Hamm; Berlin/DE

A. The urologist: evidence-based clinical decision making  
[A-210]  
N. Mottet; St. Etienne/FR

B. The radiologist: evidence-based use of multiparametric MRI  
[A-211]  
H.-P. Schlemmer; Heidelberg/DE

C. The radiation oncologist  
[A-212]  
D. Georg; Vienna/AT

» Panel discussion: Prostate cancer: evidence-based multidisciplinary approach to imaging and treatment

**Thursday, March 2, 10:30-12:00, Studio 2017**

**SS 616** Imaging rectal cancer  
(K-11, B-0414 – B-0423)

**Moderators:** P.A. Bonaffini; Monza/AT  
R. García Figueiras; Santiago de Compostela/ES

**Thursday, March 2, 14:00-15:30, Room F1**

**SS 716** Imaging nervous system and musculoskeletal tumours  
(B-0618 – B-0628)

**Moderators:** F.A. Gallagher; Cambridge/UK  
B.M. Schaarschmidt; Düsseldorf/DE

**Thursday, March 2, 16:00-17:30, Room F2**

**RC 816** Evaluating lymph node involvement: an impossible task?  
**LEVEL III**

» Chairman's introduction  
[A-329]  
P. Lalitha; Hyderabad/IN

A. The current criteria for nodal involvement MRI/CT  
[A-330]  
D. Tse; Hong Kong/HK

B. Advanced MRI techniques: what do they contribute?  
[A-331]  
H.C. Thoeny; Berne/CH

C. PET and other nuclear medicine techniques  
[A-332]  
T. Barwick; London/UK

» Panel discussion: Will imaging ever make diagnostic biopsy unnecessary?

**Friday, March 3, 10:30-12:00, Room A**

**SS 1016a** Imaging in prostate cancer  
(B-0693 – B-0703)

**Moderators:** P.A.T. Baltzer; Vienna/AT  
M. Spahn; Berne/CH

**Friday, March 3, 10:30-12:00, Studio 2017**

**SS 1016b** Hybrid imaging in oncology  
[K-17, B-0747 – B-0756]

**Moderators:** G. Cook; London/UK  
B.D. Klumpp; Tübingen/DE

**Friday, March 3, 16:00-17:30, Room F2**

**RC 1216** Monitoring response: the essential guide for all radiologists  
**LEVEL III**

» Chairman's introduction  
[A-533]  
P. Brader; Graz/AT

A. RECIST made easy  
[A-534]  
A.G. Rockall; London/UK

B. PERCIST: PET response criteria  
[A-535]  
C.C. Cyran; Munich/DE

C. Assessment of response using functional MR and CT imaging: the essentials  
[A-536]  
C.A. Cuénod; Paris/FR

» Panel discussion: When and how will functional imaging overcome morphological assessment?
REFRESHER COURSES / SCIENTIFIC SESSIONS

Oncologic Imaging

4 March  Saturday, March 4, 10:30-12:00, Studio 2017
SS 1416  Imaging of liver and pancreas
[B-0907 – B-0917]

Moderators: M. Chouhan; London/UK
A. Luciani; Créteil/FR

5 March  Sunday, March 5, 08:30–10:00, Room F2
RC 1716  Diffusion-weighted imaging (DWI) in oncology: how I do it

» Chairman’s introduction  [A-857]
D.-M. Koh; Sutton/UK

A. DWI: how to optimise protocols  [A-858]
N. Papanikolaou; Lisbon/PT

D.M. Lambregts; Amsterdam/NL

C. DWI: whole-body imaging  [A-860]
V. Vandecaveye; Leuven/BE

» Panel discussion: How to optimise DWI for clinical practice?

5 March  Sunday, March 5, 10:30-12:00, Studio 2017
SS 1816  Improving imaging of metastatic disease: what’s new?
[B-1100 – B-1110]

Moderators: R.G.H. Beets-Tan; Amsterdam/NL
K.N. De Paepe; Leuven/BE

5 March  Sunday, March 5, 14:00-15:30, Studio 2017
SS 1916  Haematological malignancies and lymphadenopathy revisited
[B-1293 – B-1303]

Moderators: C.A. Cuénod; Paris/FR
D. Simons; Heidelberg/DE
Emergency Radiology

**March 1**

**Wednesday, March 1, 10:30-12:00, Room F2**

**SS 217**  Traumatic emergencies  
[ Begin Times - 10:00-12:00 - End Times - 10:00-12:00 ]

**Moderators:** M. Maas; Amsterdam/NL
S. Vaidya; London/UK

**March 1**

**Wednesday, March 1, 14:00-15:30, Room F2**

**SS 317**  Non-traumatic emergencies  
[ Begin Times - 14:00-15:30 - End Times - 14:00-15:30 ]

**Moderators:** A. van Randen; Amsterdam/NL
S. Wirth; Munich/DE

**March 3**

**Friday, March 3, 10:30-12:00, Room F2**

**SS 1017**  CT virtopsy and other “hot” topics  
[ Begin Times - 10:30-12:00 - End Times - 10:30-12:00 ]

**Moderators:** F.H. Berger; Toronto, ON/CA
F. Macri; Nîmes/FR

**March 4**

**Saturday, March 4, 08:30–10:00, Room F2**

**RC 1317**  Acute pain: hallmark in emergency radiology  
[ Begin Times - 08:30-10:00 - End Times - 08:30-10:00 ]

**Moderators:** D.R. Kool; Nijmegen/NL
S. Wirth; Munich/DE
E. Dick; London/UK
R. Basilico; Chieti/IT

**March 4**

**Saturday, March 4, 14:00-15:30, Room F2**

**RC 1517**  The latest update in imaging of polytrauma patients  
[ Begin Times - 14:00-15:30 - End Times - 14:00-15:30 ]

**Moderators:** G. Schueller; Opfikon/CH

A. Ultrasound: when, why and by whom?  
M. Stajgis; Poznan/PL

B. CT: is it always whole-body?  
K. Katulska; Poznan/PL

C. Where is the proper place for MRI?  
M. Maas; Amsterdam/NL
S. Vaidya; London/UK

**March 1**

**Wednesday, March 1, 14:00-15:30, Room F2**

**SS 317**  Non-traumatic emergencies  
[ Begin Times - 14:00-15:30 - End Times - 14:00-15:30 ]

**Moderators:** A. van Randen; Amsterdam/NL
S. Wirth; Munich/DE

**March 4**

**Saturday, March 4, 16:00-17:30, Room F2**

**RC 1617**  Abdominal trauma: things not to forget  
[ Begin Times - 16:00-17:30 - End Times - 16:00-17:30 ]

**Moderators:** G. Schueller; Opfikon/CH

A. Liver and spleen  
M. Scaglione; Castel Volturno/IT

B. Pancreas, bowel and mesentery  
M.A. Patak; Zurich/CH

C. Urogenital tract  
R.H. Oyen; Leuven/BE
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In Clinical Trials in Radiology (CTiR) Sessions, scientific evidence is presented for imaging tests that will change the clinical practice of every radiologist in the future. Each of the clinical trials in radiology presented during these two sessions is accompanied by a short lecture. These lectures are given by experts in the respective field and will allow participants to better understand which clinical changes should be made based on the CTiR results.

**Clinical Trials in Radiology (CTiR) 1**

**Wednesday, March 1, 12:30–13:30, Room M 1**

**Moderators:** R.L. Baron; Chicago, IL/US  
M. Dewey; Berlin/DE

- **New insights into preoperative breast magnetic resonance imaging (MRI) from the multicentre individual patient analysis (MIPA) study**  
  R.M. Trimboli; San Donato Milanese/IT  
  Discussant: E.M. Fallenberg; Berlin/DE

- **The MICRA trial: Minimally Invasive Complete Response Assessment of the breast after neoadjuvant systemic therapy**  
  M.E.M. van der Noordaa; Amsterdam/NL  
  Discussant: F.J. Gilbert; Cambridge/UK

- **The MULTIPROS study - Multiparametric MRI with subsequent randomisation to MRI/US fusion guided biopsy vs TRUS biopsy in the diagnosis of prostate cancer**  
  M.J. Szewczyk-Bieda; Dundee/UK  
  Discussant: P. Asbach; Berlin/DE

- **Study design and inclusion ROBINSCA trial: large-scaled population based (CT) screening trial for cardiovascular disease**  
  M. Vonder; Groningen/NL  
  Discussant: M. Francone; Rome/IT

**Clinical Trials in Radiology (CTiR) 2**

**Thursday, March 2, 12:30–13:30, Room M 1**

**Moderators:** R.L. Baron; Chicago, IL/US  
M. Dewey; Berlin/DE

- **Non-invasive treatment of osteoid ostema with MRgFUS in paediatric patients only: a retrospective multicentre study**  
  F. Arrigoni; L’Aquila/IT  
  Discussant: L.-S. Ording Müller; Oslo/NO

- **Iodixanol versus iopromide in contemporary coronary CT angiography: lumen opacification and effect on heart rhythm in the randomised IsoCOR trial**  
  A. Coenen; Rotterdam/NL  
  Discussant: G.A. Krombach; Giessen/DE

- **Comparison of pretest probability with prevalence of obstructive coronary artery disease using invasive coronary angiography or computed tomography angiography**  
  S. Feger; Berlin/DE  
  Discussant: C. Loewe; Vienna/AT

- **Diagnostic value of novel MRI techniques for the primary staging and restaging of rectal cancer: multicentre study**  
  D.M.J. Lambregts; Amsterdam/NL  
  Discussant: U. Attenberger; Mannheim/DE
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JOINT SESSIONS

EDiR TALK
(European Diploma in Radiology)
This session aims to prepare prospective candidates for the European Diploma in Radiology (EDiR).

3 March  
Friday, March 3, 16:00–17:30, Room X
European Diploma in Radiology: essential tips for success

» Chairman’s introduction: an overview of the EDiR  [A-495]
  J. Vilar; Valencia/ES

» Are you ready for the EDiR? To view some practical cases: multiple response questions  [A-496]
  P.C. Maly Sundgren; Lund/SE
  A. Pons; Barcelona/ES

» Are you ready for the EDiR? To view some practical cases: short cases  [A-497]
  P.C. Maly Sundgren; Lund/SE
  A. Pons; Barcelona/ES

» Are you ready for the EDiR? To view some practical cases: CORE cases  [A-498]
  L. McKnight; Langland/UK
  A. Pons; Barcelona/ES

» Any questions?

EFOMP WORKSHOPS
(European Federation of Organisations for Medical Physics)

3 March  
Friday, March 3, 08:30–10:00, Room G
EF 1  Radiation incidents and accidents in medical imaging and their management (part I)

Moderators: J. Damilakis; Iraklion/GR
A. Torresin; Milan/IT

» Chairman’s introduction  [A-414]
  J. Damilakis; Iraklion/GR

» Radiation incidents and accidents in CT  [A-415]
  M. Mahesh; Baltimore, MD/US

» Radiation incidents and accidents in interventional suites  [A-416]
  R.W.R. Loose; Nürnberg/DE

» Accidental exposure during pregnancy  [A-417]
  J. Damilakis; Iraklion/GR

This session is part of the EuroSafe Imaging campaign.

3 March  
Friday, March 3, 10:30–12:00, Room G
EF 2  Radiation incidents and accidents in medical imaging and their management (part II)

Moderators: M. Brambilla; Novara/IT
D.J. Lurie; Aberdeen/UK

» Chairman’s introduction  [A-446]
  M. Brambilla; Novara/IT

» Incidents and accidents in MRI  [A-447]
  D.J. Lurie; Aberdeen/UK

» Radiation incidents and accidents in nuclear medicine  [A-448]
  M. Brambilla; Novara/IT

» Management of incidents and accidents in imaging departments: the role and responsibilities of medical physicists  [A-449]
  V. Tsapaki; Athens/GR

This session is part of the EuroSafe Imaging campaign.

= Interactive session with electronic voting/self assessment
JOINT SESSIONS

EFRS WORKSHOP
(European Federation of Radiographer Societies)
facilitated by Elsevier and the ‘Radiography’ journal

March 4
Saturday, March 4, 16:00–17:30, Room K

EFRS Authorship and Reviewer Workshop

» Chairman’s introduction: Establishing the evidence base in radiology and radiography  [A-802]
   G. Paulo; Coimbra/PT

» Why publish your work?  [A-803]
   F. Zarb; Msida/MT

» Journal selection: aims and scope, audience and metrics  [A-804]
   J.M. Nightingale; Salford/UK

» Ethics of publishing  [A-805]
   J. McNulty; Dublin/IE

» Things to consider: the reviewer’s perspective  [A-806]
   A. England; Salford/UK

» Editor’s ten top tips for publishing success  [A-807]
   J.M. Nightingale; Salford/UK

» Panel discussion: What are the barriers to publishing your research or becoming a reviewer and how can they be overcome?

March 2
Thursday, March 2, 08:30–10:00, Room X

EIBIR SESSIONS
(European Institute for Biomedical Imaging Research)

March 2
Thursday, March 2, 08:30–10:00, Room X

EIBIR Session 1
VPH-DARE@IT: Novel biomarkers and platforms for earlier dementia diagnosis  LEVEL 1

Moderator: Z.A. Taylor; Sheffield/UK

» Introduction  [A-173]
   Z.A. Taylor; Sheffield/UK

» Patient care platform  [A-174]
   M. van Gils; Tampere/FI

» Mechanistic model-based biomarkers  [A-176]
   Y. Ventikos; London/UK

» Phenomenological model-based biomarkers  [A-177]
   S. Klein; Rotterdam/NL

March 3
Friday, March 3, 08:30–10:00, Room M 2

EIBIR Session 2
EU Research on cancer imaging  LEVEL 1

Moderator: Y. Liu; Brussels/BE

» Introduction  [A-425]
   Y. Liu; Brussels/BE

» Multimodal imaging with diffuse optics for cancer theranostics  [A-426]
   T. Durduran; Barcelona/ES

» Hybrid PET/MRI for breast cancer detection  [A-427]
   C.K. Kuhl; Aachen/DE

» Using GlucoCEST MRI to visualise cancer  [A-428]
   X. Golay; London/UK
**EIBIR SESSIONS**  
(European Institute for Biomedical Imaging Research)

**ESHI SESSIONS**  
(European Society for Hybrid Medical Imaging)

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**EIBIR Session 3**  
Innovative solutions for diagnosis and treatment concepts for GIST patients from the MITIGATE project  
**Moderator:** S.O. Schönberg; Mannheim/DE  
- Introduction to the state-of-the-art therapy in GIST  
  - P. Hohenberger; Mannheim/DE  
- Improving the diagnostic imaging approach in GIST patients  
  - C. Decristoforo; Innsbruck/AT  
- Minimally invasive treatment of GIST patients in a compassionate use programme  
  - S. Diehl; Mannheim/DE  
- Impact of the MITIGATE project on European GIST patients  
  - A. Bruno-Lindner; Vienna/AT  
- Discussion

**ESHI Session**  
Hybrid imaging: case-based diagnosis in PET/CT  
**Moderator:** K. Nikolaou; Tübingen/DE  
- FDG indications in oncology: case-based  
  - K. Riklund; Umeå/SE  
- Non-FDG indications in oncology: case-based  
  - O. Ratib; Geneva/CH  
- Pitfalls in PET/CT: case-based  
  - G. Antoch; Düsseldorf/DE
**ESOR SESSION**
(European School of Radiology)

**ESR AUDIT AND STANDARDS SESSION**

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**Thursday, March 2, 14:00–15:30, Room M 3**

**How to gain and maintain quality education in radiology**

Moderators: N. Gourtsoyiannis; Athens/GR
P.M. Parizel; Antwerp/BE

» Introduction  [A-271]
P.M. Parizel; Antwerp/BE

» ESOR in action 2017  [A-272]
N. Gourtsoyiannis; Athens/GR

» How to improve education in radiology  [A-273]
S.J. Golding; Oxford/UK

» Feeling confident? Evaluating competencies  [A-274]
O. Kolokythas; Seattle, WA/US

» Lifelong learning: stay sharp in the field of radiology  [A-275]
B. Ertl-Wagner; Munich/DE

» Find your mentor and stick together  [A-276]
C.A. Minoiu; Bucharest/RO

» Awards

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**Thursday, March 2, 08:30–10:00, Room M 2**

**How (Euro)safe is your department?**

Moderator: B.E. Kelly; Belfast/UK

» Audit and raising the standard: the role of audit in 2017  [A-226]
M.F.J. Ryan; Cork/IE

» Auditing the auditors: safe health care professionals in safe departments  [A-227]
P. Soffia; Santiago/CL

» Audit: what a regulator needs to know  [A-228]
S. Ebdon-Jackson; Didcot/UK

» Audit and the patient journey  [A-229]
E. Briers; Hasselt/BE

» Panel discussion: Can an auditless department prove that it’s a safe department?

This session is part of the EuroSafe Imaging campaign.
ESR PATIENT ADVISORY GROUP (ESR-PAG) SESSIONS

**ESR-PAG 1**  Improving patient safety and quality of care in clinical radiology  

- **Chairmen's introduction**  
  N. Bedlington; Vienna/AT  [A-664]  
  B.E. Kelly; Belfast/UK  [A-665]  

- **The work of the ESR Audit & Standards Subcommittee in collaboration with ESR-PAG**  
  B.E. Kelly; Belfast/UK  [A-666]  

- ** Patients' perspective**  
  D. Walsh; Dublin/IE  [A-667]  
  E. Briers; Hasselt/BE  [A-668]  

- **Example of good practice: implementing a patient satisfaction questionnaire in your radiology department**  
  D.-G. Carrié; Toulouse/FR  [A-669]  

- **Panel discussion: Does your department perform well in patient-centred care?**
  This session is part of the EuroSafe Imaging campaign.

**ESR-PAG 2**  Big data - data management, standardisation, access and protection: the way forward in developing personalised/precision medicine

- **Chairmen's introduction**  
  A. Brink; Boston, MA/US  [A-774]  
  B. Brkljačić; Zagreb/HR  

- ** European developments within data management, standardisation, access and protection**  
  P. Mildenberger; Mainz/DE  [A-775]  

- ** Patients' point of view**  
  N. Bedlington; Vienna/AT  [A-776]  
  E. Briers; Hasselt/BE  [A-777]  

- **Current US status pros and cons and issues**  
  J.A. Brink; Boston, MA/US  [A-778]  

- **Panel discussion: Importance of data management in modern medicine - what are the main issues to be addressed?**
  This session is part of the EuroSafe Imaging campaign.
ESR WORKING GROUP ON ULTRASOUND SESSIONS

1 March Wednesday, March 1, 08:30–10:00, Room Z

WG 1 Ultrasound of the lung parenchyma: a diagnostic tool for the paediatric radiologist or for the clinician? [LEVEL I]

Moderator: C. Owens; London/UK
» How I perform and interpret lung parenchymal ultrasound [A-011]
  M. Riccabona; Graz/AT
» How does lung parenchymal ultrasound change the clinical management of the sick child: the paediatric radiologists’ perspective [A-012]
  P. Tomà; Rome/IT
» How does lung parenchymal ultrasound change the clinical management of the sick child: the clinicians’ perspective [A-013]
  L. Cattarossi; Udine/IT
» Panel discussion

1 March Wednesday, March 1, 16:00–17:30, Room Z

WG 2 Image fusion [LEVEL I]

» Chairman’s introduction: Basic principles of image fusion
  M. Bachmann Nielsen; Copenhagen/DK [A-095]
  L.E. Derchi; Genoa/IT [A-096]
» Image fusion of the kidney
  M. Claudon; Vandoeuvre-les-Nancy/FR [A-097]
  D.A. Clevert; Munich/DE [A-098]
» Image fusion of the liver [A-099]
  G.H. Mostbeck; Vienna/AT
» Image fusion of the prostate [A-100]
  D.A. Clevert; Munich/DE
» Panel discussion

2 March Thursday, March 2, 08:30–09:30, Room Z

WG 3 Minimising the risk of cross infection: how to keep patients safe in ultrasound [LEVEL I]

» Chairman’s introduction [A-178]
  M. Claudon; Vandoeuvre-les-Nancy/FR
» Risk of cross transmission of infection in ultrasound: current European practice (ESR survey results) and best practice recommendations prepared by the ESR US WG [A-179]
  C. Nyhsen; Sunderland/UK
» Comments from the ESR Patient Advisory Group regarding infection control practice in Europe [A-180]
  J. Birch; Poole/UK
» Comments from industry representation [A-181]
  N. Denjoy; Brussels/BE
» Panel discussion: How can safer practice be achieved?

2 March Thursday, March 2, 16:00–17:30, Room Z

WG 4 Simulation training in ultrasound [LEVEL I]

Moderators: M. Bachmann Nielsen; Copenhagen/DK
V. Cantisani; Rome/IT
» How to evaluate simulation training [A-300]
  L. Konge; Copenhagen/DK
» Different ultrasound simulators for different purposes [A-301]
  A. Kabaalioglu; Antalya/TR
» US simulation training in student education [A-302]
  R. Badea; Cluj-Napoca/RO
» Experience with ultrasound simulators in training radiologists [A-303]
  M.L. Østergaard; Copenhagen/DK
» Panel discussion
**EUROSAFE IMAGING SESSIONS**

1 **March**

**Wednesday, March 1, 16:00–17:30, Room M 1**

**EU 1** Clinical diagnostic reference levels  
Moderators: G. Frija; Paris/FR  
G. Simeonov; Luxembourg/LU

» Introduction  
[ A-142 ]  
G. Frija; Paris/FR

» Clinical diagnostic reference levels: from concept to impact in clinical practice  
[ A-143 ]  
R.W.R. Loose; Nürnberg/DE

» ICRP perspective: from methodological region-related DRLs to DRLs based on clinical indications  
[ A-144 ]  
E. Vaño; Madrid/ES

» EuroSafe Imaging clinical DRLs: detailed results of the pilot survey and lessons learnt for the survey among the EuroSafe Imaging Stars  
[ A-145 ]  
P. Vock; Spiegel/CH

» North American DRLs: a view from across the pond  
[ A-146 ]  
R.L. Morin; Jacksonville, FL/US

» Panel and public discussion

This session is part of the EuroSafe Imaging campaign.

2 **March**

**Thursday, March 2, 10:30–12:00, Room X**

**EU 2** Focus on appropriate image quality: what we have to know  
Moderators: W. Stiller; Heidelberg/DE  
J. Damilakis; Iraklion/GR

» EuroSafe Imaging on “appropriate image quality”: Introduction  
[ A-244 ]  
S.T. Schindera; Aarau/CH

» Metrics and methods for quantitative image quality determination: a physicist’s perspective  
[ A-245 ]  
C. Hoeschen; Magdeburg/DE

» Balancing diagnostic image quality and radiation exposure in clinical routine: a radiologist’s perspective  
[ A-246 ]  
H. Geijer; Örebro/SE

» Image quality assessment via model observers: connecting objective and subjective perspectives  
[ A-247 ]  
F.R. Verdun; Lausanne/CH

» Implementing a review process on image quality: experiences from a EuroSafe Imaging Star  
[ A-248 ]  
F. Deferme; Antwerp/BE

This session is part of the EuroSafe Imaging campaign.

3 **March**

**Friday, March 3, 14:00–15:30, Room M 1**

**EU 4** European CT dose repository  
Moderators: J.A. Brink; Boston, MA/US  
J. Damilakis; Iraklion/GR

» The technical implementation of dose tracking tools  
[ A-473 ]  
A. Torresin; Milan/IT

» How do dose tracking tools change the practice of radiographers?  
[ A-474 ]  
S.J. Foley; Dublin/IE

» How do dose tracking tools change the practice of radiologists?  
[ A-475 ]  
F. Zanca; Leuven/BE

» European CT Dose repository working group: summary of activities  
[ A-476 ]  
E. Neri; Pisa/IT

» The ACR Dose Index Registry  
[ A-477 ]  
R.L. Morin; Jacksonville, FL/US

» Questions and answers

This session is part of the EuroSafe Imaging campaign.
Image Interpretation Quiz (IIQ)
There’s a patient behind every interesting case

Moderator: J.M. García Santos; Murcia/ES

Panellists:
- **Musculoskeletal:**
  - A. Stäbler; Munich/DE
  - A. Blum; Nancy/FR
- **Thorax:**
  - N.J. Screaton; Cambridge/UK
  - N. Sverzellati; Parma/IT
- **Abdomen:**
  - A. Torregrosa Andrés; Valencia/ES
  - I. Santiago; Lisbon/PT
- **Neuro:**
  - K.-O. Løvblad; Geneva/CH
  - I.N. Pronin; Moscow/RU

Junior Image Interpretation Quiz (JI IQ)
Building our youth for the future

Moderator: A. Snoeckx; Antwerp/BE

Team A:
- M.L. Rasmussen; Odense/DK
- E. Stanley; Dublin/IE
- T. Finkenstädt; Zurich/CH
- R. Antoniak; Warsaw/PL

Team B:
- E. Talakic; Graz/AT
- M. Ichim; Bucharest/RO
- P.A. Linck; Pellegrin/FR
- V. Khasminsky; Tel Aviv/IL

This session is part of the EuroSafe Imaging campaign.
PROFESSIONAL ISSUES AND ECONOMICS IN RADIOLOGY (PIER) SESSIONS

Friday, March 3, 10:30–12:00, Room M 2

PIER Session 1  Improving efficiency in radiology departments

**Moderators:** J.A. Brink; Boston, MA/US  
S. Morozov; Moscow/RU

A. How to identify radiology productivity bottlenecks?  
[**A-450**]  
S. Morozov; Moscow/RU

B. How to optimise radiology with big data: Medical Analytics Group (MAG) project  
[**A-451**]  
O.S. Pianykh; Newton Highlands, MA/US

C. How to implement system changes?  
[**A-452**]  
G. Paulo; Coimbra/PT

D. Making the business case for patient-centred imaging care  
[**A-453**]  
M.H. Maurer; Berne/CH

» Panel discussion

Friday, March 3, 16:00–17:30, Room M 2

PIER Session 3  Tailoring radiology departments towards patients’ needs

**Moderators:** C.D. Becker; Geneva/CH  
N.N.

A. Visibility of radiology  
[**A-558**]  
N.H. Strickland; London/UK

B. Outsourcing in radiology: costs and quality matters  
[**A-559**]  
A. Giovagnoni; Ancona/IT

C. Demonstrating the added value of the radiologist: the European approach  
[**A-560**]  
P.M.A. van Ooijen; Groningen/NL

D. Demonstrating the added value of the radiologist: the US/Canadian approach  
[**A-561**]  
G. McGinty; New York, NY/US

» Panel discussion

Friday, March 3, 14:00–15:30, Room M 2

PIER Session 2  Perspectives on radiology equipment management

**Moderators:** B. Brkljačić; Zagreb/HR  
P. Leander; Malmö/SE

A. Renewal of equipment and procurement: central vs local procedures  
[**A-478**]  
B. Brkljačić; Zagreb/HR

B. Utilisation of equipment: what is appropriate? The public healthcare system’s perspective  
[**A-479**]  
P. Leander; Malmö/SE

C. Utilisation of equipment: what is appropriate? The private healthcare system’s perspective  
[**A-480**]  
A. Palkó; Szeged/HU

D. Radiology: a cost factor? The hospital manager’s perspective  
[**A-481**]  
P. Garel; Brussels/BE

» Panel discussion
**JOINT SESSIONS**

**WITH RELATED SOCIETIES**

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### March 3

**Friday, March 3, 08:30–10:00, Room Z**

**Joint Session of the ESR Working Group on Ultrasound with EFSUMB**

(European Federation of Societies for Ultrasound in Medicine and Biology)

**Handheld devices: a game changer?**

**Moderators:**
- P.S. Sidhu; London/UK  
- M. Claudon; Vandoeuvre-les-Nancy/FR

**Panelists:**
- M. Bachmann Nielsen; Copenhagen/DK  
- R. Flesland Havre; Bergen/NO  
- H. Prosch; Vienna/AT  
- V. Cantisani; Rome/IT

**Discussion**

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### March 4

**Saturday, March 4, 08:30–10:00, Room Z**

**Joint Session of the ESR and the CIRSE**

(Cardiovascular and Interventional Radiological Society of Europe)

**Interventional procedures: clinical patient management**

**Moderators:**
- E. Brountzos; Athens/GR  
- L. Donoso; Barcelona/ES

**Panelists:**
- Chairmen’s introduction  
  - E. Brountzos; Athens/GR  
  - L. Donoso; Barcelona/ES
- BEFORE: pre-intervention procedures and protocols  
  - C. Binkert; Winterthur/CH
- DURING: patient management, communication, time out procedure, ...  
  - J.I. Bilbao; Pamplona/ES
- AFTER: patient follow up and discharge procedures  
  - O.M. van Delden; Amsterdam/NL
- The role of radiographers and nurses in the interventional radiology suite: tasks and duties  
  - C. McLaren; London/UK

**Discussion**

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### March 2

**Thursday, March 2, 16:00–17:30, Room M 5**

**Joint Session of the ESR and the EANM**

(European Association of Nuclear Medicine)

**Common diagnostic guidelines on diabetic foot, osteomyelitis and prosthetic joint infection**

**Moderators:**
- V.N. Cassar-Pullicino; Oswestry/UK  
- A. Signore; Rome/IT

**Panelists:**
- Chairmen’s introduction  
  - E. Brountzos; Athens/GR  
  - L. Donoso; Barcelona/ES
- Guidelines on osteomyelitis  
  - L.M. Sconfienza; San Donato Milanese/IT  
  - A. Glaudemans; Groningen/NL
- Guidelines on prosthetic joint infection  
  - L.M. Sconfienza; San Donato Milanese/IT  
  - O. Gheysens; Leuven/BE
- Guidelines on diabetic foot complications  
  - A. Leone; Rome/IT  
  - A. Signore; Rome/IT

**Discussion**

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**Final Programme | ECR 2017**

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JOINT SESSIONS WITH RELATED SOCIETIES

2 March 
Thursday, March 2, 14:00–15:30, Studio 2017

**Joint Session of the ESR and ERS**
*(European Respiratory Society)*

**Novel strategies in idiopathic interstitial pneumonia** LEVEL I

**Moderators:** K.M. Antoniou; Iraklion/GR
C.M. Schaefer-Prokop; Amersfoort/NL

» Updated clinical practice guidelines for classification [A-267]
  A.U. Wells; London/UK

» CT patterns for classification [A-268]
  N. Sverzellati; Parma/IT

» Updated clinical practice guidelines for treatment [A-269]
  V. Poletti; Forli/IT

» CT and MRI for monitoring therapy response and inflammatory activity [A-270]
  J.A. Verschakelen; Leuven/BE

3 March 
Friday, March 3, 14:00–15:30, Room M 4

**Joint Session of the ESR and ESMRMB**
*(European Society for Magnetic Resonance in Medicine and Biology)*

**MR imaging biomarkers: what we have and what we need** LEVEL I

**Moderators:** D. Sappey-Marinier; Lyon/FR
M. Smits; Rotterdam/NL

» Preclinical MRI: multimodal markers for neuroscience drug discovery? [A-482]
  M. von Kienlin; Basle/CH

» Clinical MRI: whole-body markers for cancer detection/response [A-483]
  F. De Keyzer; Leuven/BE

» Molecular MRI: where are the limits for MRI biomarkers? [A-484]
  L. Schröder; Berlin/DE

3 March 
Friday, March 3, 08:30–10:00, Room X

**Joint Session of the ESR and ESTRO**
*(European Society for Radiotherapy and Oncology)*

**Radiomics and imaging databases for precision radiation oncology** LEVEL II

» Chairmen’s introduction
  K. Riklund; Umeå/SE [A-373]
  V. Valentini; Rome/IT [A-374]

» Radiomics in radiology, what are the parameters of interest for different imaging modalities? [A-375]
  H. Ahlström; Uppsala/SE

» Radiomics in radiotherapy: how is it used to personalise treatment and to predict toxicity and/or tumour control [A-376]
  C. Gani; Tübingen/DE

» Uncertainties in imaging: how they should be reported and propagated in prediction models using radiomics [A-377]
  L.P. Muren; Aarhus/DK

» Imaging banks: challenges and opportunities [A-378]
  A. van der Lugt; Rotterdam/NL

» Discussion

1 March 
Wednesday, March 1, 16:00–17:30, Room L 8

**Joint Session of the ESR and UEMS**
*(European Union of Medical Specialists)*

**ESR and UEMS: a strong professional partnership** LEVEL II

» Chairmen’s introduction
  L. Bonomo; Rome/IT [A-107]
  P. Ricci; Rome/IT [A-108]

» Structure of the UEMS and position of the UEMS within the EU [A-109]
  B. Maillet; Brussels/BE

» Harmonising radiology training in Europe
  P. Ricci; Rome/IT [A-110]
  L. Oleaga Zufiría; Barcelona/ES [A-111]

» Recognition of qualifications
  Z. Fras; Ljubljana/SI [A-112]
  E.J. Adam; London/UK [A-113]

» Continuing professional development (CPD)
  M. Adriaensen; Heerlen/NL [A-114]
  D. Negru; Iasi/RO [A-115]

» Questions

= Interactive session with electronic voting/self assessment
Industrial Satellite Symposia are organised by various international companies. These sessions are a chance to get an industry perspective on various scientific subjects, including technical updates, emerging trends and future innovations.

The symposia vary in length from one hour to 90 minutes, with the number of speakers also differing between companies and subjects.

Places are allocated on a first-come, first-served basis.

For details of the programmes see separate booklet ‘Industry Programme & On-Show Guide’.
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<td><strong>2 Mar</strong></td>
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<td>SY 13</td>
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<td>SY 36 Satellite Symposium organised by Philips</td>
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<td>March 3</td>
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<td>Room E1</td>
<td>SY 20 Satellite Symposium jointly organised by Bayer HealthCare and Siemens Healthineers</td>
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<td>SY 23 Satellite Symposium organised by Guerbet</td>
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<td>Room K</td>
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<td>March 3</td>
<td>Friday, 12:30-13:30</td>
<td>Room M 1</td>
<td>SY 25 Satellite Symposium organised by Bayer Russia</td>
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<td>March 3</td>
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<td>Room O</td>
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<td>Friday, 13:00-14:30</td>
<td>Room M 3</td>
<td>SY 29 Satellite Symposium organised by HIMSS (Healthcare Information and Management Systems Society)</td>
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<td>Room O</td>
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<td>Room N</td>
<td>SY 31 Satellite Symposium organised by Siemens Healthineers</td>
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Every year, the European Society of Radiology offers young participants the chance to attend the ECR for free ...

Within its **Invest in the Youth programme** the ESR has funded **1,000 places** at ECR 2017, once again giving young radiologists, physicists and radiographers from all over the world the chance to participate in the meeting.

Successful applicants have been given **free registration for ECR 2017 and free hotel accommodation.**
INDUSTRY WORKSHOPS

Intensive practical sessions organised directly by a particular company or commercial vendor. Classes are conducted on their own state-of-the-art workstations with expert technical support provided by company staff. Participants have the opportunity to learn from experts about using computers and medical devices in the field of radiology and gain first-hand knowledge.

As a registered attendee for the ECR, participation is free of charge.

For details of the programmes see separate booklet ‘Industry Programme & On-Show Guide’.
POSTGRADUATE EDUCATIONAL PROGRAMME (A)

Session numbers are prefixed by
E3, EF, EM, HL, MC, MS, NH, PC, RC, SA, SF, TF

Presentation numbers are prefixed by the letter A

Key to Abbreviations
Basic Session (BS)
European Excellence in Education (E3)
EFRS Radiographers’ Basic Session (BR)
EFOMP Workshop (EF)
ESR/EFRS meets Session (EM)
ESR Patient Advisory Group (ESR-PAG)
ESR Working Group on Ultrasound (WG)
Honorary Lecture (HL)
Joint Session (ESR/…)
Joint Session of the ESR Working Group
  on Ultrasound with EFSUMB (WG/EFSUMB)
Mini Course (MC)
Multidisciplinary Session (MS)
New Horizons Session (NH)
Professional Challenges Session (PC)
Pros & Cons Session (PS)
Radiology Trainees Forum (TF)
Refresher Course (RC)
State of the Art Symposium (SA)
Special Focus Session (SF)
08:30 - 10:00  Room A

E³ - ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists

E³ 121
Emergency radiology I

A-001 08:30
A. Brain trauma
M. Smits; Rotterdam/NL

Learning Objectives:
1. To understand the different types of brain trauma.
2. To become familiar with the differential diagnosis.

A-002 09:15
B. Peripheral vascular injury
J. Fera; Plzen/CZ

Learning Objectives:
1. To understand the different types of peripheral vascular injury.
2. To become familiar with the different imaging techniques.
3. To become familiar with interventional treatment options.

08:30 - 10:00  Room B

GI Tract

RC 101
Assessing inflammation and fibrosis in Crohn’s disease

A-003 08:30
Chairman’s introduction
A. Laghi; Latina/IT

A-004 08:35
A. Is sonography (CEUS and elastography) the right tool?
E. Quaia; Edinburgh/UK

Learning Objectives:
1. To learn about CEUS technique, including imaging acquisition and data post-processing.
2. To become familiar with US elastography, particularly with those techniques useful in the assessment of the small bowel.
3. To understand potential advantages and possible limitations of CEUS and elastography in the assessment of inflammation and fibrosis in Crohn’s disease.

A-005 08:58
B. Is there space for MDCT (spectral imaging, iodine map)?
J. Podgorska; Warsaw/PL

Learning Objectives:
1. To learn about basic principles of spectral imaging, including data post-processing.
2. To appreciate the strengths and limitations of spectral imaging in the abdomen.
3. To learn about advantages and possible limitations of spectral imaging in the assessment of inflammation and fibrosis in Crohn’s disease.

A-006 09:21
C. Will MRI (DWI and perfusion) solve the problem?
S.A. Taylor; London/UK

Learning Objectives:
1. To understand basic principles of DWI applied to Crohn’s disease.
2. To learn about MR-perfusion protocols and data analysis.
3. To learn about advantages and possible limitations of MRI in the assessment of inflammation and fibrosis in Crohn’s disease.

09:44
Panel discussion: How do I approach a case in my routine clinical practice?

08:30 - 10:00  Room C

Chest

RC 104
Pneumonia

A-007 08:30
Chairman’s introduction
I.E. Tyurin; Moscow/RU

Session Objectives:
1. To review the role of imaging in infectious lung diseases.
2. To become confident in recognising typical patterns.

A-008 08:35
A. Community-acquired pneumonia
I. Hartmann; Rotterdam/NL

Learning Objectives:
1. To appreciate the role of imaging in the management of community-acquired pneumonia.
2. To consolidate knowledge of how to discriminate from noninfectious diseases.

A-009 08:58
B. Tuberculosis
E. Castañer; Sabadell/ES

Learning Objectives:
1. To appreciate typical and atypical tuberculosis manifestations on imaging.
2. To differentiate between acute and chronic tuberculosis infection.

A-010 09:21
C. Fungal pneumonia in immunocompromised hosts
C.P. Heussel; Heidelberg/DE

Learning Objectives:
1. To learn the patterns of fungal lung infection depending on the type of immune depression.
2. To become familiar with CT signs suggesting angioinvasive fungal infection.

09:44
Panel discussion: What is the role of radiologists in the diagnosis and management of lung infections?

08:30 - 10:00  Room Z

ESR Working Group on Ultrasound

WG 1
Ultrasound of the lung parenchyma: a diagnostic tool for the paediatric radiologist or for the clinician?

Moderator:
C. Owens; London/UK

A-011 08:30
How I perform and interpret lung parenchymal ultrasound
M. Riccabona; Graz/AT

Learning Objectives:
1. To define technical requirements and main protocols for use in lung ultrasound.
2. To describe normal and abnormal findings in childhood.
3. To understand artefacts and limitations in lung ultrasound.

09:44
Panel discussion: How do I approach a case in my routine clinical practice?
A-012 08:55
How does lung parenchymal ultrasound change the clinical management of the sick child: the paediatric radiologists' perspective
P. Tomà; Rome/IT

Learning Objectives:
1. To discuss the appropriate use of US, x-ray, CT and MRI in the management of children presenting with thoracic diseases.
2. To define if and how paediatric radiologists should be trained in chest US.

A-013 09:20
How does lung parenchymal ultrasound change the clinical management of the sick child: the clinicians' perspective
L. Cattarossi; Udine/IT

Learning Objectives:
1. To illustrate the role of bedside lung parenchymal US in comparison with x-ray and CT in management of sick children.
2. To define and discuss the paediatricians perspective.

A-014 08:30
Chairman's introduction
K. Rosendahl; Bergen/NO

Session Objectives:
1. To become familiar with current indications for bone age assessment.
2. To learn about the methods' precision and accuracy.
3. To appreciate the caveats in using bone maturation to determine chronological age.

A-015 08:35
Bone age assessment: indications and methods
F. Dedouit, P. Baumann, T. Uldin, S. Grabherr; Lausanne/CH

Learning Objectives:
1. To learn about current medical indications for bone-age assessment.
2. To become familiar with the different methods.
3. To understand the differences between the different methods.

A-016 08:50
Precision and accuracy of an automated radiographic method
H.H. Thodberg; Holte/DK

Learning Objectives:
1. To learn about an automated radiographic method.
2. To understand the difference between the method's precision and its accuracy.
3. To acknowledge the need for different reference standards by ethnicity.

A-017 09:10
Precision and accuracy of MRI
S. Diaz; Stockholm/SE

Learning Objectives:
1. To learn about MRI in the assessment of bone age.
2. To become familiar with the method's precision and accuracy.
3. To appreciate potential pitfalls.

A-018 09:30
Ethical and legal aspects of using bone age to determine age
K. Chaumoitre; Marseille/FR

Learning Objectives:
1. To understand the difference between bone age as „a marker of disease”, and „a substitute for age”.
2. To become familiar with ethical aspects.
3. To appreciate legal aspects.

Panel discussion: Should bone age be used to estimate chronological age - alone or in combination with additional methods?

08:30 - 10:00  Room N

Head and Neck

RC 108
Head and neck imaging: don't sell your ultrasound yet!
Moderator:
D.W. Tshering Vogel; Berne/CH

A-019 08:30
A. Salivary gland imaging with ultrasound
P. Golofit; Szczecin/PL

Learning Objectives:
1. To get acquainted with normal and abnormal findings.
2. To understand the patterns of nodal involvement.
3. To learn about technique of fine-needle aspiration.

A-020 09:00
B. Masses of the soft parts of the neck
P.K. Srivastava; Lucknow/IN

Learning Objectives:
1. To become familiar with cervical ultrasound anatomy.
2. To learn about benign neck masses.

A-021 09:30
C. Lymph nodes: differential diagnosis and fine-needle aspiration
R. Maroldi; Brescia/IT

Learning Objectives:
1. To get acquainted with normal and abnormal findings.
2. To understand the patterns of nodal involvement.
3. To learn about technique of fine-needle aspiration.

08:30 - 10:00  Room E1

Professional Challenges Session

PC 1
Will emerging technology replace the radiologist?

A-022 08:30
Chairman's introduction
L. Donoso; Barcelona/ES

Session Objectives:
1. To become familiar with the emerging technologies in the imaging field.
2. To learn about the new concepts behind the computerised image analysis and diagnosis.
3. To understand the potential benefits and threats related to its implementation.

A-023 08:35
Computer-aided and computer-determined diagnosis
K.J. Dreyer; Boston, MA/US

Learning Objectives:
1. To learn about the different tools related with „computer assisted” diagnosis.
2. To understand the challenges in management and radiologist practice of introducing these technologies.
3. To become familiar with „real-life” implementations.
A-024 08:50
Liquid biopsy: a new kid on the block
M. Ignatiadis; Brussels/BE

Learning Objectives:
1. To understand the concept of liquid biopsy.
2. To learn about the advantages of liquid biopsy in the diagnostic process.
3. To understand the impact that these techniques will have on clinical practice.

A-025 09:05
Novelties in molecular imaging
K. Riklund; Umea/SE

Learning Objectives:
1. To understand the role of hybrid imaging in the current clinical practice.
2. To become familiar with the new hybrid imaging applications in relationship to disease presentations.
3. To learn about quantification in hybrid imaging: its benefits and limitations.

A-026 09:20
Deep learning and biomarkers: the engineer’s view
A. Alberich-Bayarri; Valencia/ES

Learning Objectives:
1. To learn about the specific engineering challenges of developing new quantification methods.
2. To become familiar with the process of adapting the use of biomarkers in the clinical setting.
3. To understand the impact of deep learning on these diagnostic tools.

09:38
Panel discussion: Should we start to worry?

08:30 - 10:00  Room E2

Neuro

RC 111
Management of acute stroke
Moderator:
P. Vilela; Almada/PT

A-027 08:30
A. A critical appraisal of the current literature
W. van Zwam; Maastricht/NL

Learning Objectives:
1. To understand the strengths and shortcomings of the relevant multicentre trials assessing the role of endovascular treatment in patients with acute ischaemic stroke.
2. To understand the outcomes of these trials, the context in which they were achieved and how they can be ensured in a different environment.
3. To appreciate potential differences in management of patients with anterior vs posterior circulation strokes.

A-028 09:00
B. Which techniques can we use to reopen an occluded cerebral blood vessel?
T. van der Zijden; Edegem/BE

Learning Objectives:
1. To understand the principles underlying endovascular clot aspiration.
2. To become familiar with the different materials available for mechanical clot retrieval.
3. To understand the circumstances in which stenting of an intracranial blood vessel is needed.

A-029 09:30
C. Endovascular stroke treatment: ethical and economical concerns
K.-O. Løvblad; Geneva/CH

Learning Objectives:
1. To appreciate the structure that is necessary to organise interventional stroke treatment for a large population.
2. To understand the cost implications and their mitigation.
3. To become familiar with the associated ethical concerns (such as informed consent) and the different ways of addressing them.

08:30 - 10:00  Room E1

E3 - Rising Stars Programme: Basic Session

BS 1
Neuroradiology
Moderator:
E.T. Tali; Ankara/TR

A-030 08:30
White matter disorders
A. Rovira-Cañellas; Barcelona/ES

Learning Objectives:
1. To have a basic understanding of classification of white matter disorders.
2. To identify and describe the imaging features of noninfectious, noninflammatory disorders.
3. To identify and describe the imaging features of brain infectious-inflammatory disorders.

A-031 09:00
Brain tumours
J. Walecki; Warsaw/PL

Learning Objectives:
1. To identify and describe the imaging appearance of malignant tumours.
2. To identify and describe the imaging features of benign tumours.
3. To have a basic knowledge of postsurgical evaluation of brain.

A-032 09:30
Stroke
E.T. Tali; Ankara/TR

Learning Objectives:
1. To learn about typical imaging features of haemorrhagic stroke.
2. To discuss current imaging techniques for evaluation of ischaemic stroke.
3. To have a basic knowledge of neuroradiological interventions - revascularisation in stroke.

08:30 - 10:00  Room F2

E3 - ECR Master Class (Oncologic Imaging)

E3 126a
Oncologic imaging in the age of precision medicine
Moderator:
H. Hricak; New York, NY/US

A-033 08:30
A. Precision medicine
G. Frija; Paris/FR

Learning Objectives:
1. To understand the meaning of precision medicine.
2. To document the role of radiologists in precision medicine.
3. To understand how precision imaging will have an influence on the practice of radiology.
A-034 08:55
B. Radiomics: the role of imaging in precision medicine
R. Kikinis; Boston, MA/US

**Learning Objectives:**
1. To review how radiologists can contribute to radiomics investigation.
2. To explain state-of-the-art of radiomics, from science to practise.
3. To learn about the idea of radiomics.

A-035 09:20
C. Precision medicine and imaging-guided interventions
F.E. Boas, S.B. Solomon; New York, NY/US

**Learning Objectives:**
1. To explain what is the present and the future of imaging-guided interventions.
2. To learn about current concepts for precise imaging guidance during IR procedures.
3. To understand the practical implementation of such tools.

09:45
Panel discussion: Precision medicine in oncology: what can imaging provide?

08:30 - 10:00  Room D

Musculoskeletal

**RC 110**
The elbow: a comprehensive approach

A-036 08:30
Chairman’s introduction
A. Alcalá-Galiano; Madrid/ES

**Session Objectives:**
1. To understand that assessing this joint requires a multimodality approach with careful attention to technique, imaging protocol, choice of coils and sequences.
2. To learn about the pivotal role of the radiologist in evaluating elbow imaging to provide relevant information to the arthroscopist.

A-037 08:35
A. The tendons: anatomy, pathology and intervention
P. Peetrons; Brussels/BE

**Learning Objectives:**
1. To become familiar with the normal imaging anatomy and pathological appearances of the elbow tendons.
2. To learn about interventional radiological techniques for treating elbow tendon disease.

A-038 08:58
B. Ligament injury and instability: what to look for and what to say
M.C. De Jonge; Amsterdam/NL

**Learning Objectives:**
1. To become familiar with patterns of abnormality seen in elbow instability.
2. To learn about the imaging findings of elbow instability.

A-039 09:21
C. Nerve entrapment at the elbow
L.M. Sconfienza; San Donato Milanese/IT

**Learning Objectives:**
1. To understand the radiological anatomy of the peripheral nerves at the elbow.
2. To learn about the imaging findings of nerve entrapments at the elbow.

09:44
Panel discussion: US, CT, conventional MR, high field MR: making the right choice

08:30 - 10:00  Room G

Physics in Medical Imaging

**RC 113**
Single-dual-multi-energy CT

A-040 08:30
Chairman’s introduction
J. Kämäräinen; Iraklion/GR

**Session Objectives:**
1. To learn about the basics of dual-energy CT (DECT).
2. To understand today’s photon counting detector technology.
3. To learn how DECT is applied in clinical practice.

A-041 08:35
A. Basics of diagnostic dual-energy CT
T. Klinder; Hamburg/DE

**Learning Objectives:**
1. To learn about the underlying physics and today’s technology.
2. To see potential advantages compared to single-energy CT.
3. To appreciate the rationale behind clinical applications.

A-042 08:58
B. Photon counting detector technology for diagnostic CT
I. Blevis; Haifa/IL

**Learning Objectives:**
1. To learn about the underlying physics and technological solutions.
2. To understand the potential advantages compared to dual-energy CT.
3. To appreciate how mature today’s photon counting technology is.

A-043 09:21
C. Do we really need multi-energy CT?
S.T. Schindera; Aarau/CH

**Learning Objectives:**
1. To learn about medical applications and potential benefits.
2. To see which single energy applications should be replaced by dual-energy applications, and why.
3. To find out what additional multi-energy CT applications would be nice to have.

09:44
Panel discussion: How many ‘energies’ do we need in CT?

08:30 - 10:00  Room K

Radiographers

**RC 114**
MRI technology and techniques

Moderators:
V. Syrgiamiotis; Athens/GR
A. Mizzi; Msida/MT

A-044 08:30
A. Recent developments in structural and quantitative spinal cord imaging at 3T
M.C. Yiannakas; London/UK

**Learning Objectives:**
1. To understand the technical challenges associated with spinal cord imaging.
2. To learn about new structural and quantitative spinal cord acquisition and analysis protocols.
3. To discuss some of the clinical applications in neurological disease.
A-045 08:55
B. RF-related heating in clinical MRI
T. Owman; Lund/SE

Learning Objectives:
1. To learn about b1-related problems in clinical MRI.
2. To understand RF-related heating and current efforts to improve the situation.
3. To discuss how to avoid RF-burns in clinical practice.

A-046 09:20
C. The benefits of diffusion imaging
J. Castillo; Msida/MT

Learning Objectives:
1. To appreciate the role of diffusion imaging in oncology imaging.
2. To discuss the responsibility of radiographers in the application of DWI.
3. To discuss the clinical application of diffusion imaging in MR enterography and paediatric imaging.

09:45
Discussion and questions: How is patient care affected by MRI technology and techniques?

08:30 - 10:00  Room M 1

Vascular

RC 115
Peripheral vascular malformations: light after darkness

A-047 08:30
Chairman's introduction
J.A. Reekers; Amsterdam/NL

Session Objectives:
1. To review classification and description.
2. To identify the role of imaging modalities.
3. To understand the role of interventional radiologist in management and treatment.

A-048 08:35
A. The diagnostic assessment
M. Köcher; Olomouc/CZ

Learning Objectives:
1. To learn about classification and terminology.
2. To understand the role of US, CT and MRA in diagnostic assessment.
3. To learn the optimal imaging algorithm for diagnosis and follow-up.

A-049 08:58
B. Percutaneous or endovascular treatment: when and how?
B. Peynircioglu; Ankara/TR

Learning Objectives:
1. To recognise the indications and the real need for treatment.
2. To learn about technical approach - how to plan the intervention?
3. To understand possible limitations and the final result prediction.

A-050 09:21
C. Paediatric vascular malformations: diagnosis and treatment
S. Stuart, D. Roebuck; London/UK

Learning Objectives:
1. To understand the specifics of vascular malformations in children.
2. To recognise when to observe and when to intervene?
3. To learn about interventional techniques used and results of treatment.

09:44
Panel discussion: How could we improve diagnosis and optimise the results of our interventions?

08:30 - 10:00  Room M 3

Interventional Radiology

RC 109
Musculoskeletal interventions: what’s new?
Moderator:
A. Gangi; Strasbourg/FR

A-051 08:30
A. Musculoskeletal ablation and embolisation
A. Basile; Catania/IT

Learning Objectives:
1. To appreciate the indications for ablations and embolisation.
2. To learn about different techniques and combination of them.
3. To discuss the results and literature data of interventional radiology procedures.

A-052 09:00
B. Vertebral augmentation and discectomy techniques: can we challenge surgery?
D. Filippiadis; Athens/GR

Learning Objectives:
1. To appreciate the rationale for the using of interventional radiology procedures.
2. To learn about different techniques and treatment strategy.
3. To discuss results and literature data in comparison with other treatments.

A-053 09:30
C. Bone biopsy and pain treatment using cone-beam CT (CBCT)
L. Tselikas; Villejuif/FR

Learning Objectives:
1. To appreciate the high imaging quality and guidance accuracy using CBCT for biopsy and pain treatment.
2. To learn about the advantages of CBCT guided interventions, reconstruction algorithms, image enhancement and dose reduction.
3. To discuss about techniques, limitations of CBCT and future applications.

08:30 - 10:00  Room M 4

E³ - ECR Academies: Tips and Tricks in Liver, Bile Ducts and Pancreas Imaging

E³ 118
Liver, bile ducts and pancreas: improving your technique with advanced tools

A-054 08:30
Chairman's introduction
Y. Menu; Paris/FR

A-055 08:35
A. Liver specific contrast: how, why, when?
E. Neri; Pisa/IT

Learning Objectives:
1. To learn about physiology of liver specific contrast media physiology, and to be able to optimise liver MRI protocols.
2. To understand why they are useful for the detection and characterisation of liver masses.
3. To learn and understand the limitations.
A-056 09:03
B. Diffusion-weighted imaging (DWI): how, why, when?
D.-M. Koh; Sutton/UK

Learning Objectives:
1. To become familiar with the different acquisition techniques and to be able to adapt to a specific machine, including field strength.
2. To understand the role of DWI in the detection and characterisation of hepatobiliary and pancreatic diseases.
3. To learn about the potential technical future developments.

A-057 09:31
C. Advances in hybrid imaging: new tracers and MR/PET
E.J. Rummeny; Munich/DE

Learning Objectives:
1. To understand why alternative tracers to FDG may be useful in exploring liver and pancreatic diseases.
2. To learn about the role of PET in the follow-up of tumours and quantification of tumour response.
3. To become familiar with the specific advantages of MR/PET over PET/CT in abdominal diseases.

08:30 - 10:00  Room M 5
E³ - ECR Master Class (Genitourinary)

E³ 126b
Functional MRI of the kidneys: ready for prime time?
Moderator:
H.C. Thoeny; Berne/CH

A-058 08:30
A. Diffusion-weighted MRI
N. Grenier; Bordeaux/FR

Learning Objectives:
1. To learn about the technical issues of DWI.
2. To understand the physiological determinants of diffusion measurements.
3. To assess the role of DWI in clinical practice.

A-059 09:00
B. Perfusion MRI
M. Claudon; Vandoeuvre-les-Nancy/FR

Learning Objectives:
1. To learn about the clinical indications for kidney perfusion imaging.
2. To become familiar with perfusion protocols for kidney perfusion imaging.
3. To learn about difficulties in kidney perfusion imaging.

A-060 09:30
C. BOLD and ASL
A. Boss; Zurich/CH

Learning Objectives:
1. To understand the physiological and technical basis of blood oxygen level-dependent (BOLD) imaging of the kidneys.
2. To learn typical findings of BOLD-MRI in patients with kidney disease.
3. To review the physics and technique of arterial spin labelling (ASL) perfusion measurements of the kidneys.
4. To see typical findings of ASL measurements in patients with kidney diseases.

10:30 - 12:00  Room A
E³ - ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists

E³ 221
MR imaging in sports medicine I

A-061 10:30
A. Muscle injury in sports
M.G. Mack; Munich/DE

Learning Objectives:
1. To understand the anatomy of the most common injured muscles.
2. To learn the evaluation of muscle injuries and the impact regarding recover.

A-062 11:15
B. Knee trauma
M. Shahabpour, M.O. De Maeseneer; Brussels/BE

Learning Objectives:
1. To learn the anatomy of the most common injured structures.
2. To recognise typical combinations of injuries.

10:30 - 12:00  Room F1
E³ - Rising Stars Programme: Basic Session

BS 2
Lungs
Moderator:
T. Franquet; Barcelona/ES

A-063 10:30
Congenital anomalies
J. Ley-Zaporozhan; Munich/DE

Learning Objectives:
1. To discuss current imaging techniques for evaluation of normal lung anatomy.
2. To learn and understand possible anatomical variants.
3. To describe the typical imaging features of the most common anatomical anomalies.

A-064 11:00
Infection
T. Franquet; Barcelona/ES

Learning Objectives:
1. To recognise the most common imaging patterns of lung infections.
2. To understand the temporal relationship between the immune status and diverse lung infections.
3. To have a basic knowledge of CT-path correlation of some pulmonary infectious diseases.

A-065 11:30
Tumours
I. Hartmann; Rotterdam/NL

Learning Objectives:
1. To describe the typical imaging appearance of bronchogenic carcinoma.
2. To describe the typical imaging features of pulmonary metastases.
3. To describe the manifestations and the role of imaging in pulmonary lymphoma.
<table>
<thead>
<tr>
<th>Time</th>
<th>Room</th>
<th>Session Title</th>
<th>Details</th>
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<tbody>
<tr>
<td>10:30 - 12:00</td>
<td>Room M 4</td>
<td>E³ - ECR Academies: Tips and Tricks in Liver, Bile Ducts and Pancreas Imaging</td>
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<td><strong>E³ 218</strong> Benign liver tumours: daily questions</td>
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<td><strong>A-066 10:30</strong> Chairman’s introduction</td>
<td>S.M. Ertürk; Istanbul/TR</td>
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<td><strong>A-067 10:35</strong> A. Cystic lesions: always biliary cysts?</td>
<td>O. Benjaminov; Petach Tikva/IL</td>
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<td><strong>Learning Objectives:</strong></td>
<td>1. To be able to list the different conditions that may present as cystic liver masses.</td>
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<td>2. To understand the diagnostic multimodality strategy.</td>
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<td>3. To become familiar with assessment challenges.</td>
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<td><strong>A-068 11:03</strong> B. Solid benign lesions: how to solve the conundrum?</td>
<td>F. Caseiro-Alves; Coimbra/PT</td>
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<td><strong>Learning Objectives:</strong></td>
<td>1. To become familiar with the recent classification of liver cell adenoma and its justification.</td>
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<td>2. To learn about the typical and atypical appearance of focal nodular hyperplasia.</td>
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<td>3. To understand the treatment strategy and the modalities of follow-up when appropriate.</td>
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<td><strong>A-069 11:31</strong> C. From images to strategy: tough cases of benign liver tumours</td>
<td>M. Nadrljanski; Belgrade/RS</td>
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<td><strong>Learning Objectives:</strong></td>
<td>1. To be able to define a diagnostic strategy when facing an unknown case of solid liver lesion, likely to be benign.</td>
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<td>2. To become familiar with the unusual appearance of common lesions like focal nodular hyperplasia or haemangioma.</td>
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<td>12:30 - 13:30</td>
<td>Room C</td>
<td>E³ - The Beauty of Basic Knowledge: Chest Imaging</td>
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<td><strong>E³ 25A</strong> Useful signs in chest radiology</td>
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<td><strong>Moderator:</strong> N. Howarth; Chêne-Bougeries/CH</td>
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<td><strong>A-071 12:30</strong> A. Lung parenchyma</td>
<td>G.R. Ferretti; Grenoble/FR</td>
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<td><strong>Learning Objectives:</strong></td>
<td>1. To review the most useful signs on the chest x-ray.</td>
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<td>2. To learn how to interpret the chest x-ray more accurately.</td>
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<td>3. To know the appropriate indications of the chest x-ray.</td>
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<td>12:15 - 12:45</td>
<td>Room B</td>
<td>Headline Session</td>
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<td><strong>Guest Lecture</strong></td>
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<td><strong>Breaking News from Latin America</strong></td>
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<td><strong>Presiding:</strong> P.M. Parizel; Antwerp/BE</td>
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<td><strong>A-070 12:15</strong> Imaging findings in Zika virus infection</td>
<td>M. Vasco Aragao; Recife/BR</td>
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<td><strong>Learning Objective:</strong></td>
<td>1. To describe the neuroimaging findings of the Zika virus (ZIKV) syndrome, the new emerging epidemic that is writing a new chapter in the history of medicine.</td>
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<td><strong>E³ 24A</strong> Degenerative disorders</td>
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<td><strong>Moderator:</strong> V.N. Cassar-Pullicino; Oswestry/UK</td>
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<td><strong>A-073 12:30</strong> Degenerative disorders</td>
<td>A. Cotten; Lille/FR</td>
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<td><strong>Learning Objectives:</strong></td>
<td>1. To appreciate the musculoskeletal imaging manifestations of degenerative disorders.</td>
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<td>2. To understand the underlying pathomechanisms involved in these imaging abnormalities.</td>
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<td>3. To appreciate the strengths and weaknesses of imaging modalities in assessing these disorders.</td>
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<td>14:00 - 15:30</td>
<td>Room F1</td>
<td>E³ - Rising Stars Programme: Basic Session</td>
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<td><strong>BS 3</strong> Gastrointestinal diseases</td>
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<td><strong>Moderator:</strong> N. Papanikolaou; Lisbon/PT</td>
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<td><strong>A-074 14:00</strong> Oesophagus</td>
<td>F.-T. Fork; Malmö/SE</td>
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<td><strong>Learning Objectives:</strong></td>
<td>1. To discuss current imaging techniques for evaluation of normal anatomy.</td>
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<td>2. To describe the imaging features in most common benign pathologies.</td>
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<td>3. To review and illustrate the imaging features of malignant pathologies.</td>
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</table>
A-075 14:22
Stomach
M. Laniado; Dresden/DE

**Learning Objectives:**
1. To discuss current imaging techniques for evaluation of normal anatomy.
2. To describe the imaging features in most common benign pathologies.
3. To review and illustrate the imaging features of malignant pathologies.

A-076 14:45
Small bowel
N. Papanikolaou; Lisbon/PT

**Learning Objectives:**
1. To discuss current imaging techniques for evaluation of normal anatomy.
2. To describe the imaging features in most common benign pathologies.
3. To review and illustrate the imaging features of malignant pathologies.

A-077 15:07
Colon
R.G.H. Beets-Tan; Amsterdam/NL

**Learning Objectives:**
1. To discuss current imaging techniques for evaluation of normal anatomy.
2. To describe the imaging features in most common benign pathologies.
3. To review and illustrate the imaging features of malignant pathologies.

A-078 14:00
Chairman's introduction: Innovative approaches to undergraduate teaching, impact on student learning
B.J. Op de Beeck; Antwerp/BE

**Session Objectives:**
1. To learn about innovation of didactic and learning strategies in radiology.
2. To evaluate the impact of technology for developing and transforming undergraduates teaching.
3. To analyse student organisation experiences.

A-079 14:05
How to keep students engaged
C. Nyhsen; Sunderland/UK

**Learning Objectives:**
1. To learn about tips and tricks to connect with students.
2. To analyse the learning outcomes of students and specify what they expect as a result of a learning activity.
3. To define the methods to achieve excellence in undergraduate training and usefulness of teaching evidence-based radiology.

A-080 14:23
Excellence in undergraduate teaching
B. Ertl-Wagner; Munich/DE

**Learning Objectives:**
1. To learn about the usefulness of curricula.
2. To discuss how to introduce to the students during the undergraduates teaching programmes radiology as an attractive specialisation.
3. To analyse the importance of mentoring undergraduates.

A-081 14:41
Teaching with technology: a challenging experience
P. Pokieser; Vienna/AT

**Learning Objectives:**
1. To emphasise on how to communicate with the students.
2. To evaluate new challenges in education, informatics tools available to encourage education.
3. To analyse the advantages of interactive sessions in undergraduate’s education.

A-082 14:59
Evidence-based radiology for diagnostic imaging: do we need to teach the undergraduates?
R. Iezzi; Rome/IT

**Learning Objectives:**
1. To analyse the key concepts of teaching evidence-based radiology.
2. To learn about new approaches in teaching and learning radiology.
3. To discuss the importance of teaching evidence-based radiology among students.

15:17
Panel discussion: How do new approaches contribute to excellence in undergraduate teaching?

14:00 - 15:30  Room M 1

Professional Challenges Session

PC 3
Excellence and innovation in undergraduate teaching of radiology

A-079 14:00
Chairman's introduction: Innovative approaches to undergraduate teaching, impact on student learning
B.J. Op de Beeck; Antwerp/BE

**Session Objectives:**
1. To learn about innovation of didactic and learning strategies in radiology.
2. To evaluate the impact of technology for developing and transforming undergraduates teaching.
3. To analyse student organisation experiences.

14:00 - 15:30  Room M 4

E³ - ECR Academies: Tips and Tricks in Liver, Bile Ducts and Pancreas Imaging

E³ 318
Chronic liver disease: guidelines for the radiologist

A-083 14:00
Chairman's introduction
B.J. Op de Beeck; Antwerp/BE

A-084 14:05
A. Measuring fat and iron with MRI: how accurate?
M.M. França; Porto/PT

**Learning Objectives:**
1. To become familiar with the different acquisition techniques allowing measurement of fat and iron with MRI.
2. To understand the correspondence between MRI evaluation and histological scores.
3. To learn about the limitations of the method.

A-085 14:33
B. Can we reliably identify/quantify liver fibrosis and cirrhosis?
V. Vilgrain; Clichy/FR

**Learning Objectives:**
1. To understand the basic principles of fibrosis evaluation (US and MRI), how these methods could be implemented in daily practice, and how to make a radiological report.
2. To learn about the correlation between imaging tools and other methods and to understand the clinical strategy.
3. To become familiar with the necessity for non-invasive detection and follow-up of chronic liver disease.

A-086 15:01
C. The small liver nodule and chronic liver disease
G. Brancatelli; Palermo/IT

**Learning Objectives:**
1. To become familiar with the problem of characterisation of liver nodule on cirrhosis/fibrosis.
2. To understand the imaging strategy.
3. To learn about the international guidelines presenting diagnostic and follow-up strategy.
16:00 - 17:30  Room B

Abdominal Viscera

RC 401
The spleen: the forgotten organ

A-087  16:00
Chairman's introduction
L.H. Ros Mendoza, Zaragoza/ES

A-088  16:05
A. Acute and chronic splenic disease
G. Zamboni, Verona/IT

Learning Objectives:
1. To describe the most common causes of acute and chronic splenic disease, excluding malignant lesions.
2. To define imaging protocols, including functional and metabolic techniques, to apply for the detection and characterisation.

A-089  16:28
B. The incidental splenic lesion
M. Laniado, Dresden/DE

Learning Objectives:
1. To describe the most common causes of splenic incidentaloma and their imaging appearance.
2. To define imaging protocols, including functional and metabolic techniques, for the differential diagnosis.
3. To propose an algorithm for the management of incidental splenic lesions.

A-090  16:51
C. Malignant lesions
S. Gourtsoyianni, London/UK

Learning Objectives:
1. To describe the clinical presentation and imaging findings for focal and diffuse neoplastic malignant lesions.
2. To discuss the indication of splenic lesion biopsy and its diagnostic contribution.

17:14
Panel discussion: How to manage incidental findings in clinical routine practice

16:00 - 17:30  Room C

Chest

RC 404
Pulmonary embolism: persistent controversies

A-091  16:00
Chairman's introduction
M. Rémy-Jardin, Lille/FR

Session Objectives:
1. To review the current controversies regarding PE diagnosis.
2. To appreciate the need for defining a standardised management.

A-092  16:05
A. Subsegmental PE, incidental PE: diagnosis and management
C.M. Schaefer-Prokop, Amersfoort/NL

Learning Objectives:
1. To learn about the characteristics of subsegmental and incidental PE.
2. To appreciate an appropriate management in both situations.

16:00 - 17:30  Room Z

ESR Working Group on Ultrasound

WG 2
Image fusion

A-093  16:28
B. CT not available, contraindicated or inconclusive: what to do?
E.J.R. van Beek, Edinburgh/UK

Learning Objectives:
1. To review the role of US and V/Q scan.
2. To learn about the current performance of MR.

A-094  16:51
C. Can we predict outcome from imaging?
B. Ghaye, Brussels/BE

Learning Objectives:
1. To learn how clinical findings influence the selection of the imaging strategy.
2. To learn how imaging may predict the outcome of the patient.
3. To learn about the follow-up.

17:14
Panel discussion: How to optimise patient management?
Postgraduate Educational Programme

A-099 16:35
Image fusion of the liver
G.H. Mostbeck; Vienna/AT

Learning Objectives:
1. To learn about the advanced liver imaging fusion technique.
2. To learn how to optimise scanning protocols by using the image fusion tool.
3. To learn about common benign and malignant lesions and differential diagnosis by using image fusion.
4. To understand how to use fusion imaging of US, CT and MRI for treatment of liver tumour.

A-100 16:55
Image fusion of the prostate
D.A. Clevert; Munich/DE

Learning Objectives:
1. To explain the PIRADS system in prostate imaging.
2. To become familiar with the technical requirements for performing image fusion of the prostate.
3. To understand how to detect and biopsy guided suspicious MR-lesions using the ultrasound image fusion technique.
4. To understand the potential pitfalls and discuss the evidence for the use of these technologies in routine clinical practice.

17:15 Panel discussion

Paediatric

RC 412
Chest imaging in paediatrics
Moderator:
B. Ahuja; Agra/IN

A-101 16:00
A. Congenital anomalies of the chest
M. Haliloglu; Ankara/TR

Learning Objectives:
1. To discuss best imaging techniques when evaluating congenital chest anomalies.
2. To have an overview of antenatal and postnatal appearances of common congenital chest anomalies.
3. To understand the clinical significance and management of congenital lung and thoracic wall anomalies.

A-102 16:30
B. Lung infection and its complications
M.L. Lobo; Lisbon/PT

Learning Objectives:
1. To understand the justification for imaging children with lower respiratory tract infection.
2. To provide tips for accurate diagnosis and to understand differential diagnosis.
3. To become familiar with complications and potential underlying conditions.

A-103 17:00
C. Imaging interstitial lung disease in children: update 2017
E. Alexopoulou1, A. Pastroma1, G. Papaioannou1, M. Raissaki2; 1Athens/GR, 2Iraklion/GR

Learning Objectives:
1. To understand optimised protocols.
2. To learn about updated nomenclature of interstitial lung diseases in children.
3. To discuss a systematic approach for the diagnosis of common entities diffusely affecting the paediatric lung.

16:00 - 17:30 Room N

RC 408
Pathways for tumour spread
Moderator:
J. Huyskens; Antwerp/BE

A-104 16:00
A. Pathways for oral cavity and oropharynx tumour spread
A. Borges; Lisbon/PT

Learning Objectives:
1. To become familiar with the anatomy of the oral cavity and oropharynx.
2. To learn which imaging technique to use.
3. To understand the typical local and remote spread of oral cavity and oropharynx tumours.

A-105 16:30
B. Pathways for nasopharyngeal tumour spread including perineural spread
V. Chong; Singapore/SG

Learning Objectives:
1. To become familiar with the anatomy of the nasopharynx.
2. To learn which imaging technique to use.
3. To understand the typical local and remote spread of nasopharyngeal tumours, including perineural spread.

A-106 17:00
C. Pathway for laryngeal and hypopharyngeal tumour spread
N. Chidambaranathan; Chennai/IN

Learning Objectives:
1. To become familiar with the anatomy of the larynx and hypopharynx.
2. To learn which imaging technique to use.
3. To understand the typical local and remote spread of laryngeal and hypopharyngeal tumours.

16:00 - 17:30 Room L 8

Joint Session of the ESR and UEMS

ESR and UEMS: a strong professional partnership

A-107/A-108 16:00
Chairmen’s introduction
L. Bonomo; Rome/IT P. Ricci; Rome/IT

Session Objectives:
1. To describe the role of the UEMS within the EU.
2. To understand the difference between ESR and UEMS.
3. To understand the importance of cooperation between ESR and UEMS.

A-109 16:05
Structure of the UEMS and position of the UEMS within the EU
B. Maillet; Brussels/BE

Learning Objectives:
1. To understand the structure of the UEMS and the position of the UEMS radiology section within the UEMS.
2. To understand the UEMS political involvement in EU affairs.
3. To understand the influence of EU directives on national legislation and daily practice.

A-110 16:25
Harmonising radiology training in Europe (part I)
P. Ricci; Rome/IT

Learning Objectives:
1. To become familiar with Chapter 6 and the current competence-based European Training Curricula.
2. To learn about the Council for European Specialist Medical Assessment (CESMA).
**A-111 16:35**
Harmonising radiology training in Europe (part II)
L. Oleaga Zufiría; Barcelona/ES

*Learning Objectives:*
1. To learn about the different levels of curricula within radiology on a European level.
2. To understand the importance of endorsement of the curriculum by the UEMS Council (i.e. the importance to secure and defend the practice of radiology against hostile take-over by other specialties).
3. To know about the value of the European Diploma in Radiology (EDIR).

**A-112 16:45**
Recognition of qualifications (part I)
Z. Fras; Ljubljana/SI

*Learning Objective:*
1. To know about the EU Directive on Professional Qualifications Recognition.

**A-113 16:55**
Recognition of qualifications (part II)
E.J. Adam; London/UK

*Learning Objectives:*
1. To know how ESR is involved in the political lobby at the EU using the EU Directive on Professional Qualifications Recognition as an example.
2. To understand the importance of cooperation between ESR and UEMS using the EU Directive on Electromagnetic fields as an example.

**A-114 17:05**
Continuing professional development (CPD) (part I)
M. Adriaensen; Heerlen/NL

*Learning Objectives:*
1. To learn about the European Accreditation Council for Continuing Medical Education (EACCME®).
2. To understand why an international independent, dual reviewing process is important.
3. To know about the existence of European CME Credit (ECMEC®).

**A-115 17:15**
Continuing professional development (CPD) (part II)
D. Negru; Iasi/RO

*Learning Objectives:*
1. To learn about the set-up and structure of the Accreditation Council in Imaging (ACI).
2. To understand the importance of cooperation with and recognition by the EACCME®.

**A-116 16:00**
Chairman's introduction
E.A. Morris; New York, NY/US

**A-117 16:05**
Screening with mammography only
R.M. Pijnappel; Utrecht/NL

*Learning Objectives:*
1. To learn about benefits and limitations of mammography screening.
2. To become familiar with common findings, recall rates and assessment outcomes.
3. To appreciate errors.

**A-118 16:30**
B. Screening with mammography and ultrasound
T.H. Helbich; Vienna/AT

*Learning Objectives:*
1. To learn about the added value of US in screening and its indication.
2. To become familiar with the common level of evidence.
3. To appreciate its role in clinical practice.

**A-119 16:55**
C. Screening with tomosynthesis
U. Bick; Berlin/DE

*Learning Objectives:*
1. To learn about the role of tomosynthesis in the screening setting.
2. To become familiar with the different protocols.
3. To appreciate potential advantages of tomosynthesis in screening.

**A-120 16:00**
Chairman's introduction
T.A. Yousry; London/UK

**A-121 16:05**
Unpicking obsessive compulsive disorder (OCD) networks with neuroimaging
E. Joyce; London/UK

*Learning Objectives:*
1. To understand the concept of severe mental illness exemplified by OCD.
2. To demonstrate the impact of neuroimaging - structural and functional MRI and PET - to our understanding of OCD as a neural network disorder.
3. To show how the central role of neuroimaging in functional neurosurgery of OCD and TS.

**A-122 16:25**
Bridging movement and mind: neuroimaging in Tourette-Syndrome
T. Foltynie; London/UK

*Learning Objectives:*
1. To understand the concept of obsessive compulsive disorder (OCD) and Tourette-Syndrome (TS).
2. To show how neuroimaging is furthering our understanding of OCD and TS.
3. To understand the central role of neuroimaging in functional neurosurgery of OCD and TS.

**17:20**
Panel discussion: What is the best modality approach to screen for breast cancer?

**16:00 - 17:30 Room E2**

**Multidisciplinary Session**

**MS 4**

**Neuroimaging and mental health disorders**

**A-120 16:00**
Chairman's introduction
T.A. Yousry; London/UK

*Session Objectives:*
1. To understand the concept of mental illness as illustrated by obsessive compulsive disorder (OCD) and Tourette-Syndrome (TS).
2. To show how neuroimaging is furthering our understanding of OCD and TS.
3. To understand the central role of neuroimaging in functional neurosurgery of OCD and TS.

**A-121 16:05**
Unpicking obsessive compulsive disorder (OCD) networks with neuroimaging
E. Joyce; London/UK

*Learning Objectives:*
1. To understand the concept of severe mental illness exemplified by OCD.
2. To demonstrate the impact of neuroimaging - structural and functional MRI and PET - to our understanding of OCD as a neural network disorder.
3. To show the central role of neuroimaging in enabling us to pinpoint the critical neural target for successful treatment with deep brain stimulation.

*Author Disclosure:*
E. Joyce: Speaker; Boston Scientific

**A-122 16:25**
Bridging movement and mind: neuroimaging in Tourette-Syndrome
T. Foltynie; London/UK

*Learning Objectives:*
1. To understand the importance on neuroimaging in understanding Tourette-Syndrome as a neural network disorder.
2. To introduce the concept of DBS as a treatment for severe medication refractory Tourette-Syndrome and the role of neuroimaging of the DBS electrical field.
3. To show how the clinical efficacy of DBS for Tourette-Syndrome can be related to simulated electrical field on a voxel by voxel basis.
A-123 16:45
Precision neurosurgical targeting in Tourette’s and obsessive compulsive disorder (OCD): critical role of neuroimaging
L. Zrinzo; London/UK
Learning Objectives:
1. To understand the essential differences between diagnostic and stereotactic MR imaging.
2. To introduce the concept of image-guided and image-verified DBS surgery.
3. To provide an overview of the different anatomical targets used for DBS in Tourette syndrome and OCD surgery and describe their radiological correlates.

17:05
Multidisciplinary case presentation and discussion
16:00 - 17:30  Room F1
E3 - Rising Stars Programme: Basic Session

BS 4
Gynaecology and obstetrics
Moderator:
M. Bekiesinska-Figatowska; Warsaw/PL
A-124 16:00
Benign gynaecological pathologies
R.N. Lucas; Lisbon/PT
Learning Objectives:
1. To describe the normal anatomy of the female reproductive organs.
2. To describe the imaging features of uterine leiomyomas.
3. To learn the key features of benign ovarian tumours.

A-125 16:30
Gynaecological malignancies
A.G. Rockall; London/UK
Learning Objectives:
1. To describe the imaging appearance of malignant tumours of myometrium.
2. To review and illustrate the imaging features of cervical cancer.
3. To describe the imaging features of malignant ovarian tumours.

A-126 17:00
Foetal imaging
M. Bekiesinska-Figatowska; Warsaw/PL
Learning Objectives:
1. To discuss current imaging techniques for evaluation of normal anatomy.
2. To have a basic knowledge about the role of ultrasonography in foetal imaging.
3. To have a basic knowledge about foetal magnetic resonance imaging.

A-128 16:04
How molecular imaging and image fusion are shaping oncology
E. de Kerviler; Paris/FR
Learning Objectives:
1. To summarise the main developments in molecular imaging.
2. To highlight the importance of image fusion in the diagnosis and treatment of cancer.
3. To explain how functional imaging is changing oncological practice.

A-129 16:23
Registries, trials and the evidence base
P.L. Pereira; Heilbronn/DE
Learning Objectives:
1. To explain the methods of gathering evidence in practical disciplines.
2. To outline the evidence base for image-guided interventions in oncology.
3. To outline the main current trials and registries in image-guided interventions in oncology.

A-130 16:42
Clinical practice: why it matters and how to do it
A. Adam; London/UK
Learning Objectives:
1. To explain the importance of clinical practice in image-guided interventions in oncology.
2. To describe how interventional radiologists can practice as clinicians rather than technicians.
3. To outline the curriculum being developed for image-guided interventions in oncology.

A-131 17:01
Quality assurance: an essential development
L.M. Kenny; Brisbane/AU
Learning Objectives:
1. To highlight the importance of quality assurance in image-guided interventions in oncology.
2. To explain how quality assurance affects clinical outcomes in cancer care.
3. To summarise the content and practical implications of the framework developed for quality assurance in image-guided interventions in oncology.

17:20
Panel discussion: What will be the future of image-guided interventions in oncology?
16:00 - 17:30  Room D
Musculoskeletal
RC 410
Bone trauma in the axial skeleton: patterns of injury and how I describe them
Moderator:
A. Barile; L’Aquila/IT
A-132 16:00
A. Thoracic and lumbar spine
V.N. Cassar-Pullicino; Oswestry/UK
Learning Objectives:
1. To become familiar with the types of injury seen in the thoracic and lumbar spine.
2. To learn how to describe the injuries in a manner useful to the clinician.

A-133 16:30
B. Pelvis
K. Verstraete; Ghent/BE
Learning Objectives:
1. To become familiar with the types of injury seen in the pelvis.
2. To learn how to describe the injuries in a manner useful to the clinician.
A-134 17:00
C. Acetabulum
A. Kassarjian; Majadahonda/ES

Learning Objectives:
1. To become familiar with the types of injury seen in the acetabulum.
2. To learn how to describe the injuries in a manner useful to the clinician.

PC 4
Professional Challenges Session
Design and implementation of structured reporting

A-135 16:00
Chairman's introduction
W.H. Sommer; Munich/DE

Session Objectives:
1. To get an overview on different initiatives for structured reporting.
2. To understand pros and cons of different forms of structured reporting, including template-based reporting, decision support and modular structured reporting.
3. To appreciate the wide range of possibilities for quality management which become possible with structured reporting.
4. To become familiar how different institutions integrate structured reporting in the clinical workflow.

A-136 16:10
Beyond templates: modular multilingual structured reporting
M. Fatehi; Tehran/IR

Learning Objectives:
1. To get familiar with advantages of modular structured reporting to template-based approach.
2. To know challenges in language independent reporting in radiology.
3. To understand importance of availability of modules for structured description of abnormal findings.
4. To learn about already developed modular structured reporting tools and apps.
5. To understand features of a problem specific flexible structured reporting application to tailor the template to clinical condition of the patient.

A-137 16:30
Introducing quality management for radiology reports
C. Wald; Boston, MA/US

Learning Objectives:
1. To learn about available options for basic quality control of radiology reporting.
2. To understand challenges of current prevailing practice for consumers of radiology reports and risk management.
3. To appreciate the importance of performing systematic report quality control and reporting compliance control.
4. To become familiar with tools for QC as well as structured data generation and presentation, including multimedia reports and dashboard presentation of report content.

A-138 16:50
Structured reporting: two decades of surveys and subcommittees, but what do we wish to achieve?
J.M.L. Boismans; Ghent/BE

Learning Objectives:
1. To learn about the preferences of radiologists and referring physicians concerning text-oriented vs structured reporting.
2. To understand the definition of structured reporting, and the evolution in thinking about the objectives to attain.
3. To become familiar with initiatives to create a framework for structured reporting, including a SWOP analysis.

17:10
Panel discussion: Structured reporting in ten years: large-scale or fairy-tale?
Clinical diagnostic reference levels: from concept to impact in clinical practice
R.W.R. Loose; Nürnberg/DE

Learning Objectives:
1. To understand the different quality requirements to answer specific clinical imaging questions in CT exams of the same body region.
2. To learn about the steps needed for a transition to clinical DRLs.
3. To appreciate the practical impact of clinical reference levels.

ICRP perspective: from methodological region-related DRLs to DRLs based on clinical indications
E. Vaño; Madrid/ES

Learning Objectives:
1. To become familiar with ICRP’s term of ‘DRLs for a defined clinical task’.
2. To learn about methodological requirements for establishing DRLs.
3. To understand the potential uses and limitations of DRLs.

EuroSafe Imaging clinical DRLs: detailed results of the pilot survey and lessons learnt for the survey among the EuroSafe Imaging Stars
P. Vock; Spiegel/CH

Learning Objectives:
1. To present results of the pilot survey.
2. To learn about the different exposure levels needed in important indications.
3. To appreciate complimentary uses of EuroSafe Imaging and national DRLs.

North American DRLs: a view from across the pond
R.L. Morin; Jacksonville, FL/US

Learning Objectives:
1. To present the US approach to quantitative benchmarking in optimisation and the role of DRLs.
2. To understand how the ACR finds consensus about minimal image quality requirements in different clinical indications.
3. To share the ACR experience with DRLs.

A-149 16:30
Chronic pelvic pain
R. Forstner; Salzburg/AT

Learning Objectives:
1. To learn about prevalence and aetiologies of chronic pelvic pain.
2. To become familiar with gynaecologic causes of chronic pelvic pain.
3. To become familiar with common non-gynaecologic causes of chronic pelvic pain.
4. To understand the role of imaging in the interdisciplinary management.

Pain in pregnant women
M. Weston; Leeds/UK

Learning Objectives:
1. To learn about causes of pain specific to pregnancy, such as ectopic pregnancy, placental abruption, fibroid degeneration and uterine dehiscence.
2. To learn about causes of pain in other organs that may present during pregnancy, such as appendicitis, renal colic and ovarian torsion.
3. To understand how pregnancy alters the way imaging is undertaken.
4. To appreciate the relative risk to the mother and foetus of imaging irradiation and misdiagnosis.
5. To become familiar with the increasing role that MR can play.

Panel discussion: The management of pelvic pain: is imaging always needed?

Molecular Imaging

A-151 16:00
A. Advanced MRI techniques
M. Smits; Rotterdam/NL

Learning Objectives:
1. To learn about functional MRI (fMRI, DCE-MRI), diffusion tensor imaging (DTI) and diffusion-weighted imaging (DWI).
2. To understand the application of these techniques in the study of the healthy and diseased.
3. To learn about quantification using MR.

B. Advanced PET imaging techniques
T. Beyer; Vienna/AT

Learning Objectives:
1. To understand the fundamentals of PET physics relevant to MR/PET imaging.
2. To appreciate the advantages of MR/PET and its complementary role in diagnostic oncology.
3. To learn about the benefits and challenges of quantification in PET.

C. Clinical applications of quantitative hybrid imaging in oncology
L. Umutlu; Essen/DE

Learning Objectives:
1. To become familiar with the role of hybrid imaging in clinical oncology.
2. To learn about quantification in oncology: its benefits and limitations.
3. To understand hybrid imaging applications in relationship to disease presentations.
16:00 - 17:30  Room M 4

**E3 418**

Bile ducts imaging: not so simple

**A-154** 16:00

Chairman's introduction

S.A. Jackson; Plymouth/UK

**A-155** 16:05

A. Cholangiocarcinoma

S. Kim; Seoul/KP

**Learning Objectives:**
1. To become familiar with the different presentations of cholangiocarcinoma (including hilar and peripheral) tumours.
2. To learn about the role of imaging in staging the lesion and its limitations.

**A-156** 16:33

B. Chronic cholangitis

M. Ronot; Clichy/FR

**Learning Objectives:**
1. To understand the appropriate technique for the non-invasive evaluation of bile ducts.
2. To become familiar with the main causes for chronic cholangitis, including primary sclerosing, autoimmune and ischaemic cholangitis.

**A-157** 17:01

C. Tough clinical cases

E.M. Merkle; Basle/CH

**Learning Objectives:**
1. To be able to define the most likely diagnosis facing an unknown case.
2. To understand the diagnostic strategy.

16:00 - 17:30  Room M 5

**E3 426**

Assessment and lifelong follow-up of congenital heart disease

**A-158** 16:00

Chairman's introduction

L. Saba; Cagliari/IT

**Session Objectives:**
1. To enhance knowledge of anatomy and physiology of common congenital cardiac conditions as well as the surgical/interventional procedures used to treat them.
2. To discuss the appropriate use and performance/interpretation of non-invasive tests examining patients with CHD.

**A-159** 16:10

A. A primer: what do the most important anomalies look like?

O. Rompel; Erlangen/DE

**Learning Objectives:**
1. To get an overview on the spectrum of congenital heart disease (CHD), from the foetus and newborn through adults with congenital heart disease.
2. To explain the pathophysiology, manifestations, diagnosis and management of cyanotic, acyanotic and obstructive congenital cardiac anomalies.
3. To discuss the implications of cardiac anomalies on complexity and urgency of treatment indications.

**A-160** 16:30

B. CT for assessment and follow-up

J.-N. Dacher; Rouen/FR

**Learning Objectives:**
1. To learn how to decide which imaging modality is the most appropriate for which indication in CHD patients, and to recognise their advantages and limitations.
2. To integrate the most up-to-date CT imaging techniques for CHD patient management, including dose reduction strategies.
3. To be able to perform a complex CT protocol in CHD, and how to systematically read and evaluate CT imaging in CHD patients.

**A-161** 16:50

C. MR imaging for assessment and follow-up

N. Schicchi; Ancona/IT

**Learning Objectives:**
1. To learn how to decide which imaging modality is the most appropriate for which indication in CHD patients, and to recognise their advantages and limitations.
2. To learn about the role of MRI in the diagnosis and planning of therapy of CHD in both paediatric patients and adults, in comparison and correlation to echocardiography.
3. To be able to perform a complex MRI protocol in CHD, and how to systematically read and evaluate MR imaging in CHD patients.

17:10

Panel discussion: How to best assess congenital anomalies?
**E³ - ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists**

**E³ 521**  
Integrating diagnostic tools in breast imaging

**A-162 08:30**  
A. Multimodality breast imaging  
K. Kinkel; Chêne-Bougeries/CH

**Learning Objectives:**  
1. To choose the adequate imaging modality according to the clinical question taking into account the performance and the cost of ultrasound, mammography and MRI.  
2. To combine information provided by different imaging modalities into a final report with special focus on mammography/tomosynthesis and ultrasound.  
3. To update your BI-RADS knowledge

**A-163 09:15**  
B. Multiparametric breast MRI  
J. Camps Herrero; Valencia/ES

**Learning Objectives:**  
1. To learn about the different technical and clinical aspects of the MRI sequences that are used currently in breast imaging.  
2. To know how to unify the information thereof provided in everyday clinical practice.

**08:30 - 10:00 Room B**  
E³ - ECR Master Class (Abdominal Viscera)

**E³ 526a**  
The obesity epidemic: what is radiology's role?

**A-164 08:30**  
Chairman's introduction  
E.M. Merkle; Basle/CH

**Session Objectives:**  
1. To learn about the obesity epidemic and the relevance of fat disorders for the Western world.  
2. To understand the methodical and diagnostic challenges when imaging obese patients including postoperative conditions after bariatric surgery.  
3. To appreciate the role of radiology in abdominal fat quantification.

**A-165 08:36**  
A. The metabolic syndrome: what the radiologist needs to understand  
H.J. Lamb; Leiden/NL

**Learning Objectives:**  
1. To learn about the causes and consequences of the metabolic syndrome.  
2. To become familiar with the abdominal manifestations of the metabolic syndrome.  
3. To understand the role of radiology in surveillance of the population at risk.

**A-166 08:57**  
B. Imaging the obese patient presenting as an emergency: challenges and solutions  
M. Rengo; Latina/IT

**Learning Objectives:**  
1. To understand the most common abdominal causes leading to an emergency presentation.  
2. To become familiar with the specific technical difficulties and challenges that obese patients present for the imaging department in an emergency situation.  
3. To learn about tips and tricks in order to optimally image the obese patient in this situation.

**08:30 - 10:00 Room C**  
State of the Art Symposium

**SA 5**  
Lung cancer screening: past, present, future

**A-169 08:30**  
Chairman's introduction  
L. Bonomo; Rome/IT

**Session Objective:**  
1. To learn about the results of European and international lung cancer screening and to appreciate opportunities for future screening research.

**A-170 08:35**  
What did we know: NLST and previous trials  
S. Diederich; Düsseldorf/DE

**Learning Objectives:**  
1. To understand the design, conduct, results and limitations of the randomised NLST trial.  
2. To learn about the results of previous trials in terms of mortality reduction.  
3. To understand the results of feasibility studies in terms of prevalence and incidence of screening detected lung cancer.

**A-171 09:00**  
What do we know: latest insights from European trials, modelling studies and current screening programmes  
M. Prokop; Nijmegen/NL

**Learning Objectives:**  
1. To learn how to select participants for maximum yield of screening.  
2. To understand how to optimise reading and nodule management.  
3. To learn how to improve patient outcome by quality control of screening and treatment.

**A-172 09:25**  
What don't we know: opportunities for future research  
A. Devaraj; London/UK

**Learning Objectives:**  
1. To understand the limitations of existing screening protocols.  
2. To learn about opportunities for optimisation of future screening protocols.  
3. To appreciate questions, not answered by current trials, for future screening research.

**09:50**  
Panel discussion: How to implement lung cancer screening in Europe
EIBIR 1
VPH-DARE@IT: Novel biomarkers and platforms for earlier dementia diagnosis

A-173 08:30
Introduction
Z.A. Taylor; Sheffield/UK

Session Objective:
1. To learn about the VPH-DARE@IT project and the use of its results.

A-174 08:45
Patient care platform
M. van Gils; Tampere/FI

Learning Objectives:
1. To learn about dementia patient’s needs.
2. To understand the VPH-DARE@IT patient care platform.

A-176 09:10
Mechanistic model-based biomarkers
Y. Ventikos; London/UK

Learning Objectives:
1. To learn about mechanistic model-based biomarkers for dementia.
2. To understand the biomarkers used in the VPH-DARE@IT project.

A-177 09:35
Phenomenological model-based biomarkers
S. Klein; Rotterdam/NL

Learning Objectives:
1. To learn about phenomenological model-based biomarkers for dementia.
2. To understand the biomarkers used in the VPH-DARE@IT project.

ESR Working Group on Ultrasound

WG 3
Minimising the risk of cross infection: how to keep patients safe in ultrasound

A-178 08:30
Chairman’s introduction
M. Claudon; Vandoeuvre-les-Nancy/FR

Session Objectives:
1. To understand how the issue of infection transmission risks in ultrasound was raised and what the US WG has done to investigate and address concerns.
2. To gain an overview of current infection control practice in Europe.
3. To become familiar with best practice recommendations to prevent cross transmission of infection in ultrasound.
4. To understand different viewpoints of practitioners, patients as well as the industry.

A-179 08:35
Risk of cross transmission of infection in ultrasound: current European practice (ESR survey results) and best practice recommendations prepared by the ESR US WG
C. Nyhse; Sunderland/UK

Learning Objectives:
1. To gain an overview of the current infection control practice in Europe by presenting the main results of the ESR US WG survey undertaken.
2. To become familiar with the issued US WG recommendations for best practice, which are aimed to minimise the risk of cross infection.

A-180 08:50
Comments from the ESR Patient Advisory Group regarding infection control practice in Europe
J. Birch; Poole/UK

Learning Objective:
1. To understand the patient’s perspective regarding cross contamination risks in ultrasound.

A-181 09:00
Comments from industry representation
N. Denjoy; Brussels/BE

Learning Objective:
1. To understand the industry’s perspective.

09:10
Panel discussion: How can safer practice be achieved?

Paediatric

RC 512
Paediatric musculoskeletal imaging
Moderator:
A.C. Offiah; Sheffield/UK

A-182 08:30
A. The occurrence of bone marrow oedema, joint fluid, ganglion cysts and erosion like features in the normal paediatric wrist
D. Avenarius; Tromsø/NO

Learning Objectives:
1. To discuss MRI protocols for the paediatric wrist.
2. To give an overview of normal development and variations in MR anatomy and signal patterns.
3. To provide an understanding of features indicative of pathology.

A-183 09:00
B. MRI of the temporomandibular joints: findings that can mimic arthritis
T. von Kalle; Stuttgart/DE

Learning Objectives:
1. To discuss MRI protocols for imaging of the temporomandibular joints (TMJ).
2. To give an overview of MR imaging finding in arthritis of the TMJ.
3. To highlight the major differential diagnoses of TMJ arthritis and its MR imaging characteristics.

A-184 09:30
C. Skeletal trauma in children
I. Barber; Esplugues de Llobregat/ES

Learning Objectives:
1. To become familiar with the types of injuries seen in children.
2. To understand the basic mechanisms.
3. To learn about the diagnostic imaging approach.
08:30 - 10:00  Room N

Cardiac

RC 503
Imaging of cardiac valves: new trends

Moderator:
H. Alkadhi; Zurich/CH

A-185 08:30
A. Echocardiography remains the reference technique
F. Knebel; Berlin/DE

Learning Objectives:
1. To learn about state-of-the-art echo techniques to evaluate cardiac valves.
2. To provide a practical approach to assessing valve pathology based on echocardiography.
3. To become familiar with the role of echo in the diagnosis, clinical management and prognosis.

A-186 09:00
B. MRI is the best comprehensive approach
M. Francone; Rome/IT

Learning Objectives:
1. To learn about the role of MRI in diagnosis and evaluation of valvular disease.
2. To become familiar with state-of-the-art MRI techniques to evaluate valvular disease.
3. To learn about typical imaging findings in MRI with impact on clinical management.

A-187 09:30
C. Does CT have a role in diagnosing valvular disease?
G. Feuchtner; Innsbruck/AT

Learning Objectives:
1. To learn about state-of-the-art CT techniques to evaluate cardiac valves at low dose.
2. To review CT appearance of the most common conditions causing valvular disease.
3. To become familiar with the role of CT in the diagnosis and clinical management.

08:30 - 10:00  Studio 2017

New Horizons Session

NH 5
Hyperpolarised MRI: imaging tissue metabolism in real time

A-188 08:30
Chairman's introduction
J.M. Gomori; Jerusalem/IL

Session Objectives:
1. To explain the different research activities of ESR.
2. To learn how to set up a research project with EIBIR.
3. To learn how to organise research in an imaging department.
4. To learn how to use imaging biomarkers in clinical studies.

A-189 09:00
Hyperpolarised MRI in oncology
F.A. Gallagher; Cambridge/UK

Learning Objectives:
1. To explore the role of metabolism in cancer development.
2. To understand how these changes in metabolism can be exploited using hyperpolarised 13C-pyruvate.
3. To review the current evidence for hyperpolarised carbon-13 imaging in oncology.
4. To understand potential clinical applications for hyperpolarised carbon-13 imaging.
5. To consider the role of new hyperpolarised molecules in oncology.

A-190 09:52
Hyperpolarised MRI in cardiology
A. Comment; Lausanne/CH

Learning Objectives:
1. To become familiar with the principles of hyperpolarised MRI.
2. To understand the key parameters required to integrate a hyperpolariser into a MRI facility.
3. To learn about the cardiac metabolic pathways that can be probed by hyperpolarised MR.

A-191 09:09
Hyperpolarised MRI in respirology
J. Vogel-Claussen; Hannover/DE

Learning Objectives:
1. To learn about the promises and challenges to build a hyperpolarised gas enhanced lung imaging programme.
2. To compare hyperpolarised gas enhanced lung MRI with emerging multinuclear functional lung MRI techniques without the need for hyperpolarised gas.

A-192 09:26
Available and potential hyperpolarised molecular targets
R. Katz-Brull; Jerusalem/IL

Learning Objectives:
1. To get an overview of the many targets available for hyperpolarised molecular targets.
2. To understand the basic chemical properties of hyperpolarised MRI molecular imaging probes.
3. To understand the role of stable-isotopes in hyperpolarised MRI.
4. To understand the biochemical processes that can be imaged with hyperpolarised MRI.

09:43
Panel discussion: Is hyperpolarisation worth all the hype?

08:30 - 10:00  Room L 8

ESR Research Committee Session

A few examples of European structures for imaging research

A-193 08:30
Chairman's introduction
O. Clément; Paris/FR

Session Objectives:
1. To explain the different research activities of ESR.
2. To learn how to set up a research project with EIBIR.
3. To learn how to organise research in an imaging department.
4. To learn how to use imaging biomarkers in clinical studies.

A-194 08:40
How EIBIR can help to prepare and manage a H2020 project
G.P. Krestin; Rotterdam/NL

Learning Objectives:
1. To explain the mission of EIBIR and its organisational structure.
2. To learn about the activities of EIBIR and its Joint Initiatives.
3. To learn about the services offered by EIBIR related to project application and management.

A-195 09:55
Imaging biobanks and big data
E. Neri; Pisa/IT

Learning Objectives:
1. To understand the concept of imaging biobanks.
2. To learn about the different types of biobanks and imaging biobanks.
3. To have an overview of the existing network of biobanks in Europe and the collaboration between BBMRI and ESR.
A-196 09:10
Role of EIBALL and EORTC to promote imaging biomarkers in clinical studies
N.M. deSouza; Sutton/UK

Learning Objectives:
1. To learn the requirements for biomarker standardisation.
2. To understand the requirements for qualitative and quantitative biomarker assessments.
3. To learn how to address biomarker variability.

A-197 09:25
How to organise an imaging research unit within a clinical department: the Force Imaging French project
L.S. Fournier; Paris/FR

Learning Objectives:
1. To learn about the French national initiative to organise imaging research units in clinical departments.
2. To understand the challenges of managing research patients among a clinical routine workflow.
3. To learn about solutions to allow an economically viable organisation for clinical research in imaging departments.

09:40
Panel discussion: Imaging biomarkers as a roadmap for promoting imaging research in Europe

08:30 - 10:00  Room E1
Breast

RC 502
The high-risk lesions enigma
Moderator:
F. Kilburn-Toppin; Cambridge/UK

A-198 08:30
A. Lesions with an elevated risk for breast cancer
G. Forrai; Budapest/HU

Learning Objectives:
1. To learn about different types of high-risk lesions.
2. To become familiar with the risk of developing a cancer.
3. To appreciate the different imaging modalities for diagnosis.

A-199 09:00
B. Value of breast MRI: rate of underestimation and impact on treatment decision
R.M. Mann; Nijmegen/NL

Learning Objectives:
1. To learn about the evidence based on MRI in evaluating high-risk lesions.
2. To become familiar with different imaging appearances of high-risk lesions.
3. To appreciate the added value for diagnosis and treatment decision.

A-200 09:30
C. Could surgery be avoided?
S.J. Vinnicombe; Dundee/UK

Learning Objectives:
1. To learn about the different non-invasive modalities to excise high-risk lesions.
2. To become familiar with the risk of avoiding surgery.
3. To appreciate the standard protocols in different countries.

08:30 - 10:00  Room E2
Special Focus Session

SF 5a
Stoke, beyond the usual suspects

A-201 08:30
Chairman's introduction
O. Jansen; Kiel/DE

Session Objectives:
1. To learn that stroke can be a more complex disease than only acute arterial vessel occlusion.
2. To understand the possibilities of advance imaging.
3. To appreciate different diagnostic approaches.

A-202 08:35
Understanding watershed infarcts
P. Mordasini; Berne/CH

Learning Objectives:
1. To understand the pathophysiology of cerebral circulation.
2. To review the difference between “internal” and “external” watershed infarcts.
3. To demonstrate how to diagnose watershed infarcts.

A-203 09:00
Reversible cerebral vasoconstriction syndrome
J. Linn; Munich/DE

Learning Objectives:
1. To understand the pathophysiology and clinical presentation of RVCS.
2. To review imaging findings on CT and MR.
3. To show how the diagnosis can be confirmed on angiography.

A-204 09:25
Thrombosis of cerebral veins and dural sinuses
V. Costalat; Montpellier/FR

Learning Objectives:
1. To review the radiologic anatomy of the intracranial venous system (vascular territories, imaging techniques).
2. To diagnose deep vein and dural sinus thrombosis.
3. To understand cortical vein occlusions.

09:50
Panel discussion: Rational imaging in patients with acute stroke symptoms

08:30 - 10:00  Room F1
E³ - Rising Stars Programme: Basic Session

BS 5
Head and Neck
Moderator:
S.S. Ozbek; Izmir/TR

A-205 08:30
Sinuses
R. Maroldi; Brescia/IT

Learning Objectives:
1. To discuss current imaging techniques for evaluation of normal anatomy.
2. To describe common imaging manifestations of inflammatory diseases.
3. To review tumour and tumour-like lesions.
A-206 08:52
Thyroid and parathyroid
H. Imhof1, A. Levai2; 1Vienna/AT, 2Budapest/HU

Learning Objectives:
1. To discuss current imaging techniques for evaluation of normal anatomy.
2. To describe common imaging manifestations of inflammatory diseases.
3. To identify and describe the imaging appearance of malignant pathologies.

A-207 09:15
Salivary glands
S.J. Golding; Oxford/UK

Learning Objectives:
1. To discuss current imaging techniques for evaluation of normal anatomy.
2. To describe common imaging manifestations of inflammatory diseases.
3. To identify and describe the imaging appearance of malignant pathologies.

A-208 09:37
Lymph nodes
S.S. Özbek; Izmir/TR

Learning Objectives:
1. To discuss current imaging techniques for evaluation of normal anatomy.
2. To describe the imaging features of infectious and inflammatory disorders.
3. To describe the imaging appearance of neoplastic disorders.

08:30 - 10:00  Room F2
Oncologic Imaging

RC 516
A multidisciplinary approach to prostate cancer: can we make a difference?

A-209 08:30
Chairman’s introduction
B. Hamm; Berlin/DE

Session Objectives:
1. To understand the pathophysiological properties of prostate cancer and its impact on diffusion-weighted imaging and dynamic contrast-enhanced MRI.
2. To understand the necessity of functional MRI (compared with mere morphological MRI) in the assessment of prostate cancer.
3. To learn about PI-RADS classification system.
4. To learn about the role of MRI in selecting patient-tailored therapy.
5. To learn about the option of active surveillance vs immediate treatment.

A-210 08:35
A. The urologist: evidence-based clinical decision making
N. Mottet; St. Etienne/FR

Learning Objectives:
1. To understand how a diagnosis is established by PSA evaluation and biopsy.
2. To learn about different treatment options: surgery, radiotherapy, local ablative and hormonal treatment, as well as active surveillance.
3. To learn how imaging impacts treatment selection.
4. To understand what the urologist needs to know from the radiologist.

A-211 08:58
B. The radiologist: evidence-based use of multiparametric MRI
H.-P. Schlemmer; Heidelberg/DE

Learning Objectives:
1. To learn how to perform and interpret multiparametric MRI.
2. To become familiar with the PI-RADS classification system.
3. To become familiar with the role of imaging for patient stratification and treatment planning.

A-212 09:21
C. The radiation oncologist
D. Georg; Vienna/AT

Learning Objectives:
1. To learn the rationale and scientific basis for focal therapies for prostate cancer.
2. To learn how focal therapies are performed in prostate cancer.
3. To learn through personal experience and from literature how multiparametric MRI can guide focal therapies of the prostate.

09:44
Panel discussion: Prostate cancer: evidence-based multidisciplinary approach to imaging and treatment

08:30 - 10:00  Room D
Musculoskeletal

RC 510
Musculoskeletal ultrasound in the management of sports injuries
Moderator:
C. Cyteval; Montpellier/FR

A-213 08:30
A. Ultrasound of foot and ankle injuries: technique and diagnosis
C. Martinoli; Genoa/IT

Learning Objectives:
1. To become familiar with ultrasound findings seen in ankle instability.
2. To learn about the ultrasound patterns of tendon abnormalities.

A-214 09:00
B. Ultrasound of the hip and knee: what is it good for and what are its limitations?
E. Rowbotham; Leeds/UK

Learning Objectives:
1. To become familiar with examination technique and typical findings of ultrasound of the hip and knee.
2. To understand the limitations of ultrasound of the hip and knee.

A-215 09:30
C. Ultrasound-guided intervention in the athlete: indications and techniques
H. Guerini; Paris/FR

Learning Objectives:
1. To become familiar with the indications for ultrasound-guided interventions in the athlete.
2. To learn about the different injection techniques.

08:30 - 10:00  Room G
Special Focus Session

SF 5b
Diffusion-weighted imaging (DWI): from physics to practice

A-216 08:30
Chairman’s introduction
N. Papanikolaou; Lisbon/PT

Session Objectives:
1. To review the basic theoretical and technical aspects behind DWI.
2. To discuss the clinical yield of DWI in the brain and body.
3. To compare DWI with other modalities like PET/CT for whole-body applications.
A-217 08:35
The physics behind the images: diffusion in oncology
T. Scheenen; Nijmegen/NL

Learning Objectives:
1. To understand the basics of measuring diffusion with MRI.
2. To understand the concept of b-value, and its shortcomings.
3. To explain contrast mechanism of DWI.
4. To review established and potential clinical applications of DWI in oncology.

A-218 08:58
Diffusion in the brain
A. Radbruch; Heidelberg/DE

Learning Objectives:
1. To differentiate pseudoprogression from pseudoresponse in glioma patients with DWI.
2. To analyse the contribution of DWI in glioma radiomics.
3. To define the role of DWI in ischaemic stroke.

A-219 09:21
Whole-body diffusion
A.R. Padhani; London/UK

Learning Objectives:
1. To provide a rationale for the use of DWI to supplement morphologic assessments in whole-body MRI examination.
2. To show how measurements are acquired in the body and to distinguish between tumour detection and response assessment protocols.
3. To provide interpretation guidelines for disease detection and response assessments including how to recognise false positive and negative cases.
4. To provide the scientific evidence comparing WB-MRI with PET/CT, bone and CT scans for disease detection including areas of potential synergy.

09:44
Panel discussion: What's new in diffusion-weighted imaging?

08:30 - 10:00  Room M 1

E³ 526b
What's new in arterial embolisation? Current and future trends
Moderator: D.K. Tsetis; Iraklion/GR
A-223 08:30
A. New beads and new drugs: new indications
S.N. Goldberg; Jerusalem/IL

Learning Objectives:
1. To explain new technological improvement with regards beads.
2. To discuss about new drugs potentially used for chemoembolisation.
3. To review experimental literature as well as preliminary experience on the use of new devices and drugs for liver chemoembolisation.

A-224 09:00
B. Prostate arterial embolisation
H. Rio Tinto; Lisbon/PT

Learning Objectives:
1. To learn about anatomic variations of prostatic vasculature and technical difficulties of embolisation.
2. To understand clinical indications - who is a good candidate for embolisation?
3. To review the results and possible advantage for minimally invasive treatment.

A-225 09:30
C. Haemorrhoid embolisation
T. Jargiello; Lublin/PL

Learning Objectives:
1. To understand vascular anatomy of the rectum and arterial physiology of haemorrhoids.
2. To review other treatment options.
3. To learn about haemorrhoid embolisation technique.

08:30 - 10:00  Room M 2

ESR Audit and Standards Session

How (Euro)safe is your department?
Moderator: B.E. Kelly; Belfast/IE
A-226 08:30
Audit and raising the standard: the role of audit in 2017
M.F.J. Ryan; Cork/IE

Learning Objectives:
1. To understand the definition and function of audit.
2. To learn about the distinction between audit and research.
3. To appreciate the importance of reaudit.
A-227 08:50
Auditing the auditors: safe health care professionals in safe departments
P. Soffia; Santiago/CL

Learning Objectives:
1. To learn about appraisal and revalidation.
2. To learn about managing the failing doctor.
3. To understand discrepancy meetings, root cause analysis and no blame culture.
4. To hear examples of effective communication within and between radiology departments.

A-228 09:10
Audit: what a regulator needs to know
S. Ebdon-Jackson; Didcot/UK

Learning Objectives:
1. To learn about National Standards and local guidelines.
2. To understand systems to ensure patient safety.
3. To learn about minimising ionizing radiation exposure to staff and patients.

A-229 09:30
Audit and the patient journey
E. Briers; Brussels/BE

Learning Objectives:
1. To learn about communicating with the patient before, during and after their examination.
2. To appreciate the patient-centred department.
3. To appreciate well thought-through, timely and accurate discussion of examination results.

09:50
Panel discussion: Can an auditless department prove that it's a safe department?

08:30 - 10:00  Room M 3
Interventional Radiology

RC 509
Introduction to percutaneous interventional procedures: a practical guide

A-230 08:30
Chairman’s introduction
R. Iezzi; Rome/IT

Session Objectives:
1. To appreciate the importance of pre-procedure planning and selection of image guidance technique.
2. To learn about intra-procedure patient analgesia and adjunctive techniques for access to sites for intervention.
3. To discuss tips and tricks for successful percutaneous intervention.

A-231 08:35
A. How to safely perform US-guided procedures
D. Akinci; Ankara/TR

Learning Objectives:
1. To learn about patient positioning for US-guided percutaneous and endocavitary approaches to sites in the body.
2. To learn about real time guidance advantages of US-guided intervention.
3. To explain image fusion techniques for US-guided intervention.

A-232 08:58
B. How to safely perform CT-guided procedures
R. Garcia Marcos; Valencia/ES

Learning Objectives:
1. To learn about patient positioning for CT-guided percutaneous approaches to sites in the body.
2. To learn the types of CT guidance and advantages of CT-guided intervention.
3. To learn about adjunctive techniques for access to sites for intervention.

A-233 09:21
C. Post-procedure follow-up and complication management
M. Seidensticker; Magdeburg/DE

Learning Objectives:
1. To appreciate the potential for complications in common biopsy procedures.
2. To learn about management of post-procedure complications.
3. To discuss the role of quality improvement.

09:44
Panel discussion: Tips and tricks for choosing your first cases.

Controversial case-based review of approaches to difficult lesions

08:30 - 10:00  Room M 4
E³ - ECR Academies: Tips and Tricks in Liver, Bile Ducts and Pancreas Imaging

E³ 518
New challenges of pancreatitis

A-234 08:30
Chairman’s introduction
M.A. Bali1, G. Zamboni2; 1Sutton/UK, 2Verona/IT

A-235 08:35
A. Understanding the Atlanta 2012 classification of acute pancreatitis
W. Schima; Vienna/AT

Learning Objectives:
1. To be aware of the new terminology for the evaluation of acute pancreatitis.
2. To learn how to report imaging findings.
3. To understand the relationship between imaging findings and prognosis.

A-236 09:03
B. Autoimmune pancreatitis and its relatives
G. Morana; Treviso/IT

Learning Objectives:
1. To understand the various forms of autoimmune pancreatitis, especially cases that are associated with extra pancreatic disease.
2. To learn about the usual and unusual appearance of autoimmune pancreatitis.
3. To understand the principles of the follow-up.

A-237 09:31
C. Tough clinical cases of cystic pancreatic lesions
M. Karcaaltincaba; Ankara/TR

Learning Objectives:
1. To understand how to report a cystic pancreatic lesion, including recommendation for imaging strategy.
2. To become familiar with the most common cystic neoplasms of the pancreas.
3. To learn how to differentiate neoplasms and inflammatory cystic lesions of the pancreas.
Joint Course of ESR and RSNA (Radiological Society of North America): Hybrid Imaging

**MC 528**
The ABCs of hybrid imaging

**Moderators:**
- A. Drzezga; Cologne/DE
- K. Riklund; Umea/SE

**A-238 08:30**
A. What you need to know about PET-physics

**J. Axelsson; Umea/SE**

**Learning Objectives:**
1. To understand the basics of physics in PET imaging.
2. To learn about the different approaches of PET attenuation correction.
3. To learn about potential artefacts in hybrid imaging.

**A-239 09:00**
B. How MR physics influence image quality in hybrid imaging

**C. Catana; Boston, MA/US**

**Learning Objectives:**
1. To learn about MR for attenuation and motion correction.
2. To learn about MR artefacts influencing PET-quality.
3. To understand the complexity of physics in MR/PET.

**A-240/A-241 09:30**
C. Interactive case discussion

**J. Axelsson; Umea/SE**

**Learning Objectives:**
1. To learn how to identify common MR artefacts.
2. To learn how to identify common PET artefacts.
3. To learn how to identify common CT artefacts.

**E³ - ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists**

**E³ 621**
Emergency radiology II

**A-242 10:30**
A. Abdominal vascular emergencies

**A. Palkó; Szeged/HU**

**Learning Objectives:**
1. To understand the different types of abdominal vascular emergencies.
2. To learn about imaging findings and treatment options.

**A-243 11:15**
B. Chest trauma

**J. Biederer; Heidelberg/DE**

**Learning Objectives:**
1. To understand the imaging technique.
2. To become familiar with the differential diagnosis.

**10:30 - 12:00**

**Room X**

**EuroSafe Imaging Session**

**EU 2**
Focus on appropriate image quality: what we have to know

**Moderators:**
- W. Stiller; Heidelberg/DE
- J. Damilakis; Iraklion/GR

**A-244 10:30**
EuroSafe Imaging on „appropriate image quality“: Introduction

**S.T. Schindera; Aarau/CH**

**Learning Objectives:**
1. To become familiar with the goals and methods of the work on appropriate image quality.
2. To learn about preliminary results and future work for ensuring appropriate image quality in daily imaging routine.

**A-245 10:40**
Metrics and methods for quantitative image quality determination: a physicist’s perspective

**C. Hoeschen; Magdeburg/DE**

**Learning Objectives:**
1. To learn about mathematical metrics used for the quantitative description of image quality.
2. To become familiar with the methods employed for measuring image quality quantitatively.
3. To understand advantages and limitations of quantitative image quality assessment.

**A-246 11:00**
Balancing diagnostic image quality and radiation exposure in clinical routine: a radiologist’s perspective

**H. Geijer; Örebro/SE**

**Learning Objectives:**
1. To learn about the image features mainly determining diagnostic image quality in clinical routine.
2. To become familiar with the factors influencing image quality in clinical practice.
3. To raise awareness of the interrelation between image quality and radiation exposure.

**A-247 11:20**
Image quality assessment via model observers: connecting objective and subjective perspectives

**F.R. Verdun; Lausanne/CH**

**Learning Objectives:**
1. To become familiar with the concept of model observers for objectively assessing image quality for clinically relevant tasks.
2. To learn about how objective measurements of physical parameters characterising image quality in CT connect to clinically task-based assessment of image quality.
3. To understand the potential and limitations of automated image quality assessment by means of model observers.

**A-248 11:40**
Implementing a review process on image quality: experiences from a EuroSafe Imaging Star

**F. Deferme; Edegem/BEL**

**Learning Objectives:**
1. To learn about the criteria employed for assessing image quality of radiologic examinations.
2. To become familiar with the structure and course of the review process and its routine implementation.
3. To learn about the results of the image quality review process, the intervention levels identified, and the actions taken.
E³ - Rising Stars Programme: Basic Session

BS 6 Oncologic therapies
Moderator:
O. Akhan; Ankara/TR

A-249 10:30
Kidney
O. Akhan; Ankara/TR

Learning Objectives:
1. To have a basic knowledge about indications and limitations of interventional radiology procedures in renal malignancies.
2. To have a basic knowledge about embolisation of renal tumours.
3. To become familiar with ablation of renal tumours.

A-250 10:52
Lungs
M. Bezzi; Rome/IT

Learning Objectives:
1. To have a basic knowledge about indications and limitations of interventional radiology procedures in lung malignancies.
2. To have a basic knowledge about image-guided biopsy.
3. To become familiar with ablation of lung cancer.

A-251 11:15
Bones
A. Gangi; Strasbourg/FR

Learning Objectives:
1. To have a basic knowledge about indications and limitations of interventional radiology procedures in bone malignancies.
2. To understand the basic concepts of embolisation of bone tumours.
3. To have a basic knowledge about bone tumours ablation.

A-252 11:37
Liver
J.I. Bilbao; Pamplona/ES

Learning Objectives:
1. To understand the basic concepts of chemoembolisation in liver malignancies.
2. To understand the basic concepts of radioembolisation in liver malignancies.
3. To have a basic knowledge about liver tumours ablation.

10:30 - 12:00 Room M 4

E³ - ECR Academies: Tips and Tricks in Liver, Bile Ducts and Pancreas Imaging

E³ 618 Pancreatic tumours

A-253 10:30
Chairman's introduction
J. Votrubová; Prague/CZ

A-254 10:35
A. Staging adenocarcinoma
N. Kartalis; Stockholm/SE

Learning Objectives:
1. To understand the rationale behind local staging of pancreatic adenocarcinoma.
2. To learn about the respective role of CT, MRI and PET-CT.
3. To become familiar with the principle of postoperative follow-up.

A-255 11:03
B. Neuroendocrine tumours
R. Manfredi; Rome/IT

Learning Objectives:
1. To understand the basics of histological classification of neuroendocrine tumours.
2. To learn about the natural history of these tumours.
3. To become familiar with the usual appearance and imaging specificities of neuroendocrine tumours.

A-256 11:31
C. Tough clinical cases
T.C. Lauenstein; Essen/DE

Learning Objectives:
1. To be able to define diagnostic probabilities when facing an unknown case of solid mass in the pancreas.
2. To understand the role of multimodality approach, including endosonography and biopsy.

10:30 - 12:00 Room M 5

Joint Course of ESR and RSNA (Radiological Society of North America): Hybrid Imaging

MC 628 Hybrid imaging in the female
Moderators:
A. Držegža; Cologne/DE
K. Riklund; Umeå/SE

A-257 10:30
A. Pelvic tumours
F. Dehdashti; St. Louis, MO/US

Learning Objectives:
1. To learn about different tracers.
2. To understand how to interpret hybrid imaging examinations of the pelvis.
3. To learn about the role of hybrid imaging in staging, treatment evaluation and follow-up.

A-258 11:00
B. Breast cancer
O. Ratib; Geneva/CH

Learning Objectives:
1. To learn about pathophysiology and relation to different tracers.
2. To understand how to interpret hybrid imaging examinations of the breast.
3. To learn about the role of hybrid imaging in staging, treatment evaluation and follow-up.

A-259 11:30
C. Interactive case discussion (part 1)
F. Dehdashti; St. Louis, MO/US

Learning Objectives:
1. To understand how to interpret hybrid imaging in female pelvic tumours.
2. To understand how to interpret hybrid imaging in breast cancer.
3. To learn how to avoid common pitfalls.

A-260 11:45
C. Interactive case discussion (part 2)
O. Ratib; Geneva/CH

Learning Objectives:
1. To understand how to interpret hybrid imaging in female pelvic tumours.
2. To understand how to interpret hybrid imaging in breast cancer.
3. To learn how to avoid common pitfalls.
<table>
<thead>
<tr>
<th>Time</th>
<th>Room</th>
<th>Session Title</th>
<th>Details</th>
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<tbody>
<tr>
<td><strong>Room A</strong></td>
<td></td>
<td><strong>Headline Session</strong></td>
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<td>12:15 - 12:45</td>
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<td><strong>HL 1 Wilhelm Conrad Röntgen Honorary Lecture</strong></td>
<td>Presiding: P.M. Parizel; Antwerp/BE</td>
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<td><strong>A-261</strong> Dissatisfaction, burnout and inequality: three major challenges in radiology</td>
<td>M. Castillo; Chapel Hill, NC/US</td>
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<td>12:30 - 13:30</td>
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<td><strong>E³ 25B How to avoid misdiagnosis on the chest x-ray</strong></td>
<td>Moderator: N. Howarth; Chêne-Bougeries/CH</td>
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<td><strong>A-262</strong> A. Neoplastic lesions</td>
<td>J. Vlahos; London/UK</td>
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<td><strong>Learning Objectives:</strong></td>
<td>1. To review the reasons for misdiagnosis on the chest x-ray.</td>
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<td>2. To learn how to focus on blind areas.</td>
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<td>3. To know the consequences of a misdiagnosis.</td>
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<td><strong>A-263</strong> B. Non-neoplastic lesions</td>
<td>A.R. Larici; Rome/IT</td>
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<td><strong>Learning Objectives:</strong></td>
<td>1. To review the reasons for misdiagnosis on the chest x-ray.</td>
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<td>2. To learn how to interpret the chest x-ray more accurately.</td>
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<td>3. To know the consequences of a misdiagnosis.</td>
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<td>14:00 - 15:30</td>
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<td><strong>E³ 721 MR imaging in sports medicine II</strong></td>
<td>A-265 A. Sports injuries of the ankle</td>
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<td><strong>Learning Objectives:</strong></td>
<td>P. Robinson; Leeds/UK</td>
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<td></td>
<td>1. To learn the anatomy of the ankle.</td>
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<td>2. To learn the evaluation of common ankle injuries.</td>
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<td><strong>A-266</strong> B. Shoulder injury</td>
<td>M. Zanetti; Zurich/CH</td>
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<td><strong>Learning Objectives:</strong></td>
<td>1. To review the anatomy of the shoulder in three dimensions.</td>
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<td>2. To learn the evaluation of common shoulder injuries.</td>
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<td>14:00 - 15:30</td>
<td>Studio</td>
<td><strong>Joint Session of the ESR and ERS</strong></td>
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<td>2017</td>
<td><strong>ESR/ERS Novel strategies in idiopathic interstitial pneumonia</strong></td>
<td>Moderators: K.M. Antoniou; Iraklion/GR C.M. Schaefer-Prokop; Amersfoort/NL</td>
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<td><strong>A-267</strong> Updated clinical practice guidelines for classification</td>
<td>A.U. Wells; London/UK</td>
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<td><strong>Learning Objectives:</strong></td>
<td>1. To appreciate the rationale for the roles of pathology, radiology, and pneumology.</td>
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<td>2. To understand strengths and weaknesses of pathology.</td>
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<td>3. To become familiar with novel developments in histopathology.</td>
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<td><strong>A-268</strong> CT patterns for classification</td>
<td>N. Sverzellati; Parma/IT</td>
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<td><strong>Learning Objectives:</strong></td>
<td>1. To consolidate knowledge about the anatomical and pathological correlates.</td>
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<td>2. To learn about the criteria for usual interstitial pneumonia (UIP).</td>
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<td>3. To learn about the criteria for non-specific interstitial pneumonia (NSIP).</td>
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<td><strong>A-269</strong> Updated clinical practice guidelines for treatment</td>
<td>V. Poletti; Forli/IT</td>
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<td><strong>Learning Objectives:</strong></td>
<td>1. To learn about the clinical course and prognosis.</td>
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<td>2. To consolidate knowledge about the standard therapy.</td>
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<td>3. To become familiar with novel therapies.</td>
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<td><strong>A-270</strong> CT and MRI for monitoring therapy response and inflammatory activity</td>
<td>J.A. Verschakelen; Leuven/BE</td>
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<td><strong>Learning Objectives:</strong></td>
<td>1. To consolidate knowledge about the rationale for therapy response imaging.</td>
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<td>2. To learn about quantitative imaging biomarkers.</td>
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<td>3. To become familiar with novel options of imaging inflammation.</td>
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ESOR Session

ESOR
How to gain and maintain quality education in radiology
Moderators:
N. Gourtsoyiannis; Athens/GR
P.M. Parizel; Antwerp/BE

A-271 14:00
Introduction
P.M. Parizel; Antwerp/BE

A-272 14:05
ESOR in action 2017
N. Gourtsoyiannis; Athens/GR

A-273 14:15
How to improve education in radiology
S.J. Golding; Oxford/UK

A-274 14:30
Feeling confident? Evaluating competencies
O. Kolokythas; Seattle, WA/US

A-275 14:45
Lifelong learning: stay sharp in the field of radiology
B. Ertl-Wagner; Munich/DE

A-276 15:00
Find your mentor and stick together
C.A. Minoiu; Bucharest/RO

Awards

14:00 - 15:30 Room M 3

E³ - ECR Academies: Spinal Imaging

E³ 719
Spine: osseous lesions

A-277 14:00
Chairman's introduction
F. Kainberger; Vienna/AT

Session Objectives:
1. To establish a structured indication basing on clearly pre-defined questions.
2. To understand the distinct patterns of osseous spine lesions on projection radiographs and MRI.

A-278 14:05
A. Primary bone tumours
J.L. Bloem; Leiden/NL

Learning Objectives:
1. To learn how to use MR parameters to suggest a specific diagnosis.
2. To learn how to use radiographic and clinical parameters to suggest a specific diagnosis.
3. To identify the new types of spinal tumours and their radiological features.

A-279 14:33
B. Early diagnosis of spondyloarthropathies
J.A. Narvaez; Barcelona/ES

Learning Objectives:
1. To identify the MR features in the axial skeleton of early spondyloarthropathies.
2. To differentiate systemic inflammatory changes from other entities.
3. To learn the importance of imaging in patients managing and outcome.

A-280 15:01
C. Diffuse bone marrow disorders: myeloma and metastases
A. Barr-Melnyk; Munich/DE

Learning Objectives:
1. To discuss the advantages and disadvantages of MR, CT, and PET/CT in diagnosis.
2. To identify MR features in multiple myeloma and metastasis.
3. To know the imaging role in treatment planning and monitoring therapy of metastases and myeloma.

14:00 - 15:30 Room M 4

Joint Course of ESR and RSNA (Radiological Society of North America): Hybrid Imaging

MC 728
Hybrid imaging of the brain
Moderators:
A. Drzezga; Cologne/DE
K. Riklund; Umea/SE

A-281 14:00
A. Neurodegenerative disorders
H. Barthel; Leipzig/DE

Learning Objectives:
1. To learn about pathophysiology in neurodegenerative disorders.
2. To learn about different tracers and how to interpret the findings.
3. To understand the role of hybrid imaging in neurodegenerative disorders.

A-282 14:30
B. Brain tumours
J. McConathy; St. Louis, MO/US

Learning Objectives:
1. To get an overview of brain tumours and tracers used.
2. To learn how to interpret the examinations.
3. To understand the role of hybrid imaging of brain tumours.

A-283 15:00
C. Interactive case discussion (part 1)
H. Barthel; Leipzig/DE

Learning Objectives:
1. To learn about evaluation of hybrid imaging in neurodegenerative disorders.
2. To learn about evaluation of hybrid imaging of brain tumours.
A-284 15:15
C. Interactive case discussion (part 2)
J. McConathy; St. Louis, MO/US

Learning Objectives:
1. To learn about evaluation of hybrid imaging in neurodegenerative disorders.
2. To learn about evaluation of hybrid imaging of brain tumours.

16:00 - 17:30  Room A

E³ 821
Paediatric radiology for the general radiologist

A-285 16:00
A. Fractures in children
K.J. Johnson; Birmingham/UK

Learning Objectives:
1. To become familiar with different traumatic fracture types.
2. To identify possible criteria for child abuse.

A-286 16:45
B. MRI-typical paediatric applications in musculoskeletal imaging
K. Rosendahl; A.M.J.B. Smets; Bergen/NO, Amsterdam/NL

Learning Objectives:
1. To learn indications of paediatric MRI.
2. To become familiar with MR imaging findings in children.

16:00 - 17:30  Room B

Special Focus Session

SF 8
The postoperative abdomen: lost in translation?

A-287 16:00
Chairman's introduction: Presentation of a challenging case
Y. Menu; Paris/FR

Session Objectives:
1. To learn about the most common complications following abdominal surgery, either immediate or delayed.
2. To become familiar with the most common surgical procedures and to understand the mechanism of complications.
3. To be able to detect these complications using imaging methods, and to understand the principle of management, including conservative, interventional and/or surgical treatments.

A-288 16:05
Inflammatory complications (peritonitis, abscess)
Z. Tarján; Budapest/HU

Learning Objectives:
1. To learn about the incidence of immediate postoperative inflammatory complications and their outcome.
2. To understand the surgical procedures that are most commonly exposed to inflammatory complications.
3. To be able to detect inflammation and abscesses and to identify direct and indirect signs of leakage.
4. To understand the discussion about treatment, conservative, surgical or interventional.

A-289 16:23
Vascular complications (bleeding, thrombosis, ischaemia)
R. Nolz; Vienna/AT

Learning Objectives:
1. To learn about the incidence of immediate postoperative vascular complications and their outcome.
2. To understand the surgical procedures that are most commonly exposed to vascular complications.
3. To be able to manage the diagnostic strategy using appropriate imaging modalities.
4. To understand the role of intervention.

A-290 16:41
Postoperative obstruction
A. Palkó; Szeged/HU

Learning Objectives:
1. To learn about the incidence of immediate and long-term intestinal obstruction after surgery and/or radiotherapy.
2. To understand the mechanism of obstruction related to previous surgery, including adhesion, volvulus, internal hernia and recurrence/complication of initial disease.
3. To be able to detect obstruction, characterise the mechanism and evaluate the severity.
4. To feed the discussion of conservative vs surgical treatment.

A-291 16:59
Complications of weight-loss surgery
M. Rengo; Latina/IT

Learning Objectives:
1. To learn about the main surgical techniques of bariatric surgery and to understand the mechanism of the most common immediate and delayed complications.
2. To be able to identify the normal post-surgical appearance on imaging methods.
3. To detect the main complications associated with bariatric surgery on imaging methods.

17:14
Panel discussion: Where might we go wrong and how can we avoid it?

16:00 - 17:30  Room C

Chest

RC 804
CT - patterns in chest radiology: back to basics and beyond

A-292 16:00
Chairman's introduction
H. Prosch; Vienna/AT

Session Objectives:
1. To emphasise the importance of anatomy in reading CT.
2. To appreciate the necessity of defining patterns to improve CT diagnoses.

A-293 16:05
A. Secondary pulmonary lobe anatomy: essential to tackle with the nodular pattern
T. Frauenfelder; Zurich/CH

Learning Objectives:
1. To become confident in recognising the anatomical compartments of the lung.
2. To describe typical nodular imaging patterns of lung disease using appropriate terminology.

A-294 16:28
B. Linear and reticular pattern
F. Molinari; Lille/FR

Learning Objectives:
1. To recognise and interpret typical reticular imaging patterns.
2. To differentiate acute and chronic diseases which cause septal patterns.
Postgraduate Educational Programme

A-295 16:51
C. Ground glass opacities (GGO) and consolidation
J. Vogel-Claussen; Hannover/DE

Learning Objectives:
1. To appreciate the different conditions which cause GGO pattern and consolidation.
2. To learn how to interpret GGO and consolidation in different clinical settings.

17:14
Panel discussion: Is it always easy to detect a pattern? Tips for success

16:00 - 17:30  Room X
Joint Session of the ESR and EORTC

ESR/EORTC
Imaging biomarker and education for multicentre clinical oncological trials
Moderators
N.M. deSouza; Sutton/UK
Y. Liu; Brussels/BE

A-296 16:00
Imaging as primary endpoint in clinical trials: perspective of the EORTC
Y. Liu; Brussels/BE

Learning Objectives:
1. To become familiar with the importance of imaging biomarker in oncologic trials.
2. To learn about the role of the Imaging group of the EORTC.
3. To appreciate how standardisation and quality assessment enhances the role of imaging in oncologic trials.

A-297 16:22
Imaging biomarker for clinical trials in brain tumours
M. Smits; Rotterdam/NL

Learning Objectives:
1. To consolidate knowledge about state-of-the-art quantitative MRI.
2. To learn about standardisation and validation.
3. To appreciate the value of quantitative MRI in tumour grading and therapy response.

A-298 16:45
The importance of collaboration between the European Initiative on Biomarkers Alliance (EIBALL) and EORTC
S. Trattnig; Vienna/AT

Learning Objectives:
1. To become familiar with recent developments of collaboration between EIBALL and EORTC.
2. To learn about the increasing role of radiologists in oncologic trials.
3. To appreciate the importance of imaging biomarker in multicentre trials.

A-299 17:07
Training possibilities for radiologists involved in clinical multicentre trials
L.S. Fournier; Paris/FR

Learning Objectives:
1. To become familiar with education of radiologists for oncologic trials.
2. To learn about the advantages of education for implementation and evaluation of clinical trials.
3. To appreciate the value of educational courses on clinical multicentre trials for radiologists.

16:00 - 17:30  Room Z
ESR Working Group on Ultrasound

WG 4
Simulation training in ultrasound
Moderators:
M. Bachmann Nielsen; Copenhagen/DK
V. Cantisani; Rome/IT

A-300 16:00
How to evaluate simulation training
L. Konge; Copenhagen/DK

Learning Objectives:
1. To learn about different types of simulators on the market.
2. To learn about which are suitable for beginners or advanced levels, for OB/GYN or abdominal, and which can be used for training interventional ultrasound.
3. To learn about advantages and disadvantages of different types of ultrasound simulators.

A-301 16:15
Different ultrasound simulators for different purposes
A. Kabaalioglu; Antalya/TR

Learning Objectives:
1. To learn about the basis for training in medical students in US.
2. To learn about reported outcomes from ultrasound simulation training of medical students.
3. To learn about possible ways of its implementation.

A-302 16:30
US simulation training in student education
R. Badea; Cluj-Napoca/RO

Learning Objectives:
1. To learn about the present literature on simulation training in abdominal ultrasound.
2. To understand the level of evidence for the effect of ultrasound simulation training.
3. To learn about the experience from starting simulation training as part of the curriculum in Denmark.

17:00
Panel discussion

16:00 - 17:30  Room O
Professional Challenges Session

PC 8
How to make best use of cardiac imaging in a radiology department
Moderator's introduction
G.I. Kirova-Nedialkova; Sofia/BG

Session Objectives:
1. To focus on the needs for and challenges in organising a non-invasive cardiac imaging programme.
2. To learn about the main factors driving cost-effectiveness in the setting of cardiac imaging.
3. To understand the process of credentialing and accreditation in the practice of cardiac imaging.
4. To understand the radiologists' role as a team player.
A-305 16:06
Starting a cardiac imaging programme
G.A. Krombach; Giessen/DE

Learning Objectives:
1. To understand the challenges for starting a cardiac imaging programme.
2. To learn about requirements for starting a cardiac imaging programme.
3. To learn about the steps necessary for starting a successful cardiac imaging programme.

A-306 16:28
Cost-effectiveness of cardiac imaging
M.G.M. Hunink; Rotterdam/NL

Learning Objectives:
1. To understand the issues related to cost-effectiveness calculations.
2. To learn how cost-effectiveness in cardiac imaging can be influenced by different parameters.
3. To learn about the thresholds for cost-effectiveness in cardiac imaging.

A-307 16:50
Training cardiac imaging in the radiology department
F. Pugliese; London/UK

Learning Objectives:
1. To understand the challenges of training cardiac imaging.
2. To learn about the ideal training conditions for cardiac imaging.
3. To learn how to implement cardiac imaging training programmes.

17:12
Panel discussion: Are we ready to integrate cardiac imaging in routine radiology workload?

16:00 - 17:30  Studio 2017
Genitourinary

RC 807
Imaging of the prostate
Moderator:
P. Puech; Lille/FR

A-311 16:00
A. MRI staging of prostate cancer
G.M. Villeirs; Ghent/BE

Learning Objectives:
1. To understand the current role of prostate MRI.
2. To learn how to optimise imaging and reporting.
3. To illustrate the staging approach.

A-312 16:30
B. Pitfalls in MRI of the prostate
V. Panebianco; Rome/IT

Learning Objectives:
1. To illustrate the classification of the most common pitfalls on mpMRI of the prostate.
2. To discuss the role of PI-RADS version 2 in interpreting pitfalls in prostate MRI.
3. To learn how to avoid pitfalls.

16:00 - 17:30  Studio 2017
EuroSafe Imaging Session

EU 3
European Alliance for Medical Radiation Protection Research (EURAMED)
Moderator:
G. Frija; Paris/FR

A-314 16:00
Introduction of EURAMED
C. Hoeschen; Magdeburg/DE

Learning Objectives:
1. To be introduced to EURAMED.
2. To become familiar with how EURAMED has been developed.
3. To learn what its objectives are.
4. To understand how EURAMED could benefit the ESR.

A-315 16:18
Cardiovascular effects of radiotherapy in breast cancer patients: potential mechanisms
W. Dörr; Vienna/AT

Learning Objectives:
1. To become familiar with which CV effects we see in breast cancer treated patients.
2. To learn how these effects could be optimised in terms of endpoint specificity.
Circulating biomarkers reflecting dose exposure
R. Tamarat; Fontenay-aux-Roses/FR

Learning Objectives:
1. To learn about the extracellular vesicles (EV) as circulating biomarkers.
2. To understand how to evaluate the different EV and their origins.
3. To learn how to use EV as biomarkers in a prostate adenocarcinoma cohort.

General physical principles used for optimisation
G. Paulo; Coimbra/PT

Learning Objectives:
1. To learn how optimisation should take place.
2. To understand that image quality and dose depends on the class of patients.
3. To learn how to transfer this optimisation into clinical practice.

Dose distribution in interventional radiology
H. Schlattl; Munich/DE

Learning Objectives:
1. To learn how to determine dose distributions by simulations.
2. To understand reasons for dose differences in organs for interventions.
3. To understand optimisation of dose distributions in interventional radiology, e.g. to avoid deterministic effects.

A-320 16:05
A. Pretreatment planning
C.K. Kuhl; Aachen/DE

Learning Objectives:
1. To know the role of the imaging methods for preoperative staging.
2. To understand the need for imaging-guided needle sampling and localisation for a tailored surgery.
3. To appreciate the need for changing surgical guidelines for treating breast cancer.

Liver
G. Brancatelli; Palermo/IT

Learning Objectives:
1. To locate and identify, using cross sectional medical imaging, superficial and internal structures of common liver anatomy.
2. To learn and understand how the vasculature define the eight Couinaud segments.
3. To explain how common pathological conditions affect the structure of the liver.

A-322 16:51
C. The breast radiologist sitting down with the pathologist
T. Tot; Falun/SE

Learning Objectives:
1. To understand the importance of using imaging to guide the pathologist in complex lesions.
2. To know the different ways of correlating radiology and pathology.
3. To learn how to enhance this cooperation in order to achieve the best results in terms of tumour extension and tumour margins.

Panel discussion: How to enhance the interaction between radiologists and pathologists?

Toxic brain disorders
Moderator: P. Due-Tonnessen; Oslo/NO

A-323 16:00
A. Alcohol-related changes in the brain
M. Knauth; Göttingen/DE

Learning Objectives:
1. To document how imaging can help to make the diagnosis of acute alcohol poisoning and chronic alcoholic encephalopathy.
2. To discuss Wernicke encephalopathy.
3. To present the imaging findings in methanol and ethylene glycol poisoning.

C. Treatment-induced effects on the brain parenchyma
T. Lim; Singapore/SG

Learning Objectives:
1. To show the imaging findings after radiation therapy in the acute, early and late delayed stages.
2. To present an overview of long-term sequelae after radiation therapy.
3. To discuss treatment induced leukoencephalopathy after chemotherapy (especially methotrexate).

A-325 17:00
B. Recreational drugs and occupational hazards
L. van den Hauwe; Antwerp/BE

Learning Objectives:
1. To present an overview of recreational drugs and how they influence the brain.
2. To illustrate the effect of drugs on imaging studies (amphetamines, ecstasy, cocaine, heroin, methadone, ...).
3. To understand how occupationally used toxic substances can influence the brain (including toluene, cyanide, organophosphates, lead and mercury poisoning, ...).

Joint Session of the ESR and ESOR
Radiologic anatomy: abdomen
Moderator: S. Gourtsoyianni; London/UK

A-326 16:00
Liver
G. Brancatelli; Palermo/IT

Learning Objectives:
1. To locate and identify, using cross sectional medical imaging, superficial and internal structures of common liver anatomy.
2. To learn and understand how the vasculature define the eight Couinaud segments.
3. To explain how common pathological conditions affect the structure of the liver.

Biliary tree
O. Benjaminov; Petach Tikva/IL

Learning Objectives:
1. To discuss current imaging techniques for evaluation of normal biliary anatomy.
2. To learn and understand possible anatomical variants that may occur.
3. To explain how common pathological conditions affect the bile ducts.
Learning Objectives:
1. To review and illustrate the imaging features of normal pancreatic anatomy.
2. To review the possible congenital variants and anomalies of the pancreas and pancreatic duct.
3. To explain how common pathological conditions affect the pancreas.

A-328 17:00
Pancreas
M. Dioguardi Burgio; Clichy/Fr

A-329 16:00
Chairman's introduction
P. Lalitha; Hyderabad/IN

Session Objectives:
1. To understand diagnostic imaging difficulties in the evaluation of nodal involvement.
2. To understand the complementary information obtained with CT, MRI and PET.
3. To learn about advanced imaging techniques (CT - dual-energy; MRI - DWI, and PET) for evaluating nodal involvement.
4. To recognize pitfalls in evaluating nodal involvement using CT, MRI and PET.

A-330 16:05
A. The current criteria for nodal involvement MRI/CT
D. Tse; Hong Kong/HK

Learning Objectives:
1. To understand the role of local nodal staging and its importance for management and prognosis.
2. To become familiar with the current imaging criteria for assessment of nodal metastases.
3. To understand the diagnostic performance of cross-sectional imaging.

A-331 16:28
B. Advanced MRI techniques: what do they contribute?
H.C. Thoeny; Berne/CH

Learning Objectives:
1. To understand the principle of DWI of nodes.
2. To learn about the appearances of malignant nodes on diffusion-weighted MRI.
3. To become familiar with node-specific enhanced MRI.

A-332 16:51
C. PET and other nuclear medicine techniques
T. Barwick; London/UK

Learning Objectives:
1. To learn the typical appearance on nodal metastatic disease on FDG.
2. To recognize the pitfalls for interpretation.
3. To become familiar with new radiotracers, including choline and PSMA PET, for the demonstration of nodal disease.

A-333 16:00
Chairman's introduction
M. Reijnierse; Leiden/NL

Session Objectives:
1. To gain insight into the merits of various imaging modalities in the daily practice of radiology of rheumatology.
2. To appreciate the crucial radiological contribution we need to provide in order to support optimal clinical decision making.

A-334 16:05
A. Rheumatoid arthritis: what does MRI show and how do I do it?
I. Sudoł-Szopińska; Warsaw/PL

Learning Objectives:
1. To become familiar with MRI techniques used in the assessment of rheumatoid arthritis.
2. To learn about the MRI findings in rheumatoid arthritis and their significance.

A-335 16:28
B. The axial skeleton in spondyloarthritis: conventional radiograph to MRI
R. Campbell; Liverpool/UK

Learning Objectives:
1. To become familiar with imaging findings seen in the axial skeleton in spondyloarthritis.
2. To understand features on imaging which distinguish spondyloarthritis from other spinal diseases.

A-336 16:51
C. Ultrasound in inflammatory arthritis: what does it show and what does it mean?
A. Klauser; Innsbruck/AT

Learning Objectives:
1. To become familiar with US techniques used in the assessment of inflammatory arthritis.
2. To learn about the US findings in inflammatory arthritis and their significance.

17:14 Panel discussion: How practical is it for radiologists to support ultrasound and MRI for clinical rheumatology? Is it something the rheumatologists should undertake themselves?

A-337 16:00
Chairman's introduction
P.A.M. Hofman; Maastricht/NL

Session Objectives:
1. To update delegates on the role of radiologists in post-mortem and forensic radiology.
2. To update delegates on the radiology in death investigations.
3. To discuss the role of various imaging modalities.
4. To highlight areas where further research is required.
A-338 16:07
Introduction to post-mortem radiology
T. Ruder; Zurich/CH

Learning Objectives:
1. To understand the potential role of post-mortem imaging and forensic imaging.
2. To discuss the different imaging techniques and protocols for post-mortem imaging.
3. To learn about the typical imaging findings and pitfalls.
4. To discuss relevant legal issues related to forensic radiology.

A-339 16:24
Post-mortem imaging: a pathologist's perspective
D. Ranson; Melbourne/AU

Learning Objectives:
1. To understand the potential role of post-mortem imaging in relation to pathology.
2. To become familiar with relevant questions in a death investigation.
3. To discuss the contribution of imaging to a death investigation.

A-340 16:41
Paediatric forensic post-mortem radiology
R.R. van Rijn; Amsterdam/NL

Learning Objectives:
1. To learn about the role of imaging in child abuse.
2. To discuss the different imaging techniques and protocols in paediatric forensic radiology.
3. To discuss relevant legal issues related to paediatric forensic radiology.

A-341 16:58
Post-mortem CT and MRI: imaging techniques
A. Persson; Linköping/SE

Learning Objectives:
1. To learn about quantitative MRI and temperature independent imaging.
2. To learn about DECT in post-mortem imaging.
3. To learn about advanced visualisation techniques in post-mortem and forensic radiology.
4. To understand areas where further research is needed.

A-342 16:00
A. E-learning and blended learning approaches to continuing professional development (CPD): is this the way forward?
E. Metsälä; Helsinki/FI

Learning Objectives:
1. To discuss about the concepts used related to e-learning and blended learning.
2. To learn about the measures used and outcomes received comparing blended learning and traditional learning.
3. To appreciate the possibilities of e-learning and blended learning in health care staff CPD.
16:00 - 17:30  Room M 2

Computer Applications

**RC 805**

**Daily use of mobile devices in radiology**

**A-348 16:00**

Chairman’s introduction
O. Ratib; Geneva/CH

**Session Objectives:**
1. To give an overview of tools available on mobile devices for education and exam reporting.
2. To underline the impact of mobile devices in routine clinical activity.
3. To learn about the legislative backbone and potential drawbacks of mobile technology.

**A-349 16:05**

A. What did mobile devices change in radiology education?
E. Kotter; Freiburg/DE

**Learning Objectives:**
1. To give an overview of tools available for e-learning.
2. To explore the potential impact of e-learning in the daily radiological practice.
3. To explore future developments and limits of e-learning.

**A-350 16:28**

B. Is it appropriate to read a study on a smartphone or a tablet?
E. Neri; Pisa/IT

**Learning Objectives:**
1. To give an overview of available DICOM viewers and software for reporting imaging studies.
2. To discuss technical requirements of mobile devices for use in imaging interpretation.
3. To provide insight on future developments of imaging viewing technology.

**A-351 16:51**

C. Security and ethical issues of mobile device technology
E.R. Ranschaert; Mol/BE

**Learning Objectives:**
1. To provide an overview of technical solutions for patients’ image and data mobility.
2. To discuss technical requirements of mobile devices for use in imaging interpretation.
3. To give an overview of European legislation in relation to patient image and data mobility.

17:14
Panel discussion: Will mobile technology overcome stationary technology in radiology?

16:00 - 17:30  Room M 3

Interventional Radiology

**RC 809**

**Imaging and endovascular treatment of pulmonary embolism**

**A-352 16:00**

Chairman’s introduction
G. O’Sullivan; Galway/IE

**Session Objectives:**
1. To appreciate the value of imaging in therapy planning and follow-up.
2. To learn about patient selection and evidence in catheter directed therapies for PE.
3. To learn about recent and ongoing trials in the endovascular treatment of PE.

**A-353 16:05**

A. Imaging algorithm for pulmonary embolism
B. Ghaye; Brussels/BE

**Learning Objectives:**
1. To learn how clinical findings influence the selection of the imaging strategy in PE.
2. To learn about the follow-up after treatment.
3. To learn how imaging may predict the outcome of the patient.

**A-354 16:28**

B. What is new in the recently published guidelines for pulmonary embolism treatment?
R. Uberoi; Oxford/UK

**Learning Objectives:**
1. To learn about the recently published guidelines for PE treatment in stable patients.
2. To learn about the recently published guidelines for PE treatment in unstable patients.
3. To learn about recent therapeutic algorithms in PE treatment.

**A-355 16:51**

C. Updates on the endovascular treatment of massive and submassive pulmonary embolism
S.C. Spiliopoulos; Athens/GR

**Learning Objectives:**
1. To learn about the rationale of recent and ongoing trials.
2. To learn about the level of evidence for interventional radiology techniques in PE treatment.
3. To learn about clinical results and possible further developments.

17:14
Panel discussion: Appropriate diagnosis and risk stratification in the management of acute massive and acute submassive pulmonary embolism

**E³ - ECR Academies: Spinal Imaging**

**E³ 819**

**Spinal trauma**

**A-356 16:00**

Chairman’s introduction
L. Manfrè; Catania/IT

**A-357 16:05**

A. Looking for fractures
E.J. Ulbrich; Zurich/CH

**Learning Objectives:**
1. To understand the different standard clinical criteria for spine imaging (Canadian C-spine rule, Nexus criteria).
2. To understand the essential traumatic spinal mechanisms.
3. To become familiar with the different classification systems, from Denis to TLICS.

**A-358 16:33**

B. Looking for spinal cord and soft tissue injuries
F. Bonneville; Toulouse/FR

**Learning Objectives:**
1. To understand which soft tissue structures are relevant for spinal stability.
2. To learn how to detect subtle soft tissue injuries.
3. To become familiar with the different traumatic cord injuries.
**A-359 17:01**
C. Looking for spinal injuries in children  
P.C. Maly Sundgren; Lund/SE

**Learning Objectives:**
1. To understand that children are prone to different types and locations of injuries when compared to adults.
2. To become familiar with normal anatomy and anatomic variants that may mimic fractures in children.
3. To learn how to select the appropriate imaging modality in the individual patient.

**16:00 - 17:30 Room M 5**

Joint Course of ESR and RSNA (Radiological Society of North America): Hybrid Imaging

**MC 828**

Hybrid imaging in the male  
Moderators:  
A. Drzezga; Cologne/DE  
K. Riklund; Umea/SE

**A-361 16:00**

A. Prostate cancer: novel tracers  
S.P. Rowe; Baltimore, MD/US

**Learning Objectives:**
1. To learn about novel tracer and their biochemical properties.
2. To understand the differences of information given by the use of different tracers.
3. To understand how to interpret examinations with different tracers.

**A-360 16:30**

B. Prostate cancer: PET, MR or both?  
M. Eiber; Los Angeles, CA/US

**Learning Objectives:**
1. To learn about pathophysiology in prostate cancer.
2. To understand how to interpret hybrid imaging of prostate cancer.
3. To learn about the role of hybrid imaging in staging, treatment evaluation and follow-up.

**A-362/A-363 17:00**

C. Interactive case discussion (part 1)  
M. Eiber; Los Angeles, CA/US  
S.P. Rowe; Baltimore, MD/US

**Learning Objectives:**
1. To learn how to interpret hybrid imaging of prostate cancer.
2. To understand the pathophysiology in relation to imaging.
Postgraduate Educational Programme

08:30 - 10:00  Room A

**E³ - ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists**

**E³ 921**

**Use of staging and classification systems**

**A-364 08:30**

A. **RECIST 1.1 training**
A. Graser; Munich/DE

**Learning Objectives:**
1. To understand the principle of the RECIST system.
2. To become familiar with the daily oncological work-up.

**A-365 09:15**

B. **Gastrointestinal-abdominal masses**
A. Ba-Ssalamah; Vienna/AT

**Learning Objectives:**
1. To learn the characteristic features of some common and atypical abdominal masses.
2. To identify the key imaging findings that assist surgeons or oncologists treating specific abdominal masses.

08:30 - 10:00  Room B

**Gi Tract**

**RC 901**

**CT colonography today**

**A-366 08:30**

Chairman's introduction
M. Hellström; Gothenburg/SE

**A-367 08:35**

A. **How I perform it**
P. Lefere; Roeselare/BE

**Learning Objectives:**
1. To learn about modern approaches to bowel preparation and faecal/fluid tagging.
2. To become familiar with colon distention, including prevention of possible complications.
3. To learn about different scanning protocols and their use according to patient status and clinical needs.

**A-368 08:58**

B. **How I interpret it**
T. Mang; Vienna/AT

**Learning Objectives:**
1. To become familiar with different image presentations: 2D, 3D, enhanced views.
2. To appreciate the strengths and limitations of primary 2D and primary 3D reading.
3. To learn about the use of Computed Assisted Diagnosis (CAD) software.

**A-369 09:21**

C. **Screening with CTC**
D. Regge; Turin/IT

**Learning Objectives:**
1. To understand basic principles of population and opportunistic screening.
2. To become familiar with data on accuracy of CTC in screening populations.
3. To learn about current guidelines on the use of CTC in screening.

08:30 - 10:00  Room C

**Chest**

**RC 904**

**Low-dose and no-dose chest imaging: opportunities and limitations**
Moderator:
D. Tack; Baudour/BE

**A-370 08:30**

A. **CT**
C. de Margerie-Mellon; Paris/FR

**Learning Objectives:**
1. To learn about techniques for decreasing the radiation dose.
2. To know in which clinical situations low-dose CT should be performed.

**A-371 09:00**

B. **MRI**
J. Dinkel; Munich/DE

**Learning Objectives:**
1. To learn about the current lung MR protocols.
2. To know in which clinical situations lung MRI is a helpful adjunct to diagnosis.

**A-372 09:30**

C. **US**
F. Gleeson; Oxford/UK

**Learning Objectives:**
1. To learn when, how and why to perform a US study of the chest.
2. To become familiar with the strengths and limitations of the technique.

09:44

Panel discussion: Challenging cases from clinical practice

08:30 - 10:00  Room X

**Joint Session of the ESR and ESTRO**

**ESR/ESTRO**

**Radiomics and imaging databases for precision radiation oncology**

**A-373 08:30**

Chairmen's introduction (part 1)
K. Riklund; Umea/SE

**Session Objectives:**
1. To discuss how radiomics will change the clinical practice both in radiology and oncology.
2. To understand the impact of quantitative imaging data uncertainties in the prognosis and predictive models.
3. To discuss the potential and challenges of large multicentre imaging datasets.

**A-374 08:31**

Chairmen's introduction (part 2)
V. Valentini; Rome/IT

**Session Objectives:**
1. To discuss how radiomics will change the clinical practice both in radiology and oncology.
2. To understand the impact of quantitative imaging data uncertainties in the prognosis and predictive models.
3. To discuss the potential and challenges of large multicentre imaging datasets.

**A-375 08:33**

Radiomics in radiology, what are the parameters of interest for different imaging modalities?
H. Ahlström; Uppsala/SE

**Learning Objectives:**
1. To learn how radiomics can be measured with imaging methods.
2. To discuss how radiomics can be integrated in “omics” analysis.
3. To explore the potential of radiomics analysis in cancer care.
Radiomics in radiotherapy: how is it used to personalise treatment and to predict toxicity and/or tumour control

C. Gani; Tübingen/DE

Learning Objectives:
1. To understand how radiomics can be used to identify patients at high risk for failure after radiotherapy.
2. To discuss how radiomics can be integrated into radiotherapy treatment planning.
3. To explore the potential of radiomics to predict acute and long-term toxicity after radiotherapy.

Uncertainties in imaging: how they should be reported and propagated in prediction models using radiomics

L.P. Muren; Aarhus/DK

Learning Objectives:
1. To understand how to incorporate radiomics into RT response models.
2. To discuss how uncertainties should be estimated and reported.
3. To explore the effect of image uncertainties in RT response models.

Imaging banks: challenges and opportunities

A. Van der Lugt; Rotterdam/NL

Learning Objectives:
1. To understand what is an imaging biobank.
2. To discuss how an imaging biobank can be integrated in cancer care.
3. To explore the intraoperability of clinical imaging biobank and other data repositories.

Who can use the equipment and reimbursement

R.F. Havre; Bergen/NO

Learning Objectives:
1. To learn about the possible requirements for image quality and storage for handheld devices.
2. To learn about the requirements for training and profession for using the equipment.
3. To learn about different reimbursement requirements and practices in selected European countries.

A-383 09:15
Appropriate training
H. Prosch; Vienna/AT

Learning Objectives:
1. To get an overview on the current status of ultrasound training in radiology.
2. To appreciate the pivotal role of ultrasound in the understanding of basic anatomy and pathology.
3. To become familiar with the importance of one to one teaching in ultrasound.

Ultrasound to train students
V. Cantisani; Rome/IT

Learning Objectives:
1. To provide current status of education in ultrasound of medical student.
2. To provide EFSUMB proposal and strategy in student education.

Panel discussion: Handheld devices - should we be happy or concerned?

09:45

Paediatric

Understanding paediatric neuroradiology

Moderator: A. Rossi; Genoa/IT

A-385 08:30
A. Imaging of the premature brain
N. Khandelwal, P. Singh; Chandigarh/IN

Learning Objectives:
1. To discuss the roles of US, (CT) and MRI in preterm imaging.
2. To give an overview of the different imaging findings in the preterm brain related to age.
3. To discuss the prognostic role preterm brain imaging.

B. Abusive head trauma: the role of CT and MRI
C. Adamsbaum; Le Kremlin-Bicêtre/FR

Learning Objectives:
1. To discuss the role of CT and MRI in imaging of abusive head trauma (AHT).
2. To give an overview of common CT and MRI findings in AHT.
3. To understand the strengths and limitations of CT and MRI in imaging AHT.

C. Imaging in hypoxic-ischaemic injury and hypothermia: an update
F.M. Triulzi; Milan/IT

Learning Objectives:
1. To discuss the role of US, (CT) and MRI in hypoxic-ischaemic injury (including advanced MR techniques).
2. To give an overview of common imaging findings in hypoxic-ischaemic injury (HIE).
3. To understand the importance of timing and prognostic value of imaging in HIE.
**Postgraduate Educational Programme**

**Friday**

### Cardiac

**RC 903**

**Novel ways to assess myocardial tissue**

**Moderator:** O. Duvernoy; Uppsala/SE

**A-388** 08:30

**A. T1 mapping: technical considerations**

M.R. Makowski; Berlin/DE

**Learning Objectives:**
1. To learn about the principles of T1 mapping.
2. To learn about specific issues of T1 mapping.
3. To learn how to do and assess T1 mapping.

**A-389** 09:00

**B. T2 mapping: technical considerations**

C. Tessa; Lido di Camaiore/IT

**Learning Objectives:**
1. To learn about the principles of T2 mapping.
2. To learn about specific issues of T2 mapping.
3. To learn how to do and assess T2 mapping.

**A-390** 09:30

**C. Clinical use of T1 and T2 mapping**

H.J. Lamb; Leiden/NL

**Learning Objectives:**
1. To learn about the main fields of application for T1-T2 mapping.
2. To learn the specific parameters useful for the clinical implementation of T1-T2 mapping.
3. To understand the incremental value of T1-T2 mapping over current methodologies.

### Breast

**RC 902**

**Minimally-invasive local treatment of breast cancer: the time is now**

**A-396** 08:30

**Chairman's introduction**

M. Sklair-Levy; Tel Aviv/IL

**A-397** 08:35

**A. High intensity focused ultrasound (HIFU) therapy**

K. Pinker-Domenig, B. Cavallo Marincola; Vienna/AT, Rome/IT

**Learning Objectives:**
1. To learn about the basics of HIFU therapy.
2. To become familiar with the different types of imaging guidance.
3. To appreciate its role in treating benign and malignant lesions.

**A-398** 09:00

**B. Radiofrequency ablation therapy**

B. Brkljačić; Zagreb/HR

**Learning Objectives:**
1. To learn about how radiofrequency works.
2. To become familiar with its use in clinical practice.
3. To appreciate the advantages and disadvantages.

**A-399** 09:25

**C. Cryotherapy**

M.H. Fuchsjäger; Graz/AT

**Learning Objectives:**
1. To learn about cryotherapy technique.
2. To become familiar with its use in clinical practice.
3. To appreciate its role in treating benign and malignant lesions.

09:50

**Panel discussion: How can we overcome resistance of clinical partner specialties to refer eligible women to radiology?**
Neuro

RC 911
Cerebrovascular disease
Moderator:
A. Krainik; Grenoble/FR

A-400 08:30
A. Vascular distribution territories: arterial and venous
A. Dörfler; Erlangen/DE

Learning Objectives:
1. To become familiar with a comprehensive vascular anatomy of the brain.
2. To understand the advantages and limitations of CTA and MRA.
3. To recognise the different imaging patterns in stroke and their prognostic value.

A-401 09:00
B. Arterial dissection and vasculitis
P.C. Maly Sundgren; Lund/SE

Learning Objectives:
1. To learn how to image dissections of the neck vessels and intracranial arteries.
2. To learn about the imaging features of cerebral vasculitis and how to differentiate it from reversible cerebral vasoconstriction syndrome.
3. To become familiar with the most important causes of secondary vasculitis, including infectious causes such as TB and HIV.

A-402 09:30
C. Cerebral perfusion studies in cerebrovascular disease: techniques, indications and applications
H.R. Jäger; London/UK

Learning Objectives:
1. To understand how imaging can help select patients for treatment of acute ischaemic stroke.
2. To show the importance of collateral flow in ischaemic patients.
3. To discuss the current evidence-based medicine (EBM) for treatment of patients with acute ischaemic stroke.

Joint Session of the ESR and ESOR

ESR/ESOR 2
Radiologic anatomy: lower extremities
Moderator:
U. Aydingoz; Ankara/TR

A-403 08:30
Hip
A.H. Karantanas; Iraklion/GR

Learning Objectives:
1. To identify intra- and extra-articular anatomy on MRI.
2. To learn what we see and what we miss on plain film.
3. To understand osteoarthritis and learn its key features on imaging.

A-404 09:00
Knee
M. Klontzas; London/UK

Learning Objectives:
1. To identify intra- and extra-articular anatomy on MRI.
2. To learn what we see and what we miss on plain film.
3. To understand and learn the key features of meniscal injury.

SF 9
The revival of lymphangiography

A-405 09:30
Ankle
M. Maas; Amsterdam/NL

Learning Objectives:
1. To identify intra- and extra-articular anatomy on MRI.
2. To learn what we see and what we miss on plain film.
3. To understand and learn key features of ankle sprain.

A-406 08:30
Chairman's introduction
B.A. Radeleff; Heidelberg/DE

Session Objectives:
1. To learn and to become familiar about the radiological diagnostic tools and therapy options (indication, technique and success) of lymphatic disease.
2. To understand the most important sequences and tricks for MR-lymphography for diagnosis and treatment steps leading to occlusion of chyle leaks.
3. To appreciate that diagnostics by non-contrast magnetic resonance lymphography in a near future could become the imaging modality of reference for investigation of lymphatic disorders.

A-407 08:35
„Theranostic“ lymphangiography
E. Santos Martin; New York, NY/US

Learning Objectives:
1. To learn and to become familiar about the indication, technique and success of intranodal lymphangiography (INL).
2. To understand that intranodal lymphangiography is an effective option for further treatment method e.g. for chyle leaks.
3. To appreciate that if conventional lymphography is impossible, percutaneous intranodal lymphangiography is a valuable alternative.

A-408 09:00
MR lymphangiography
L. Arrivé; Paris/FR

Learning Objectives:
1. To learn and to become familiar about the indication, technique and success of non-contrast magnetic resonance lymphography.
2. To understand the most important sequences and tricks for the non-contrast magnetic resonance lymphography.
3. To appreciate that non-contrast magnetic resonance lymphography in a near future could become the imaging modality of reference for investigation of lymphatic disorders.

A-409 09:25
Thoracic duct embolisation
H.H. Schild; Bonn/DE

Learning Objectives:
1. To learn and to become familiar about the indication, technique and success of minimal-invasive therapies for thoracic chyle leaks.
2. To understand that thoracic duct embolisation is an effective treatment method for chylothorax.
3. To appreciate that if thoracic duct embolisation is impossible, percutaneous lymphatic destruction or injection of sclerosants/tissue adhesive next to the thoracicare valuabe therapeutic alternatives.

09:45
Panel discussion: Lymphangiography, are you convinced?
**Multidisciplinary Session**

**MS 9**

**Primary bone tumours**

**A-410 08:30**  
Chairman's introduction  
A.M. Davies; Birmingham/UK

**Session Objectives:**
1. To recognise the importance of a multidisciplinary approach to the diagnosis of bone tumours.
2. To appreciate the challenges faced by pathologists in making a diagnosis.
3. To appreciate the role of imaging from diagnosis to surgical planning.

**A-411 08:35**  
Fundamental imaging  
S.L.J. James; Birmingham/UK

**Learning Objectives:**
1. To appreciate the diverse radiographic appearances of bone tumours.
2. To understand the importance of reviewing all imaging when making a diagnosis.
3. To become familiar with local and distant imaging strategies for staging.

**A-412 08:55**  
Why I need the radiologist: the pathologist's perspective  
L.-G. Kindblom; Billdal/SE

**Learning Objectives:**
1. To provide a reasoned differential diagnosis based on imaging findings.
2. To communicate the precise anatomical location and origin of the tumour.
3. To correlate imaging features of malignancy with histological findings.

**A-413 09:15**  
The surgeon's perspective  
L. Jeys; Birmingham/UK

**Learning Objectives:**
1. To orchestrate the multidisciplinary discussion of management based on combined imaging and histological findings.
2. To appreciate the significance of local and distant extent on management.
3. To learn about the imaging requirements for robotic surgery.

**09:35**  
Multidisciplinary case presentation and discussion

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**EFOMP Workshop: Radiation incidents and accidents in medical imaging: can we prevent them?**

**EF 1**

**Radiation incidents and accidents in medical imaging and their management (part I)**

**A-414 08:30**  
Chairman's introduction  
J. Damilakis; Iraklion/GR

**Moderators:**  
J. Damilakis; Iraklion/GR  
A. Torresin; Milan/IT

**Session Objectives:**
1. To learn about the common reasons for radiation incidents and accidents in CT and interventional suites.
2. To learn about the common reasons for accidental exposure during pregnancy.
3. To be informed about the EU BSS requirements on radiation incidents and accidents in medical imaging and their management.

**A-415 08:35**  
Radiation incidents and accidents in CT  
M. Mahesh; Baltimore, MD/US

**Learning Objectives:**
1. To give an overview of radiation incidents and accidents in CT.
2. To discuss the lessons learnt from these incidents and accidents.
3. To learn how to manage incidents and accidents in CT.

**A-416 09:05**  
Radiation incidents and accidents in interventional suites  
R.W.R. Loose; Nürnberg/DE

**Learning Objectives:**
1. To give an overview of radiation incidents and accidents in interventional radiology.
2. To discuss the lessons learnt from these incidents and accidents.
3. To learn how to manage incidents and accidents in interventional radiology.

**A-417 09:35**  
Accidental exposure during pregnancy  
J. Damilakis; Iraklion/GR

**Learning Objectives:**
1. To provide information about the frequency of accidental exposure of pregnant patients in imaging departments.
2. To learn how cases of accidental exposure of pregnant patients in imaging departments can be reduced.
3. To learn how to manage pregnant patients in case of accidental exposure to x-rays.
Radiographers

RC 914
Patient safety: professional and clinical responsibility of the radiographer
Moderators:
T. Roding; Haarlem/NL
P. Due-Tonnessen; Oslo/NO

A-418 08:30
A. Patient and staff safety in medical imaging: what can be done?
S. Mc Fadden; Newtownabbey/UK

Learning Objectives:
1. To appreciate the current guidelines and legislation across the EU.
2. To learn about current research and different roles of the radiographer.
3. To discuss different ways to ensure patient safety is maintained.

A-419 08:55
B. Aspects of safety: what should be considered?
K. Azevedo1, C.A. Silva2, A.F.C.L. Abrantes1, L.P.V. Ribeiro1, A.M. Ribeiro1; 1Faro/PT, 2Évora/PT

Learning Objectives:
1. To appreciate the core competencies and the radiographer’s role as a key element to ensure patient safety at the imaging department.
2. To learn about the main concepts of patient safety related to the radiographer’s professional responsibility and ethics outlines at the imaging department level from a public or private hospital or even at the private practice level.
3. To discuss ways to promote patient safety and quality in imaging.

A-420 09:20
C. Patient safety: opportunities and challenges ahead in medical imaging
J. McNulty; Dublin/IE

Learning Objectives:
1. To appreciate the current status and challenges ahead with ensuring patient safety in medical imaging.
2. To learn about new ways of addressing the challenges ahead.
3. To discuss the implementation of patient safety focused curricula and the benefits for clinical departments.

09:45
Discussion and questions: Ensuring patient safety in medical imaging: what else can be done?

Vascular

RC 915
Post-treatment evaluation: what every radiologist should know

A-421 08:30
Chairman’s Introduction
P. Haage; Wuppertal/DE

Session Objectives:
1. To briefly introduce the distinctive role of proper post-treatment evaluation after intervention.
2. To control the results and to know possible complications - to prepare re-intervention.

A-422 08:35
A. Thoracic aorta
T. Leiner; Utrecht/NL

Learning Objectives:
1. To learn about the most common complications after thoracic aortic interventions.
2. To understand imaging specifics after thoracic aortic interventions.
3. To know indications for re-intervention.

A-423 08:58
B. Abdominal aorta
C. Loewe; Vienna/AT

Learning Objectives:
1. To learn about the most common complications after abdominal aortic interventions.
2. To understand imaging specifics after thoracic aortic interventions.
3. To know indications for re-intervention.

A-424 09:21
C. Peripheral arterial disease
M. Anzidei; Rome/IT

Learning Objectives:
1. To learn about the most common complications after PAD endovascular repair.
2. To understand what imaging technique is preferred (any diagnostic).
3. To explain when to re-intervene and how to prepare it?

09:44
Panel discussion: How to optimise post-treatment imaging: getting proper diagnosis without performing too many examinations

EIBIR Session

EIBIR 2
EU Research on cancer imaging

A-425 08:30
Introduction
Y. Liu; Brussels/BE

Session Objectives:
1. To understand cancer imaging research in Europe.
2. To learn about current funding opportunities for cancer imaging research in Europe.

A-426 08:45
Multimodal imaging with diffuse optics for cancer theranostics
T. Durduran; Barcelona/ES

Learning Objectives:
1. To understand a new multimodal imaging technology.
2. To learn about the Horizon 2020 research project LUCA.

A-427 09:10
Hybrid PET/MRI for breast cancer detection
C.K. Kuhl; Aachen/DE

Learning Objectives:
1. To discover the importance of hybrid imaging for cancer detection.
2. To learn about the Horizon 2020 research project HYPMED.

A-428 09:35
Using GlucoCEST MRI to visualise cancer
X. Golay; London/UK

Learning Objectives:
1. To discover an innovative MRI method to visualise cancer.
2. To learn about the Horizon 2020 research project GLINT.
**Molecular Imaging**

**RC 906**  
Translational research in molecular imaging: how to do the translation

**A-429 08:30**  
Chairman’s introduction  
J. Hodler; Zurich/CH

**Session Objectives:**  
1. To learn the translational potential of preclinical research.  
2. To understand the needs of preclinical research.  
3. To know the physiological differences between small animals and humans.

**A-430 08:36**  
A. Preclinical MR/PET imaging of cancer  
C. Kuntner-Hannes; Seibersdorf/AT

**Learning Objectives:**  
1. To learn the use of preclinical PET/MR imaging.  
2. To understand the needs of standardisation in preclinical imaging.  
3. To understand the challenges in quantitative preclinical PET imaging.

**A-431 08:59**  
B. What about nanotechnology?  
F.M.A. Kiessling; Aachen/DE

**Learning Objectives:**  
1. To understand advantages and limitations of nanomedicines.  
2. To gain knowledge on elimination routes of nanoprobes.  
3. To understand the potential benefit of active targeting.

**A-432 09:22**  
C. The transition from preclinical to clinical  
A. Kjaer; Copenhagen/DK

**Learning Objectives:**  
1. To learn the benefits of preclinical imaging for clinical activities.  
2. To understand how to translate the knowledge from preclinical to clinical applications.  
3. To understand the limitations of translation.

09:45  
Panel discussion: How to perform translational research in molecular imaging

**A-435 09:03**  
B. MR findings: what’s relevant?  
M.-A. Weber; Heidelberg/DE

**Learning Objectives:**  
1. To summarise typical MRI patterns of degenerative cervical spine disease.  
2. To identify which imaging findings explain pain and are useful in planning treatment.  
3. To discuss the role of the different modalities, MR vs CT.

**A-436 09:31**  
C. Spinal stenosis: what is it?  
M. Muto; Naples/IT

**Learning Objectives:**  
1. To learn the most frequent causes of spinal stenosis.  
2. To learn how to make a correct diagnosis of spinal stenosis using different imaging modalities.  
3. To identify imaging features of spinal stenosis that determine outcome and treatment strategies.

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**E³ - ECR Academies: Spinal Imaging**

**E³ 919**  
Degenerative cervical spine

**A-433 08:30**  
Chairman’s introduction  
V.N. Cassar-Pullicino; Oswestry/UK

**A-434 08:35**  
A. Normal ageing process  
C.W.A. Pfirrmann; Zurich/CH

**Learning Objectives:**  
1. To understand normal ageing process.  
2. To describe biomechanical spinal changes with ageing.  
3. To learn MR age-related findings.
### Postgraduate Educational Programme

**ESR meets Belgium**

**EM 1**

Emergency radiology

**Presiding:**
G.M. Villeirs; Gent/BE  
P.M. Parizel; Antwerp/BE

**A-440 10:30**

**Introduction**
G. Villeirs; Gent/BE

**Session Objectives:**
1. To learn more about various topics presented by eminent Belgian radiologists.
2. To illustrate imaging applications in the Belgian context.
3. To show the diversity of emergency radiology.

**A-441 10:45**

**Additional value of dual-energy CT in abdominal emergencies**
E. Danse; Brussels/BE

**Learning Objectives:**
1. To explain the basics of dual-energy CT.
2. To illustrate the application of dual-energy CT in the abdominal emergency setting.
3. To demonstrate the incremental value of dual-energy CT in abdominal emergencies.

**A-442 10:55**

**High-end CT imaging in forensic medicine: experience after recent Brussels terror attacks**
W. Develter; Leuven/BE

**Learning Objectives:**
1. To learn more about the challenges in forensic medicine after major calamities.
2. To explain the need for high-end CT imaging in forensic medicine.
3. To illustrate the value of high-end CT in the aftermath of the Brussels terror attacks.

**A-443 11:15**

**Interlude: Imaging Belgian food**
K. Verstraete; Ghent/BE

**A-444 11:25**

**Imaging genetics and beyond: facial reconstruction and identification**
P. Claes; Leuven/BE

**Learning Objectives:**
1. To demonstrate the application of imaging in genetic assessment.
2. To illustrate the use of imaging for identification.
3. To illustrate the use of imaging after facial reconstruction.

**A-445 11:45**

**Interlude: The Belgian Museum of Radiology**
R. Van Tiggelen; Brussels/BE

**EF 2**

Radiation incidents and accidents in medical imaging and their management (part II)

**Moderators:**
M. Brambilla; Novara/IT  
D.J. Lurie; Aberdeen/UK

**A-446 10:30**

**Chairman’s introduction**
M. Brambilla; Novara/IT

**Session Objectives:**
1. To learn about the common reasons for radiation incidents and accidents in MRI and nuclear medicine departments.
2. To appreciate why we need to manage radiation incidents and accidents properly.

**A-447 10:35**

**Incidents and accidents in MRI**
D.J. Lurie; Aberdeen/UK

**Learning Objectives:**
1. To give an overview of radiation incidents and accidents in MRI.
2. To discuss the lessons learnt from these incidents and accidents.
3. To learn how to manage incidents and accidents in MRI.

**A-448 11:05**

**Radiation incidents and accidents in nuclear medicine**
M. Brambilla; Novara/IT

**Learning Objectives:**
1. To give an overview of radiation incidents and accidents in nuclear medicine.
2. To discuss the lessons learnt from these incidents and accidents.
3. To learn how to manage incidents and accidents in nuclear medicine.

**A-449 11:35**

**Management of incidents and accidents in imaging departments: the role and responsibilities of medical physicists**
V. Tsapaki; Athens/GR

**Learning Objectives:**
1. To provide information about the role of medical physicists in managing incidents and accidents in imaging departments.
2. To identify the duties and responsibilities of medical physicists associated with the management of radiation incidents and accidents.

**PI 1**

Improving efficiency in radiology departments

**Moderators:**
J.A. Brink; Boston, MA/US  
S. Morozov; Moscow/RU

**A-450 10:30**

**A. How to identify radiology productivity bottlenecks?**
S. Morozov; Moscow/RU

**Learning Objectives:**
1. To review the metrics of shared radiology workflow in the domains of efficiency, quality and safety (what).
2. To demonstrate various methods and techniques for total productivity improvement (how).
3. To delineate the roles of individuals and teams in productivity improvement cycle (who).
A-451 10:48
B. How to optimise radiology with big data: Medical Analytics Group (MAG) project
O.S. Pianykh; Newton Highlands, MA/US

Learning Objectives:
1. To highlight the need for big data analysis in radiology management.
2. To provide examples of already implemented data-driven radiology optimisation.
3. To illustrate the challenges of big-data analysis and project implementation.

A-452 11:06
C. How to implement system changes?
G. Paulo; Coimbra/PT

Learning Objectives:
1. To learn about the importance of teamwork towards the establishment of a good work environment.
2. To understand the impact of good communication strategies in increasing staff satisfaction.
3. To discuss about the influence of the organisational culture in professional empowerment.

A-453 11:24
D. Making the business case for patient-centred imaging care
M.H. Maurer; Berne/CH

Learning Objectives:
1. To identify health system priorities around patient-centred care.
2. To develop reporting and improvement programmes that align with health system priorities.
3. To build influence through leadership and performance in patient-centred care.

A-454 10:30
Chairman’s introduction
S. Gaudino; Rome/IT

A-455 10:35
A. MR imaging of the spinal cord: how to do it?
J. Van Goethem; Antwerp/BE

Learning Objectives:
1. To understand the challenges for acquiring high-quality MR images of the spinal cord.
2. To learn current state-of-the-art sequences for spinal cord imaging.
3. To be aware of the importance of advanced neuroimaging techniques for the evaluation of spinal cord diseases.

A-456 11:03
B. Differentiating intradural mass lesions
G. Lycklama a Nijeholt; The Hague/NL

Learning Objectives:
1. To understand how to differentiate intradural-extradural mass lesions from intrinsic spinal cord tumours.
2. To become familiar with the most common types of tumours arising within the spinal canal, both in children and in adults.
3. To learn the typical MR imaging features of these lesions.

A-457 11:31
C. Pattern recognition of non-tumoural spinal cord lesions
M.M. Thurnher; Vienna/AT

Learning Objectives:
1. To become familiar with the epidemiology and clinical manifestations of the most common diseases affecting the spinal cord.
2. To recognise the most common intramedullary lesions.
3. To learn how to identify these lesions based on the pattern of involvement.

12:15 - 13:00
Room A

Headline Session
ESOR Ten-Year Anniversary Session

A-458 12:15
Introduction
P.M. Parizel; Antwerp/BE

A-459 12:20
10 years of ESOR
N. Gourtsoyiannis; Athens/GR

A-460 12:25
How did ESOR influence my professional development
O. Abeyakoon; Cambridge/UK

A-461 12:32
Teaching in ESOR: tutoring scholars and fellows
C. Loewe; Vienna/AT

12:39
Celebration

12:30 - 13:30
Room C

E³ - The Beauty of Basic Knowledge: Chest Imaging

E³ 25C
Reporting interstitial lung disease made easy
Moderator:
N. Howarth; Chêne-Bougeries/CH

A-462 12:30
A. Five golden rules
S.R. Desai; London/UK

Learning Objectives:
1. To review diagnostic signs of common interstitial lung disease.
2. To learn how to avoid overdiagnosis.
3. To know the limitations of radiological diagnoses.

A-463 13:00
B. Multidisciplinary approach to diagnosis in interstitial lung disease: the role of HRCT
N. Sverzellati; Parma/IT

Learning Objectives:
1. To understand the role of radiologists in diagnosing interstitial lung disease.
2. To know the limitations of radiological diagnoses.
3. To understand what to say when the diagnosis is not obvious.
Postgraduate Educational Programme

12:30 - 13:30 | Room D

E³ 24C
Bone tumours
Moderator:
V.I. Cassar-Pullicino; Oswestry/UK

A-464 12:30
Bone tumours
K. Wörtler; Munich/DE

Learning Objectives:
1. To become familiar with the imaging features of benign and malignant bone tumours.
2. To appreciate their imaging characteristic hallmarks on plain film radiography.
3. To learn how best to use imaging modalities in differential diagnosis.

13:00 - 13:30 | Room A

Headline Session

HL 2
Josef Lissner Honorary Lecture
Presiding:
P.M. Parizel; Antwerp/BE

A-465 13:00
The future of CT: from hardware to software
M. Prokop; Nijmegen/NL

14:00 - 15:30 | Room K

EFRS meets Belgium

EM 4
EFRS meets Belgium
Presiding:
S. Bogaert; Ghent/BE
H.H. Hjølmy; Oslo/NO
A. Tempels; Lodelinsart/BE

Moderators:
G. Alleman; Beerem/BE
J.-L. Greffe; Lodelinsart/BE

A-466/A-467/A-468 14:00
Introduction
H.H. Hjølmy; Oslo/NO, S. Bogaert; Ghent/BE
A. Tempels; Lodelinsart/BE

Session Objective:
1. To give an overview of Belgian radiographers and the radiographers' profession in Belgium.

A-469 14:05
A picture of the radiographers' profession and education
P. Van Laer; Lovendegem/BE

Learning Objectives:
1. To learn about the education system for radiographers in Belgium.
2. To understand the history of the profession and the complexity of the legislation system in Belgium.
3. To become familiar with what has changed in Belgium in the last five years and what aims are to be achieved in the near future.

A-470 14:23
Belgium: the beautiful 'city'
K. Van Belle; Sint-Andries/BE

Learning Objectives:
1. To arouse curiosity about Belgian cultural highlights.
2. To explain how Belgium sees Belgium.
3. To discuss how the world sees Belgium.
4. To understand how Belgium sees the world.

A-471 14:41
Patient safety and quality improvement in Belgian radiology departments
S. Germonpré; Brussels/BE

Learning Objectives:
1. To promote the implementation of best professional practices in patient positioning; knowledge, attitudes, organisational factors.
2. To highlight the usefulness of the UTAUT model to study professional behaviour outside the context of new technology.

A-472 14:59
Radiation protection in Belgium
O. Bran; Louvain-la-Neuve/BE
The ACR Dose Index Registry
R.L. Morin; Jacksonville, FL/US

Learning Objective:
1. To learn the impact of the ACR Dose Index Registry in the clinical practice.

15:15
Questions and answers

Professional Issues and Economics in Radiology (PIER)

PI 2
Perspectives on radiology equipment management
Moderators:
B. Brkljačić; Zagreb/HR
P. Leander; Malmö/SE

A-478 14:00
A. Renewal of equipment and procurement: central vs local procedures
B. Brkljačić; Zagreb/HR

Learning Objectives:
1. To discuss the need for the regular renewal of radiology equipment.
2. To present controversies in public procurement of radiology equipment.
3. To discuss advantages and disadvantages of different types of procurement.

A-479 14:18
B. Utilisation of equipment: what is appropriate? The public healthcare system’s perspective
P. Leander; Malmö/SE

Learning Objectives:
1. To describe how a cost analysis of system utilisation can be performed.
2. To discuss how other factors than economical influence the utilisation.
3. To come to a reasonable common goal of utilisation between the radiological department and the public funder.

A-480 14:36
C. Utilisation of equipment: what is appropriate? The private healthcare system’s perspective
A. Palkó; Szeged/HU

Learning Objectives:
1. To understand the basics of cost management.
2. To learn about optimisation in scheduling and patient involvement.
3. To present best-practice maintenance concepts.

A-481 14:54
D. Radiology: a cost factor? The hospital manager's perspective
P. Garel; Brussels/BEL

Learning Objectives:
1. To discuss reasons for in-house vs outsourced radiology.
2. To explain cost-models (e.g. internal budgeting).
3. To discuss new concepts for integrated care and the consequences for radiology.

15:12
Panel discussion

Joint Session of the ESR and ESMRMB

ESR/ESMRMB
MR imaging biomarkers: what we have and what we need
Moderators:
D. Sappey-Marinier; Lyon/FR
M. Smits; Rotterdam/NL

A-482 14:00
Preclinical MRI: multimodal markers for neuroscience drug discovery?
M. von Kienlin; Basle/CH

Learning Objectives:
1. To become familiar with potential MR biomarkers for diagnosis and therapeutic monitoring of specific brain diseases.
2. To learn about advanced MR techniques and methods providing quantitative biomarkers.
3. To learn how MR imaging biomarkers can help to evaluate specific effects of novel pharmaceuticals upon brain function in preclinical animal models.
4. To understand how brain imaging markers could be included in clinical trials.

A-483 14:30
Clinical MRI: whole-body markers for cancer detection/response
F. De Keyzer; Leuven/BEL

Learning Objectives:
1. To become familiar with the biomarker content of WB-MRI protocols.
2. To review the literature showing that WB-MRI biomarkers can aid in the detection and characterisation of cancers and by extension to response assessment to therapies.
3. To highlight that WB-MRI BM qualification requires frameworks for development and that we are now at efficacy testing stage.

A-484 15:00
Molecular MRI: where are the limits for MRI biomarkers?
L. Schröder; Berlin/DE

Learning Objectives:
1. To become familiar with the wide range of new potential markers provided by new contrast mechanisms for MR imaging, in particular chemical exchange saturation transfer (CEST) and hyperpolarisation.
2. To understand the role, benefits and limitations of molecular imaging.
3. To learn about the potential future use of targeted contrast agents that combine the benefits from both CEST and the sensitivity gain of hyperpolarised agents.

E³ - ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists

E³ 1221
Basic breast imaging

A-485 16:00
A. Calcifications in mammography
C.S. Balleyguier; Villejuif/FR

Learning Objectives:
1. To become familiar with different types of calcifications.
2. To learn the differential diagnosis of different calcifications.
3. To learn the different tools to biopsy calcification clusters.

A-486 16:45
B. Asymmetry and architectural distortion
L.J. Pina Insausti; Pamplona/ES

Learning Objectives:
1. To understand the concept of asymmetry and architectural distortion.
2. To become familiar with the respective imaging features.
3. To learn about the diagnostic approach using all breast imaging modalities.
New Horizons Session

**NH 12**
The increasing clinical impact of MR/PET

**A-487 16:00**
Chairman's introduction
L. Umutlu; Essen/DE

**Session Objectives:**
1. To understand the increasing clinical impact of MR/PET in diverse application fields.
2. To understand the benefits of MR/PET over PET/CT in paediatric and head and neck imaging.
3. To become familiar with indications for MR/PET in cardiac and musculoskeletal imaging.

**A-488 16:05**
MR/PET in paediatric oncology?
P.D. Humphries; London/UK

**Learning Objectives:**
1. To understand the gain of using MRI instead of CT together with PET.
2. To become familiar with current application fields in paediatric imaging.
3. To give an insight into future application fields.

**A-489 16:25**
MR/PET in cardiac imaging?
M. Dewey; Berlin/DE

**Learning Objectives:**
1. To understand the gain of using hybrid MR/PET in cardiac imaging.
2. To become familiar with current application fields in cardiac imaging.
3. To give an insight into the clinical impact and potential future applications of MR/PET in cardiac imaging.

**A-490 16:45**
MR/PET in head and neck imaging?
M. Becker; Geneva/CH

**Learning Objectives:**
1. To understand the gain of using MRI instead of CT together with PET.
2. To become familiar with current application fields in head and neck imaging.
3. To give an insight into the clinical impact of MR/PET in head and neck imaging.

**A-491 17:00**
MR/PET in musculoskeletal imaging?
G. Andreisek; Münsterlingen/CH

**Learning Objectives:**
1. To understand the gain of using hybrid MR/PET in MSK imaging.
2. To become familiar with current application fields in MSK imaging.
3. To give an insight into the clinical impact and potential future applications of MR/PET in musculoskeletal imaging.

17:15
Panel discussion: Are we ready to fully integrate MR/PET into clinical diagnostic work-up?

Chest

**RC 1204**
Thoracic manifestations of systemic disease
Moderator:
A. Chodorowska; Wroclaw/PL

**A-492 16:00**
A. Systemic sclerosis
M. Silva; Parma/IT

**Learning Objectives:**
1. To learn about the typical radiological appearances.
2. To be aware of the clinical relevance of scoring.
3. To know how vascular complications affect patient prognosis.

**A-493 16:30**
B. Granulomatosis and polyangiitis
S. Bayraktaroglu; Izmir/TR

**Learning Objectives:**
1. To learn about the radiological appearances of small-vessels vasculitis.
2. To learn how clinical and radiological features help in differential diagnosis.
3. To appreciate the actual role of imaging in assessing disease activity.

**A-494 17:00**
C. Histiocytosis and lymphangioleiomyomatosis
A. Oikonomou; Toronto, ON/CA

**Learning Objectives:**
1. To learn about the typical radiological features and complications.
2. To discuss the possible overlap with other cystic and non-cystic lung diseases.
3. To appreciate the clinical relevance of differentiating these two entities.

EDiR talk

European Diploma in Radiology: essential tips for success

**A-495 16:00**
Chairman's introduction: an overview of the EDiR
J. Vilar; Valencia/ES

**A-496 16:10**
Are you ready for the EDiR? To view some practical cases: multiple response questions
P.C. Maly Sundgren; Lund/SE, A. Pons; Barcelona/ES

**A-497 16:30**
Are you ready for the EDiR? To view some practical cases: short cases
P.C. Maly Sundgren; Lund/SE, A. Pons; Barcelona/ES

**A-498 16:50**
Are you ready for the EDiR? To view some practical cases: CORE cases
L. McKnight; Langland/UK, A. Pons; Barcelona/ES

17:10
Any questions?

**A-499 17:15**
How to prepare for the EDiR? To learn essential hints to prepare for the EDiR
O. Dicle; Izmir/TR, A. Pons; Barcelona/ES

17:25
Any questions?
Postgraduate Educational Programme

Friday

16:00 - 17:30  Room Z

**Headline Session**

**ER**

**European Radiology 25th Anniversary Session**

**Moderators:**
- M.F. Reiser; Munich/DE
- A.L. Baert; Kessel-Lo/BE
- A.K. Dixon; Cambridge/UK

**A-500 16:00**

**Introduction: 25 years of European Radiology**

M.F. Reiser; Munich/DE

**A-501 16:05**

**How to present research data consistently in a scientific paper**

M. Laniado; Dresden/DE

**A-502 16:13**

**Cost considerations regarding an integrated CT-PET system**

G.K. von Schulthess; Zurich/CH

**A-503 16:21**

**Role of contrast-enhanced helical CT in the evaluation of acute thoracic aortic injuries after blunt chest trauma**

M. Scaglione; Castel Volturno/IT

**A-504 16:29**

**CT angiography of pulmonary embolism in patients with underlying respiratory disease: impact of multislice CT on image quality and negative predictive value**

M. Rémy-Jardin; Lille/FR

**A-505 16:37**

**CT colonography: effect of experience and training on reader performance**

S. Halligan; London/UK

**A-506 16:45**

**First performance evaluation of a dual-source CT (DSCT) system**

T. Flohr; Forchheim/DE

**A-507 16:53**

**Gd-EOB-DTPA-enhanced magnetic resonance images of hepatocellular carcinoma: correlation with histological grading and portal blood flow**

T. Murakami¹, Y. Imai²; ¹Osaka/JP, ²Ikeda City/JP

**A-508 17:01**

**ESUR prostate MR guidelines 2012**

J.O. Barentsz; Nijmegen/NL

**A-509 17:09**

**Nephrogenic systemic fibrosis and gadolinium-based contrast media: updated ESUR Contrast Medium Safety Committee guidelines**

H. Thomsen; Aalborg/DK

**A-510 17:17**

**Iterative reconstruction techniques for computed tomography Part 1: Technical principles**

M.J. Willemink; Utrecht/NL

17:25

**Awards**

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16:00 - 17:30  Room O

**Paediatric**

**RC 1212**

**Dose reduction: tips and tricks**

**Moderator:**
- C. Granata; Genoa/IT

**A-511 16:00**

**A. Dose reduction in paediatric CT**

D. Aadnevik; Bergen/NO

**Learning Objectives:**
1. To explain the factors that affect patient radiation exposure from CT exams.
2. To discuss the importance of dose reduction in paediatric CT.
3. To give an overview of CT dose reduction strategies and techniques.

**A-512 16:30**

**B. Diagnostic reference levels in paediatric imaging: international recommendations**

R. Seuri; Helsinki/FI

**Learning Objectives:**
1. To discuss the need for establishing diagnostic reference levels (DRLs) in paediatric diagnostic imaging.
2. To give an overview of DRL values for typical paediatric examinations.
3. To understand the way of implementation and use of DRLs in dose reduction and protocol optimisation.

**A-513 17:00**

**C. The impact of dose management systems**

L.A. Rainford; Dublin/IE

**Learning Objectives:**
1. To discuss the importance of dose monitoring in paediatric imaging.
2. To have an overview of the features and functions of dose monitoring systems.
3. To understand the role of dose monitoring systems in the evaluation of population dose and protocol optimisation.

16:00 - 17:30  Room N

**Special Focus Session**

**SF 12a**

**My most scary head and neck mistakes**

**A-514 16:00**

**Chairman’s introduction: Misses, misinterpretations and mistakes**

A. Borges; Lisbon/PT

**Session Objectives:**
1. To become familiar with the most common mistakes in head and neck imaging and their causes.
2. To learn strategies to avoid mistakes.
3. To learn how to deal with different types of mistakes.

**A-515 16:05**

**What I missed and why**

M.G. Mack; Munich/DE

**Learning Objectives:**
1. To become familiar with different types of missed findings.
2. To appreciate common radiologist’s bias.
3. To learn strategies to avoid different categories of misses.

**A-516 16:28**

**What I misinterpreted and why**

L. Ginsberg; Houston, TX/US

**Learning Objectives:**
1. To appreciate different causes of misinterpretation of imaging findings in the head and neck.
2. To review common misinterpreted findings in the head and neck.
3. To learn how to avoid misinterpretations.
How to deal with mistakes: the report, the radiologist and the department
S.J. Golding; Oxford/UK

Learning Objectives:
1. To learn how to deal with mistakes: your own and other’s.
2. To understand the value of clinical audits.
3. To become familiar with different steps of clinical action.

Panel discussion: Mistakes - can they be avoided and how?

A-517 16:51

Panel discussion: Multiparametric MRI of the female pelvis - should it replace tailored protocols?

SF 12b Challenges in the diagnosis of acute appendicitis

16:00 - 17:30  Room E1

Special Focus Session

SF 12b Challenges in the diagnosis of acute appendicitis

A-522 16:00
Chairman’s introduction
J. Stoker; Amsterdam/NL

Session Objectives:
1. To become familiar with the topics on imaging in acute appendicitis discussed in this session.
2. To learn the optimal diagnostic strategy in diagnosing acute appendicitis in specific populations (paediatric, pregnant, obese, elderly).
3. To understand the role of imaging in the management of acute appendicitis in specific populations (paediatric, pregnant, obese, elderly).

A-523 16:05
Acute appendicitis during pregnancy: high-end ultrasonography, ultra-low dose CT or unenhanced MRI?
P.-A. Poletti; Geneva/CH

Learning Objectives:
1. To learn about the pros and cons of high-end ultrasonography, ultra-low dose CT and unenhanced MRI in diagnosing appendicitis in pregnancy.
2. To appreciate the role of high-end ultrasonography, ultra-low dose CT and unenhanced MRI in diagnosing appendicitis in pregnancy.
3. To understand the role of high-end ultrasonography, ultra-low dose CT and unenhanced MRI in relation to clinical findings to differentiate between diagnosing appendicitis uncomplicated vs complicated appendicitis in pregnancy.

A-524 16:23
Imaging algorithms for acute appendicitis in difficult patients (obese, elderly, other)
J.B.C.M. Puylaert; The Hague/NL

Learning Objectives:
1. To learn about the pros and cons of high-end ultrasonography, ultra-low dose CT and MRI in diagnosing appendicitis in ‘difficult’ patients.
2. To appreciate the role of high-end ultrasonography, ultra-low dose CT and unenhanced MRI in diagnosing appendicitis in ‘difficult’ patients.
3. To understand the role of high-end ultrasonography, ultra-low dose CT and unenhanced MRI in relation to clinical findings to differentiate between uncomplicated vs complicated appendicitis in ‘difficult’ patients.
4. To understand the pros and cons of different imaging strategies in diagnosing appendicitis in ‘difficult’ patients.

A-525 16:41
What is the cost-effectiveness of different imaging modalities in acute appendicitis?
M. Zins; Paris/FR

Learning Objectives:
1. To learn about the level of evidence concerning cost effectiveness of imaging in acute appendicitis.
2. To learn about the cost effectiveness of high-end ultrasonography, ultra-low dose CT and MRI in diagnosing appendicitis (including uncomplicated vs complicated).
3. To understand the cost-effectiveness of different imaging strategies in diagnosing appendicitis in the general population, in pregnancy and in ‘difficult’ patients.
A-526 16:59
Evidence-based treatment of acute appendicitis: conservative vs surgical management?
M.A. Boermeester; Amsterdam/NL

Learning Objectives:
1. To learn about the evidence concerning conservative vs surgical management in acute appendicitis.
2. To learn about the role of clinical history, physical examination and laboratory findings in the management of acute appendicitis.
3. To appreciate the role of imaging in management of acute appendicitis (including uncomplicated vs complicated).

17:12
Panel discussion: Optimised imaging algorithms in the diagnosis of acute appendicitis

A-531 16:30
Vascular distribution territories: arterial and venous
A. Dörrler, Erlangen/DE

Learning Objectives:
1. To become familiar with a comprehensive vascular anatomy of the brain.
2. To recognise patterns of various pathologies attributed to vascular distribution territories.
3. To recognise the different imaging patterns in stroke and their prognostic value.

A-532 17:00
The basal ganglia of the brain revisited
D. Zlatareva; Sofia/BG

Learning Objectives:
1. To recall the basal ganglia nuclei and their topography.
2. To identify the classic functional organisation of the basal ganglia and its current concepts.
3. To elucidate the pathophysiology of various movement disorders.

A-536 16:51
C. Assessment of response using functional MR and CT imaging: the essentials
C.A. Cuénod; Paris/FR

Learning Objectives:
1. To learn about the portfolio of functional imaging response methods in CT and MRI.
2. To understand the current clinical value of each technique.
3. To appreciate potential advantages compared to PERCIST.

A-534 16:05
A. RECIST made easy
A.G. Rockall; London/UK

Learning Objectives:
1. To understand the basic idea of RECIST.
2. To understand how to use RECIST in daily clinical practice.
3. To become familiar with the detailed rules of RECIST.

A-535 16:28
B. PERCIST: PET response criteria
C.C. Cyran; Munich/DE

Learning Objectives:
1. To learn about the basic principles of PERCIST.
2. To understand how to use PERCIST for structured quantitative research and clinical reporting.
3. To appreciate the advantages of PERCIST over mere morphological methods.

ESR/ESOR 3
Radiologic anatomy: neuro
Moderator:
M.A. Lucic; Sremska Kamenica/RS

A-530 16:00
Cortical anatomy and primary functional areas
T.A. Youssry; London/UK

Learning Objectives:
1. To understand the basic concepts of cortical subdivision.
2. To be able to identify critical cortical structures.
3. To learn to localise primary functional areas.

A-533 16:00
Chairman's introduction
P. Brader; Graz/AT

Session Objectives:
1. To understand the correlation of functional imaging evaluation with the pathophysiological effect of treatment on oncological pathology.
2. To understand the necessity of functional imaging for an accurate (early) evaluation of the therapy regimen on the response (or non-response) of oncological disease.
3. To learn about the added value of functional imaging for evaluating treatment (e.g. anti-angiogenic treatment).
4. To learn about the technical principles of functional imaging in correlation with the impact of therapy on tumour cells and neo-vasculature.

A-537 16:14
C. Assessment of response using functional MR and CT imaging: the essentials
C.A. Cuénod; Paris/FR

Learning Objectives:
1. To learn about the portfolio of functional imaging response methods in CT and MRI.
2. To understand the current clinical value of each technique.
3. To appreciate potential advantages compared to PERCIST.

17:14
Panel discussion: When and how will functional imaging overcome morphological assessment?
16:00 - 17:30  Room D

Musculoskeletal

RC 1210
Imaging the hip and thigh

Moderator:
V. Njagulj; Sremska Kamenica/RS

A-537 16:00
A. Femoroacetabular impingement: what is it, how do I image it and does it matter?
R. Sutter; Zurich/CH

Learning Objectives:
1. To understand the mechanism of femoroacetabular impingement.
2. To learn about the imaging findings in patients with femoroacetabular impingement.

A-538 16:30
B. Groin pain in the athlete: what causes it and what does imaging contribute?
M. Maas; Amsterdam/NL

Learning Objectives:
1. To understand the anatomy of the groin region.
2. To learn about the imaging findings in athletes with groin pain.

A-539 17:00
C. Muscle injury of the hip and thigh
M.-A. Weber; Heidelberg/DE

Learning Objectives:
1. To understand the imaging patterns of muscle injury at the hip and thigh.
2. To learn about grading and prognostic values of muscle injuries.

16:00 - 17:30  Room G

Multidisciplinary Session

MS 12
Transcatheter aortic valve implantation (TAVI)

A-540 16:00
Chairman’s introduction: A brief history of TAVI
A. Cribier; Rouen/FR

Session Objectives:
1. To understand the clinical needs of non-surgical techniques for aortic valve replacement.
2. To understand the difficult process of developing a breakthrough innovative technology in interventional cardiology.
3. To understand the importance of “translational research” for the success and expansion of TAVI.

A-541 16:15
The TAVI procedure
H. Eltchaninoff; Rouen/FR

Learning Objectives:
1. To learn the current indications of TAVI and the process of patient selection.
2. To learn the different phases of the procedure using the transfemoral approach.
3. To learn the prevention and treatment of complications.

A-542 16:30
The cardiac surgeon’s perspective
P.-Y. Litzler; Rouen/FR

Learning Objectives:
1. To learn the different mini-surgical approaches for TAVI and the current indications.
2. To learn the different phases of TAVI using the mini-surgical approaches.
3. To learn from a cardiac surgeon the perspectives of surgical valve replacement in the TAVI era.

A-543 16:45
Pre-interventional assessment by CT
J.-N. Dacher; Rouen/FR

Learning Objectives:
1. To learn about the technical principles of MDCT acquisition in pre-TAVI assessment.
2. To learn about the advantages of a structured MDCT report (including key images) validated by the cardiology team.
3. To know the medical impact of the radiology team in the management of TAVI patients.

A-544 16:58
Why use dual-energy CT in TAVI patients?
B. Dubourg; Rouen/FR

Learning Objectives:
1. To know how to decrease the dose of iodine with new CT technology including dual-energy.
2. To know how to control the radiation dose with new CT technology.
3. To know how to characterise the myocardium with new CT technology.

A-545 17:11
Common and uncommon complications seen by CT
J. Caudron; Rouen/FR

Learning Objectives:
1. To learn the basic cardiac CTA protocol in implanted patients.
2. To know the normal CT findings in implanted patients.
3. To know the complications of TAVI and potential yield of CT.

17:24
Multidisciplinary case presentation and discussion

16:00 - 17:30  Room K

Pros & Cons Session

PS 1227
Providing an effective ultrasound service: how and by whom?

Moderators:
L.E. Derchi; Genoa/IT
V. Gibbs; Bristol/UK

A-546 16:00
A. Who provides US services? The situation in Europe
H. Edwards; Stevenage/UK

Learning Objectives:
1. To discuss the three models of ultrasound scanning undertaken across Europe.
2. To outline the differences in ultrasound services provided across European countries.

A-547 16:15
B. Should US services be provided by radiologists? (performed and reported on)
M. Claudon; Vandoeuvre-les-Nancy/FR

Learning Objectives:
1. To discuss why US examinations should be performed directly by the radiologist.
2. To underline why US examinations should be reported only by the radiologist.
A-548 16:30
C. Can or should US services be provided by radiographers/sonographers? Educational needs
G. Harrison; London/UK

Learning Objectives:
1. To outline ultrasound training programmes and curricula in countries where US is undertaken and reported by sonographers.
2. To compare this with other international training models available.

A-549 16:45
D. Is it possible to standardise a 'real-time' examination? Sometimes it is possible, but not always
C. Nyhsen; Sunderland/UK

Learning Objectives:
1. To discuss when and how this is possible.
2. To be able to recognise when an additional examination by the radiologist is needed.

A-550/A-551 17:00
Discussion on the pros and cons
L.E. Derchi; Genoa/IT
V. Gibbs; Bristol/UK

16:00 - 17:30 Room M 1
EuroSafe Imaging Session

EU 5
EuroSafe Imaging Stars
Moderators:
L. Bonomo; Rome/IT
S. Ebdon-Jackson; Didcot/UK

A-552 16:00
Value and limitations of the ‘Is your Imaging EuroSafe’ surveys
L. Bonomo; Rome/IT

Learning Objectives:
1. To learn about the value of EuroSafe Imaging surveys.
2. To understand how useful the EuroSafe Imaging surveys’ findings in our daily clinical activity can be.
3. To understand how data can be collected and what actions are needed to enhance radiation protection of patients.

A-553 16:15
Integration of the ‘EuroSafe Imaging Clinical Audit Pack’ in imaging departments
B.E. Kelly; Belfast/UK

Learning Objectives:
1. To gain an appreciation of the place for audit in radiological practice in the 21st century.
2. To understand the difference between audit and research.
3. To appreciate the importance of re-audit in the audit spiral (helix).

A-554 16:30
Benchmarking: why, how and when?
J. Hakumäki, R.L. Vanninen; Kuopio/FI

Learning Objectives:
1. To understand why to benchmark radiation doses among institutions.
2. To learn how to collect and compare data and how to be compatible with the EuroSafe Imaging initiative.
3. To understand the scheduling and motives for benchmarking.

A-555 16:45
The value of achieving star status
D. Akata; Ankara/TR

Learning Objectives:
1. To cause awareness of the basic concepts for safe imaging in order to harmonize patient safety standards.
2. To understand criteria and goals to perform the best clinical practice in radiation protection.
3. To learn to do self-auditing and to identify strengths and weaknesses.
4. To gain an insight in the network of imaging departments committed to best practice in radiation protection for future cooperation in projects.

A-556 17:00
How to improve the EuroSafe Imaging Stars concept?
L. Donoso; Barcelona/ES

Learning Objectives:
1. To review the current criteria for the different levels of accreditation.
2. To present the experience and the lessons learned after the first year of implementation.
3. To discuss the possible ways for the improvement of the EuroSafe Imaging Stars initiative.

A-557 17:15
Improving the integration of radiation protection in the clinical setting
G. Frija; Paris/FR

Learning Objectives:
1. To clarify the concept of optimisation in relation to the clinical indication.
2. To show why local diagnostic reference levels are appropriate.

16:00 - 17:30 Room M 2
Professional Issues and Economics in Radiology (PIER)

PI 3
Tailoring radiology departments towards patients’ needs
Moderators:
C.D. Becker; Geneva/CH
N.N.

A-558 16:00
A. Visibility of radiology
N.H. Strickland; London/UK

Learning Objectives:
1. To discuss ways of raising the visibility of radiology with our clinical colleagues.
2. To explore the pros and cons of raising the visibility of radiology with patients.
3. To consider how to make radiology the centre of managers’ vision.

A-559 16:18
B. Outsourcing in radiology: costs and quality matters
A. Giovagnoni; Ancona/IT

Learning Objectives:
1. To define the various types of outsourcing and discussing advantages and disadvantages.
2. To know and analyse the different stages of the outsourcing process.
3. To analyse the legal issues and professional responsibility.

A-560 16:36
C. Demonstrating the added value of the radiologist: the European approach
P.M.A. van Ooijen; Groningen/NL

Learning Objectives:
1. To know and acknowledge which disruptive technologies will influence future radiology.
2. To know about different workload distribution models between professionals.
3. To determine new possibilities for radiology to add value to patient care.
A-561 16:54
D. Demonstrating the added value of the radiologist: the US/Canadian approach
G. McGinty; New York, NY/US

Learning Objectives:
1. To see the change of radiology as a discipline over the last decades and threats out of this.
2. To learn about opportunities of radiology today.
3. To understand about the continuity of care and the role of radiology in this context.

17:12
Panel discussion

16:00 - 17:30  Room M 3
Interventional Radiology

RC 1209
Portal hypertension and interventional radiology (IR)

A-562 16:00
Chairman's introduction
V. Vilgrain; Clichy/FR

Session Objectives:
1. To appreciate the role of multidisciplinary treatment of portal hypertension.
2. To learn about imaging and intervention in portal hypertension.
3. To discuss outcomes of interventions in portal hypertension.

A-563 16:05
A. Imaging of portal hypertension
I. Bargellini; Pisa/IT

Learning Objectives:
1. To appreciate imaging features of portal hypertension.
2. To discuss the appropriate choice and timing of imaging technique in investigation of portal hypertension and its complications.
3. To learn about relevant findings that influence therapy choice in portal hypertension.

A-564 16:28
B. Embolisation of varices and splenic artery in portal hypertension
I.E. Keussen; Lund/SE

Learning Objectives:
1. To discuss the rationale for embolisation.
2. To learn about the selection of technique and choice of material.
3. To understand outcomes from embolisation techniques.

A-565 16:51
C. Transjugular intrahepatic portosystemic shunt (TIPS): critical appraisal of techniques and guidelines for treatment
A. Krajina; Hradec Králové/CZ

Learning Objectives:
1. To learn about the selection of patients for TIPS.
2. To learn about the techniques for TIPS formation.
3. To discuss outcomes of TIPS and role of imaging surveillance.

17:14
Panel discussion: Appropriate selection of patients for IR including the role of balloon-occluded retrograde transvenous obliteration (BRTO) for gastric varices
Joint Session of the ESR and the EANM

ESR/EANM
Common diagnostic guidelines on diabetic foot, osteomyelitis and prosthetic joint infection

Moderators:
V.N. Cassar-Pullicino; Oswestry/UK
A. Signore; Rome/IT

A-570 16:00
Guidelines on osteomyelitis (part 1)
L.M. Sconfienza; San Donato Milanese/IT

Learning Objectives:
1. To learn about the current literature evidence on the diagnosis of osteomyelitis using radiological and nuclear medicine modalities.
2. To understand the consensus process that led to build common diagnostic flowcharts on osteomyelitis.
3. To become familiar with diagnostic flowcharts on osteomyelitis involving radiological and nuclear medicine modalities.

A-571 16:15
Guidelines on osteomyelitis (part 2)
A. Glaudemans; Groningen/NL

Learning Objectives:
1. To learn about the current literature evidence on the diagnosis of osteomyelitis using radiological and nuclear medicine modalities.
2. To understand the consensus process that led to build common diagnostic flowcharts on osteomyelitis.
3. To become familiar with diagnostic flowcharts on osteomyelitis involving radiological and nuclear medicine modalities.

A-572 16:30
Guidelines on prosthetic joint infection (part 1)
L.M. Sconfienza; San Donato Milanese/IT

Learning Objectives:
1. To learn about the current literature evidence on the diagnosis of prosthetic joint infection using radiological and nuclear medicine modalities.
2. To understand the consensus process that led to build common diagnostic flowcharts on prosthetic joint infection.
3. To become familiar with diagnostic flowcharts on prosthetic joint infections involving radiological and nuclear medicine modalities.

A-573 16:45
Guidelines on prosthetic joint infection (part 2)
O. Gheysens; Leuven/BEL

Learning Objectives:
1. To learn about the current literature evidence on the diagnosis of prosthetic joint infection using radiological and nuclear medicine modalities.
2. To understand the consensus process that led to build common diagnostic flowcharts on prosthetic joint infection.
3. To become familiar with diagnostic flowcharts on prosthetic joint infections involving radiological and nuclear medicine modalities.

A-574 17:00
Guidelines on diabetic foot complications (part 1)
A. Leone; Rome/IT

Learning Objectives:
1. To learn about the current literature evidence on the diagnosis of diabetic foot complications using radiological and nuclear medicine modalities.
2. To understand the consensus process that led to build common diagnostic flowcharts on diabetic foot complications.
3. To become familiar with diagnostic flowcharts on diabetic foot complications involving radiological and nuclear medicine modalities.
08:30 - 10:00  Room A

E³ - ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists

E³ 1321
Imaging of abdominal tumours

A-576 08:30
A. Liver tumours
A. Luciani; Créteil/FR

Learning Objectives:
1. To become familiar with the differential diagnosis.
2. To identify the key imaging findings.

A-577 09:15
B. Pancreatic tumours
C. Matos; Lisbon/PT

Learning Objectives:
1. To become familiar with the differential diagnosis.
2. To identify the key imaging findings.

08:30 - 10:00  Room B

GI Tract

RC 1301
Difficult challenges in imaging the acute abdomen
Moderator:
S.K. Puri; New Delhi/IN

A-578 08:30
A. Perforation of the GI tract
V. Maniatis; Aabenraa/DK

Learning Objectives:
1. To learn about the main causes and clinical symptoms of GI tract perforation.
2. To become familiar with the imaging methods used to detect GI tract perforation and with relevant diagnostic algorithms.
3. To appreciate the important imaging appearances indicative of GI tract perforation. What should radiologists not miss?

A-579 09:00
B. Bowel obstruction
A.J.B.S. Madureira; Porto/PT

Learning Objectives:
1. To learn about the different types and causes of bowel obstruction.
2. To become familiar with relevant imaging signs in both small and large bowel obstruction including complications.
3. To appreciate the most widely used imaging approach for detection and evaluation of bowel obstruction.

A-580 09:30
C. Acute biliary conditions
C.D. Becker; Geneva/CH

Learning Objectives:
1. To learn about the most common pathologies leading to acute biliary conditions.
2. To become familiar with the relevant multimodality imaging appearances in this group of patients.
3. To appreciate the role of interventional radiology in the management of these conditions.

08:30 - 10:00  Room C

Special Focus Session

SF 13a
Cases I'll never forget in chest imaging

A-581 08:30
Chairman's Introduction
A.P. Parkar; Bergen/NO

Session Objectives:
1. To become familiar with the common mistakes in chest imaging.
2. To understand the value and limitation of pattern recognition.
3. To appreciate the value of combing pattern recognition and clinical information.

A-582 08:34
A. Nodules (0.4-2 cm)
A.R. Larici; Rome/IT

Learning Objectives:
1. To understand the anatomical and pathological basis.
2. To learn about typical diagnoses and differentials.
3. To appreciate typical caveats and pitfalls.

A-583 08:43
B. Masses and consolidation (> 2 cm)
C.P. Heussel; Heidelberg/DE

Learning Objectives:
1. To understand the anatomical and pathological basis.
2. To learn about typical diagnoses and differentials.
3. To appreciate typical caveats and pitfalls.

A-584 08:52
C. Ground glass opacity
H.P. Revel; Paris/FR

Learning Objectives:
1. To understand the anatomical and pathological basis.
2. To learn about typical diagnoses and differentials.
3. To appreciate typical caveats and pitfalls.

A-585 09:01
D. Reticular pattern
J. Coolen; Leuven/BE

Learning Objectives:
1. To understand the anatomical and pathological basis.
2. To learn about typical diagnoses and differentials.
3. To appreciate typical caveats and pitfalls.

A-586 09:10
E. Cystic pattern
S.R. Desai; London/UK

Learning Objectives:
1. To understand the anatomical and pathological basis.
2. To learn about typical diagnoses and differentials.
3. To appreciate typical caveats and pitfalls.

A-587 09:19
F. Airway abnormalities
E. Castañer; Sabadell/ES

Learning Objectives:
1. To understand the anatomical and pathological basis.
2. To learn about typical diagnoses and differentials.
3. To appreciate typical caveats and pitfalls.

A-588 09:28
G. Vascular abnormalities
M. Das; Maastricht/NL

Learning Objectives:
1. To understand the anatomical and pathological basis.
2. To learn about typical diagnoses and differentials.
3. To appreciate typical caveats and pitfalls.
A-589 09:37
Pleural disease
C. Beigelman; Lausanne/CH

Learning Objectives:
1. To understand the anatomical and pathological basis.
2. To learn about typical diagnoses and differentials.
3. To appreciate typical caveats and pitfalls.

09:46
Panel discussion: How to avoid common mistakes in the interpretation of chest imaging?

08:30 - 10:00  Room Z

Joint Session of the ESR and the CIRSE

Interventional procedures: clinical patient management

08:30
Chairmen's introduction
E. Brountzos; Athens/GR
L. Donoso; Barcelona/ES

Session Objectives:
1. To emphasise the importance of getting involved in patient care.
2. To highlight key elements related to patient care in the radiology suite.
3. To understand the importance of including patient care concepts in the interventional radiologists' training.

08:36 BEFORE: pre-intervention procedures and protocols
C. Binkert; Winterthur/CH

Learning Objectives:
1. To become familiar with the main remarks in patient consultation and consent before a procedure.
2. To learn how to perform a relevant clinical evaluation and laboratory testing.
3. To prescribe and interpret the relevant imaging studies.

08:54 DURING: patient management, communication, time out procedure, ... J.I. Bilbao; Pamplona/ES

Learning Objectives:
1. To learn how to fill out the CIRSE safety list.
2. To learn how to monitor the patient during the procedure.
3. To understand the different levels of sedation needed.

09:12 AFTER: patient follow up and discharge procedures
O.M. van Delden; Amsterdam/NL

Learning Objectives:
1. To learn how to prescribe drugs and guidelines for the ward for infection, pain, nausea, nutrition, ...
2. To know how to recognise, detect and treat complications.
3. To learn the relevant clinical and imaging follow up.

09:30 The role of radiographers and nurses in the interventional radiology suite: tasks and duties
C. McLaren; London/UK

Learning Objectives:
1. To understand the importance of the role of radiographers and nurses.
2. To become familiar with the different tasks of radiographers and nurses.
3. To describe the interventional procedures that nurses and radiographers can perform under supervision.

09:48 Discussion

08:30 - 10:00  Room O

Special Focus Session

SF 13b
Cardiac imaging in prevention and screening: who, when and how?

A-590 08:30
Chairman's introduction
T. Leiner; Utrecht/NL

Session Objectives:
1. To recognise and interpret cardiac alterations in athletes, individuals with elevated cardiac risk factors and patients with suspected genetic cardiac disease.
2. To understand when and in whom cardiac imaging is indicated according the best available evidence today.
3. To prescribe practical MR and CT approaches in populations that qualify for prevention and screening using imaging.

A-591 08:35
Cardiac imaging in athletes: what is normal, what is abnormal?
B.K. Velthuis; Utrecht/NL

Learning Objectives:
1. To recognise the spectrum of cardiac alterations due to physical activity and how to differentiate these from disease.
2. To understand the differences in cardiac alterations due to different types of physical activity and training duration.
3. To understand when and in whom cardiac imaging is indicated.

A-592 08:58
Screening of individuals with cardiac risk factors: what to look for?
M. Dewey; Berlin/DE

Learning Objectives:
1. To understand the role of imaging techniques in patients with elevated risk for cardiovascular events.
2. To understand the strengths and weaknesses of different imaging modalities.
3. To understand when and in whom cardiac imaging is indicated.

A-593 09:21
Evidence base and guidelines for screening genetic cardiac diseases
J. Moon; London/UK

Learning Objectives:
1. To review cardiac imaging findings that can provide clinically important information in patients with suspected genetic cardiac disease.
2. To understand when and in whom cardiac imaging is indicated for screening for manifestations of genetic diseases involving the heart.

09:44
Panel discussion: Who, when and how to screen?

08:30 - 10:00  Room N

Head and Neck

RC 1308
Post-treatment imaging of the head and neck

A-594 08:30
Chairman's introduction
H.B. Eggesbø; Oslo/NO

Session Objectives:
1. To become familiar with different ways of treatment.
2. To understand post-surgical and post-RT complications.
3. To know how to follow-up patients in order to depict early recurrence.
A-595 08:35
A. Normal findings after radiotherapy
R. Hermans; Leuven/BE

Learning Objectives:
1. To get acquainted with changes in tissues during and after radiotherapy.
2. To understand expected changes after radiotherapy in CT and MR imaging.
3. To recognise treatment complications from expected tissue changes after radiotherapy.

A-596 08:58
B. Normal findings after surgery
A. Trojanowska; Lublin/PL

Learning Objectives:
1. To get acquainted with most frequent surgical procedures in head and neck.
2. To understand how to evaluate post-surgical patients.
3. To learn how to assess microvascular flaps.

A-597 09:21
C. Treatment monitoring for early detection of recurrence
A.D. King; Hong Kong/HK

Learning Objectives:
1. To get acquainted with problem of recurrence in imaging studies.
2. To understand how to estimate signs of recurrence on CT and MRI.
3. To learn about false positive and false negative findings.

09:44
Panel discussion: What are the challenges in differentiating post-treatment changes from tumour recurrence?

08:30 - 10:00  Studio 2017
Genitourinary

RC 1307
Management of incidental findings in the genitourinary tract
Moderator:
R.H. Oyen; Leuven/BE

A-598 08:30
A. Adrenals
L.E. Derchi; Genoa/IT

Learning Objectives:
1. To understand the definition of incidental findings in adrenal pathology.
2. To learn about the imaging characteristics of common adrenal incidental masses.
3. To become familiar with the algorithm approach and evidence-based recommendations for management of adrenal incidentalomas.

A-599 09:00
B. Kidneys
H.C. Thoeny; Berne/CH

Learning Objectives:
1. To understand the definition of incidental findings in renal pathology.
2. To learn about the imaging characteristics of common renal incidental masses, namely cystic.
3. To become familiar with the algorithm approach and evidence-based recommendations for management of renal incidentalomas.

A-600 09:30
C. Adnexa
C.S. Balleyguier; Villejuif/FR

Learning Objectives:
1. To understand the definition of incidental findings in adnexal pathology.
2. To learn about the imaging characteristics of common adnexal incidental masses.
3. To become familiar with the algorithm approach and evidence-based recommendations for management of adnexal incidentalomas.

08:30 - 10:00  Room L 8
E1 - Rising Stars Programme: EFRS Radiographers’ Basic Session

BR 1
The professional roles of the radiographer

A-601/A-602 08:30
Introduction
H.H. Hjemly; Oslo/NO D. Katsifarakis; Athens/GR

A-603 08:35
Becoming a clinical radiographer: role, role development and specialisation
N.H. Woznitza; London/UK

Learning Objectives:
1. To understand the opportunities for different career pathways across the radiography profession.
2. To be aware of the educational requirements underpinning each of the different careers which will be presented within the session.
3. To support radiographers in making choices about their own career development and career pathway.

A-604 08:53
Becoming a clinical manager
E. Kelly; Galway/IE

Learning Objectives:
1. To understand the opportunities that may be available for clinical managers.
2. To be aware of the requirements and qualifications needed for this role.
3. To support prospective radiographers when choosing a managerial role.

A-605 09:11
Becoming an academic and/or researcher
S.J. MacKay; Liverpool/UK

Learning Objectives:
1. To understand the role of the radiographer as an academic person and researcher.
2. To be aware of the educational requirements underpinning this career pathway.
3. To support radiographers by providing the required information on the opportunities in these fields.

A-606 09:29
Working in industry
P. Doherty; Forchheim/DE

Learning Objectives:
1. To understand the opportunities of working in industry.
2. To be aware of the fast developments that take place in industry and be knowledgeable of the requirements to occupy such a post.
3. To provide the necessary support for radiographers in making the choices to pursue a career in industry.

09:47
Discussion, questions and conclusion
### Postgraduate Educational Programme

**08:30 - 10:00  Room E1**

#### Breast

**RC 1302**  
**Rethinking ductal carcinoma in situ (DCIS)**  
**Moderator:** F. Pediconi; Rome/IT  

**A-607 08:30**  
**A. New radiologic-pathologic knowledge on DCIS**  
**A. Frigerio; Turin/IT**  

**Learning Objectives:**  
1. To learn about different types of DCIS.  
2. To become familiar with risk of developing a cancer.  
3. To appreciate the radiologic-pathologic correlations.

**A-608 09:00**  
**B. Diagnosing DCIS**  
**S. Schrading; Aachen/DE**  

**Learning Objectives:**  
1. To learn about the evidence based on MRI in evaluating DCIS.  
2. To become familiar with different imaging appearance of DCIS.  
3. To appreciate added value of MRI for diagnosis.

**A-609 09:30**  
**C. Reducing overtreatment of DCIS**  
**M.G. Wallis; Cambridge/UK**  

**Learning Objectives:**  
1. To learn about the risk of overdiagnosis and overtreatment.  
2. To become familiar with the risk of avoiding surgery.  
3. To appreciate the prospective for the future.

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**08:30 - 10:00  Room E2**

#### Neuro

**RC 1311**  
**White spots in the brain**  
**Moderator:** E. Maj; Warsaw/PL  

**A-610 08:30**  
**A. White spots and blots in the brain: what are they?**  
**T.A. Yousry; London/UK**  

**Learning Objectives:**  
1. To understand what white spots are.  
2. To make differential diagnoses in brain white spots.  
3. To demonstrate how to study patients with brain white spots.

**A-611 09:00**  
**B. How can I improve my reporting of T2-hyperintense lesions?**  
**A. Rovira-Cañellas; Barcelona/ES**  

**Learning Objectives:**  
1. To understand if it is possible to use a structured report with white brain abnormality.  
2. To learn how to define a comprehensive imaging protocol for those patients.  
3. To appreciate the role of modern imaging techniques for defining white brain hyperintense T2 lesions.

**A-612 09:30**  
**C. Is there a need for quantitative reporting of white matter lesions?**  
**W. van Hecke; Antwerp/BE**  

**Learning Objectives:**  
1. To understand the importance of quantitative analysis in white matter lesions.  
2. To show how to perform the quantitative analysis.  
3. To understand the importance of follow-up in patients with white matter lesions.

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**08:30 - 10:00  Room F1**

#### E³ - European Diploma Prep Sessions

**E³ 1323**  
**Chest**

**A-613 08:30**  
**Chairman's introduction**  
**J. Villar; Valencia/ES**  

**Session Objectives:**  
1. To understand the most important signs in chest imaging.  
2. To learn the imaging features of benign and malignant lesions of the lung.  
3. To become familiar with the imaging appearance of common lesions of the mediastinum, pleura and chest wall.  
4. To understand the role of different imaging modalities including hybrid imaging in diagnosing and staging neoplasms of the chest.

**A-614 08:36**  
**A. Fundamentals of chest imaging**  
**D. Tack; Baudour/BE**  

**Learning Objectives:**  
1. To understand if it is possible to use a structured report with white brain abnormality.  
2. To learn how to define a comprehensive imaging protocol for those patients.  
3. To appreciate the role of modern imaging techniques for defining white brain hyperintense T2 lesions.

**A-615 09:04**  
**B. Inflammation and tumours of the lung**  
**H. Prosch; Vienna/AT**  

**Learning Objectives:**  
1. To understand the imaging features and differential diagnoses of diffuse infiltrative and alveolar lung disease and atelectasis.  
2. To become familiar with thoracic diseases in immunocompetent, immunocompromised and post-transplant patients.  
3. To become familiar with the differentiation of solitary and multiple pulmonary nodules, benign and malignant neoplasms, hyperlucencies and their potential aetiology and evaluation.  
4. To understand the role of different imaging modalities including hybrid imaging in diagnosing and staging neoplasms of the chest.

**A-616 09:32**  
**C. Mediastinum, pleura and chest wall**  
**N. Howarth; Chêne-Bougeries/CH**  

**Learning Objectives:**  
1. To understand the imaging features of common pathologies of the diaphragm, pleura and chest wall on radiography, CT and MRI of the chest.  
2. To learn the imaging features and causes of mediastinal and hilar diseases.  
3. To understand the imaging features of disorders of the pulmonary vascular system and great vessels.  
4. To learn the typical imaging features of the postoperative chest.
08:30 - 10:00 Room F2

Emergency Imaging

**RC 1317**

**Acute pain: hallmark in emergency radiology**

_A-617_ 08:30

Chairman's introduction: Management and therapeutic pathways in patients with acute pain  
D.R. Kool; Nijmegen/NL

_A-618_ 08:35

A. Head  
S. Wirth; Munich/DE

**Learning Objectives:**
1. To become familiar with common clinical conditions resulting in acute headache.  
2. To understand the choice of the best-suited imaging modality.  
3. To learn about typical imaging findings in the most common clinical scenarios.

_A-619_ 09:00

B. Chest  
E. Dick; London/UK

**Learning Objectives:**
1. To become familiar with clinical conditions resulting in acute pain.  
2. To understand which additional data will influence the choice of the correct imaging modality.  
3. To learn about typical imaging findings in patients with acute chest pain.

_A-620_ 09:25

C. Abdomen  
R. Basilico; Chieti/IT

**Learning Objectives:**
1. To become familiar with common clinical conditions resulting in acute abdominal pain.  
2. To understand what clinical information influences the choice of the best-suited imaging modality.  
3. To learn about typical and less typical imaging findings in patients with acute abdominal pain.

09:50

Panel discussion: Where does radiology fit in the pathway?

08:30 - 10:00 Room D

Musculoskeletal

**RC 1310**

**Shoulder MRI: mastering technique and making my report relevant**

_A-621_ 08:30

Chairman's introduction  
J. Kramer; Linz/AT

**Session Objectives:**
1. To understand the level of expertise that patients expect for adequate performance and reading of shoulder MRI.  
2. To gain insight into differentiating normal age-related changes from clinical relevant MR features.

_A-622_ 08:35

A. The normal MRI: techniques and anatomy  
E. Llopis; Valencia/ES

**Learning Objectives:**
1. To become familiar with MRI techniques for imaging the shoulder.  
2. To understand normal MRI shoulder anatomy, and normal variants seen.

09:50

Panel discussion: How does radiology fit in the pathway?
### Professional Challenges Session

#### PC 13a

**Radiography and radiology: more than the sum of their parts**

**A-629 08:30**

Chairman's introduction: Working together (part 1)

P. Bezzina; Msida/MT

**Session Objectives:**
1. To appreciate the challenges facing radiography and radiology.
2. To emphasise the importance of a patient safety culture.
3. To understand the need for care and compassion in medical imaging.

**A-630 08:33**

Chairman's introduction: Working together (part 2)

P.C. Maly Sundgren; Lund/SE

**Session Objectives:**
1. To appreciate the challenges facing radiography and radiology.
2. To emphasise the importance of a patient safety culture.
3. To understand the need for care and compassion in medical imaging.

**A-631 08:37**

Opportunities and challenges facing radiography and radiology

G. Paulo; Coimbra/PT

**Learning Objectives:**
1. To highlight the current challenges facing radiographers and radiologists.
2. To discuss the opportunities for radiographers and radiologists.
3. To suggest approaches to meeting current and future needs for the delivery of effective patient care in clinical departments.

**A-632 09:00**

Patient safety culture: a combined responsibility

S.J. Foley; Dublin/IE

**Learning Objectives:**
2. To discuss the responsibilities for radiographers and radiologists within the Directive.
3. To consider how the Directive can improve the culture of radiation safety within the clinical environment.

**A-633 09:33**

Skills and competences in care and compassion

A. England; Salford/UK

**Learning Objectives:**
1. To focus on the specific aspects of care and compassion within radiography and radiology.
2. To discuss the issue of continuous professional development in care and compassion.
3. To emphasise the importance of care and compassion within training curricula.

**A-634 08:30**

Chairman's introduction

M.G.M. Hunink; Rotterdam/NL

**Session Objectives:**
1. To learn about the silent epidemic of physician burnout.
2. To learn to recognise the symptoms of burnout.
3. To understand what factors contribute to burnout in radiologists.
4. To learn what preventive measures can be taken to prevent burnout in radiologists.
5. To understand what interventions work in treating burnout.

**A-635 08:40**

A personal story

M.F. Berger; Nottwil/CH

**Learning Objectives:**
1. To learn to recognise the early symptoms of burnout in oneself.
2. To understand how life events and work stress in radiology contribute to burnout.
3. To appreciate the challenges in dealing with burnout.
4. To learn how mindfulness can help in prevention and treatment.
5. To appreciate the value of mindfulness in being a better radiologist.

**A-636 09:00**

Mindfulness-based interventions for burnout of physicians

A. Speckens; Nijmegen/NL

**Learning Objectives:**
1. To appreciate the impact of the practice environment and the risk factors that lead to physician burnout.
2. To understand the impact of physician burnout on patient care.
3. To learn what we can do to prevent and treat physician burnout.
4. To learn what the research says about the effectiveness of mindfulness for burnout.
5. To appreciate what leaders can do to enhance the lives of staff and residents.

**A-637 09:25**

Interventions to prevent and treat burnout

B. Trück; Brussels/BE

**Learning Objectives:**
1. To learn what interventions are available to prevent and treat burnout.
2. To experience what mindfulness/meditation can do for you.
3. To appreciate that attention to the present moment enhances feelings of happiness.
4. To appreciate that mindfulness enhances focus in all activities.

**A-638 08:30**

FDG indications in oncology: case-based

K. Riklund; Umea/SE

**Learning Objectives:**
1. To learn about the evidence for common indications.
2. To become familiar with PET and CT findings.
3. To learn about the impact on clinical decision.
A-639 09:00
Non-FDG indications in oncology: case-based
O. Ratib; Geneva/CH

Learning Objectives:
1. To learn about the evidence for common indications.
2. To get familiar with PET and CT findings.
3. To learn about the impact on clinical decision.

A-640 09:30
Pitfalls in PET/CT: case-based
G. Antoch; Düsseldorf/DE

Learning Objectives:
1. To learn about the cause of pitfalls in PET/CT.
2. To get familiar with the appearance of pitfalls in PET/CT.
3. To learn about how to avoid pitfalls in PET/CT.

08:30 - 10:00  Room M 3

E³ - ECR Master Class (Interventional Radiology)

E³ 1326
Image-guided liver interventions: update and level of evidence

Moderator:
P.L. Pereira; Heilbronn/DE

A-641 08:30
A. Hepatocellular carcinoma (HCC)
L. Crocetti; Pisa/IT

Learning Objectives:
1. To evaluate the clinical indication for interventional radiological approaches for HCC.
2. To evaluate pro and contra of endovascular vs percutaneous treatment options.
3. To highlight recent research and emerging developments in the treatment of HCC.

A-642 09:00
B. Liver metastases of colorectal cancer (mCRC)
T.K. Helimberger; Munich/DE

Learning Objectives:
1. To outline the current status of image-guided therapeutic approaches for mCRC.
2. To discuss the application of endovascular vs percutaneous treatment options in different clinical scenarios.
3. To highlight recent research and emerging developments in this field.

A-643 09:30
C. Liver metastases of neuro-endocrine tumours (NET)
J. Kettenbach; St. Pölten/AT

Learning Objectives:
1. To outline the current status of image-guided therapeutic approaches for NETs.
2. To discuss indications and advantages of endovascular vs percutaneous treatment options.
3. To evaluate literature data on interventional treatments of NETs.

08:30 - 10:00  Room M 4

E³ - ECR Academies: Multiparametric Ultrasound (MPUS)

E³ 1320
Multiparametric US in paediatric radiology

A-644 08:30
Chairman's introduction
K. Rosendahl; Bergen/NO

A-645 08:35
A. Contrast-enhanced US (CEUS) in paediatric trauma
M. Riccabona; Graz/AT

Learning Objectives:
1. To understand the role of off-label use of US contrast agents in paediatric patients.
2. To become familiar with CEUS in the assessment of paediatric trauma patients.
3. To learn about limitations of CEUS in trauma compared to CT.

A-646 09:03
B. CEUS in paediatrics: liver, kidney and beyond
E.-M. Jung; Regensburg/DE

Learning Objectives:
1. To understand established indications for off-label use of CEUS.
2. To learn how to perform CEUS in different age groups.
3. To become familiar with US contrast enhancement in parenchymal organs.

A-647 09:31
C. Multiparametric US of the paediatric chest: more than effusion
P. Tomà; Rome/IT

Learning Objectives:
1. To understand established indications for chest US in children.
2. To learn the different roles of real-time US, Doppler and CEUS to diagnose pulmonary and mediastinal lesions, especially pneumonia.
3. To understand the limitations of percutaneous US of the chest.

08:30 - 10:00  Room M 5

E³ - ECR Academies: Neuroradiology: from Morphology to Function

E³ 1322
Cerebral blood flow quantification

A-648 08:30
Chairman's introduction
T. van der Zijden; Edegem/BE

A-649 08:36
A. Functional imaging of cerebral perfusion
A. Krajnik; Grenoble/FR

Learning Objectives:
1. To understand that functional imaging of perfusion enables the study of properties such as vasoreactivity to circulating gases, autoregulation and neurovascular coupling.
2. To show that functional imaging of perfusion can influence therapeutic strategy through estimation of the vascular reserve and the risk of ischaemia.
3. To learn that functional MRI of vasoreactivity is of value in understanding functional MRI activation.
A-650 09:04
B. Cerebral blood flow measurements with arterial spin-labelling
X. Golay; London/UK

**Learning Objectives:**
1. To reveal how arterial spin labelling (ASL) can accurately measure cerebral blood flow (CBF).
2. To present an overview of the advantages and limitations of using ASL in adult and paediatric subjects.
3. To show that the use of subject-specific model parameters (for example particularly blood and tissue T1) can improve the accuracy of CBF estimates.

A-651 09:32
C. Cerebrovascular reserve imaging and the consequences of neurovascular uncoupling
J. Hendrikse; Utrecht/NL

**Learning Objectives:**
1. To understand the consequences of severely reduced CVR in terms of future risk of stroke as well as cortical thinning that can occur in the absence of acute ischaemic events.
2. To review the challenges facing clinical implementation.
3. To understand the potential of CVR for informing patient selection for revascularisation.

10:30 - 12:00  Room A

E³ - ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists

**E³ 1421**
Genitourinary and gastrointestinal radiology

A-652 10:30
A. Prostate MRI using PI-RADS
H.C. Thoeny; Berne/CH

**Learning Objectives:**
1. To learn the clinical indications for prostate MRI.
2. To assess technical considerations for performance of multiparametric prostate MRI.

A-653 11:15
B. New aspects of renal tumours
N. Grenier; Bordeaux/FR

**Learning Objectives:**
1. To become familiar with the different types and classifications of renal tumours.
2. To understand the key imaging findings of the different tumours.

10:30 - 12:00  Room B

ESR meets the United States of America

**EM 2**
Precision imaging and patient experience

*Presiding:*
J.A. Brink; Boston, MA/US
R.L. Ehman; Rochester, MN/US
P.M. Parizel; Antwerp/BE

A-654/A-655/A-656 10:30
**Introduction**
P.M. Parizel; Antwerp/BE
J.A. Brink; Boston, MA/US
R.L. Ehman; Rochester, MN/US

**Session Objectives:**
1. To document the growing significance of clinical decision support software for radiologists.
2. To demonstrate how radiologists can use quantitative imaging biomarkers to enhance their role in scientific research and clinical practice.
3. To illustrate how ACR and RSNA are helping radiologists to provide better patient-centred care and improve patient experience with medical imaging.

A-657 10:45
**Clinical decision support**
K.J. Dreyer; Boston, MA/US

**Learning Objectives:**
1. To understand how decision support systems may improve appropriate utilisation of medical imaging.
2. To understand the role of decision support systems in reducing variation in radiologists’ reporting.
3. To consider future opportunities for decision support for medical imaging.

11:05
**Interlude/Commentary: Future directions in decision support (ESR/ACR/RSNA Leaders)**

A-658 11:10
**Quantitative imaging Biomarkers Alliance**
E.F. Jackson; Madison, WI/US

**Learning Objectives:**
1. To understand the need for quantitative imaging biomarkers in clinical trials and clinical practice.
2. To understand key challenges to the implementation of standardised quantitative imaging techniques.
3. To describe some of the current approaches to resolving such key challenges.

11:30
**Interlude/Commentary: Future directions in quantitative imaging (ESR/ACR/RSNA Leaders)**

A-659/A-660 11:35
**Imaging 3.0/Radiology Cares**
G. McGinty; New York, NY/US, R.L. Ehman; Rochester, MN/US

**Learning Objectives:**
1. To understand the principles of the Imaging 3.0 initiative.
2. To understand the principles of the Radiology Cares initiative.
3. To consider potential opportunities for improved patient experience with medical imaging.

11:55
**Interlude/Commentary: Future directions in patient experience (ESR/ACR/RSNA Leaders)**
TF 1
Highlighted Lectures

Moderators:
L. Andrade; Coimbra/PT
A. Svare; Riga/LV

A-661 10:30
Ovarian cancer staging: where and what to look for?
M.M. Otero-García; Santiago de Compostela/ES

Learning Objectives:
1. To become familiar with the different radiological findings in ovarian cancer.
2. To learn where to look for metastatic ovarian cancer.
3. To investigate the role of different imaging modalities in ovarian cancer staging.
4. To understand the potential clinical impact of imaging in treatment planning.

A-662 11:00
Update in breast ultrasound
B. Brkljačić; Zagreb/HR

Learning Objectives:
1. To learn about technique and clinical applications of breast ultrasound.
2. To understand the role of ultrasound for guidance of breast biopsies and minimally invasive treatment.
3. To understand the role of ultrasound in screening for breast cancer.
4. To become familiar with clinical use of sonoelastography and automated whole-breast ultrasound systems.

A-663 11:30
Multiparametric MRI evaluation in brain tumours
A. Santa; Sibiu/RO

Learning Objectives:
1. To learn about how we assess MRI images regarding brain tumours.
2. To understand the role of each type of sequence in evaluating the pathology.
3. To appreciate how the decision of diagnostic progresses along with the various sequences acquired, the data that each sequence bring to the reader.
4. To become familiar with more sophisticated modalities of assessment of brain tumours, e.g. diffusion, ADC, spectroscopy, perfusion and with the way they add to positive and differential diagnosis.

A-664 10:30
Chairmen’s introduction (part 1)
N. Bedlington; Vienna/AT

Session Objectives:
1. To understand how ESR is improving patient safety and quality of care through audit and standards.
2. To explore concrete examples of best practice on implementing these standards in the radiology department and how these might be replicated.

A-665 10:40
The work of the ESR Audit & Standards Subcommittee in collaboration with ESR-PAG
B.E. Kelly; Belfast/UK

Learning Objectives:
1. To become familiar with methods and examples of good practice and on how to improve the patient-doctor relationship.
2. To understand the need for balance between professional responsibility and patient autonomy.

A-666 10:55
Patients’ perspective (part I)
D. Walsh; Dublin/IE

Learning Objectives:
1. To learn that implementing the driver diagram in their department will be a step-by-step process that can be monitored by patients.
2. To learn that a fair knowledge of the upcoming procedure is part of feeling safe for the patient.
3. To learn that an overload of information is equally detrimental to a safe feeling as no information, putting the patient central means an adjusted offering of information.

A-667 11:10
Patients’ perspective (part II)
E. Briers; Hasselt/BE

Learning Objectives:
1. To learn that implementing the driver diagram in their department will be a step-by-step process that can be monitored by patients.
2. To learn that a fair knowledge of the upcoming procedure is part of feeling safe for the patient.
3. To learn that an overload of information is equally detrimental to a safe feeling as no information, putting the patient central means an adjusted offering of information.

A-668 11:25
Example of good practice: implementing a patient satisfaction questionnaire in your radiology department
D.-G. Carrié; Toulouse/FR

Learning Objectives:
1. To understand the benefits of patient satisfaction assessment.
2. To learn how to implement a questionnaire (means to be used, items to estimate).
3. To understand the feedback you will obtain.

A-669 11:40
Panel discussion: Does your department perform well in patient-centred care?
Learning Objectives:
1. To understand the typical imaging features of benign and malignant lesions of the hepatobiliary system.
2. To learn the typical imaging features of benign and malignant lesions of the pancreas and spleen.
3. To become familiar with the methodological basis and to differentiate typical features in imaging examinations of the gastrointestinal tract.
4. To understand the role of different imaging modalities including hybrid imaging in diagnosing and staging neoplasms, gastrointestinal and abdominal organ systems.

A-671 10:36
A. Hepatobiliary system
Y. Menu; Paris/FR

Learning Objectives:
1. To learn the anatomy, normal variants and congenital disorders of the hepatobiliary system.
2. To become familiar with the primary and secondary imaging features of acute and chronic diffuse liver diseases.
3. To understand the causes and imaging features of benign and malignant focal liver lesions, including cysts, haemangiomas, adenomas, focal nodular hyperplasia, hepatocellular carcinomas and metastases.
4. To learn the various causes and imaging features of benign and malignant diseases of the biliary tract and gallbladder.

A-672 11:04
B. Pancreas and spleen
W. Schima; Vienna/AT

Learning Objectives:
1. To understand the anatomy, normal variants and congenital disorders of the pancreas.
2. To become familiar with the causes and imaging features of benign and malignant pancreatic tumours.
3. To understand the imaging features of acute and chronic pancreatitis and its potential complications.
4. To learn the causes and imaging features of focal and diffuse splenic abnormalities.

A-673 11:32
C. Imaging of the gastrointestinal tract
R.G.H. Beets-Tan; Amsterdam/NL

Learning Objectives:
1. To become familiar with the anatomy, normal variants and congenital disorders of the oesophagus, stomach, duodenum, small bowel, colon, rectum and anal canal.
2. To understand the imaging features of colonic diverticulosis, diverticulitis, tumour stenosis, ileocolic intussusception, colonic fistula, paracolic abscess, epiploic appendagitis, intraperitoneal fluid collection, colonic pneumatosi and pneumoperitoneum.
3. To learn typical radiological manifestations of inflammatory bowel diseases, malabsorption syndromes, infection and bowel ischaemia.
4. To become familiar with the staging of tumours of the gastrointestinal tract, including features that indicate nonresectability, and to understand the role of different imaging modalities including hybrid imaging in diagnosing and staging.

A-674 10:30
A. Clinical utility of perfusion imaging for differentiating brain tumours
I.N. Pronin; Moscow/RU

Learning Objectives:
1. To provide practical tips and tricks for performing CT and MR perfusion in patients with brain tumours.
2. To illustrate how certain perfusion derived parameters (rCBV) can be correlated with tumour histology (e.g. angiogenesis, capillary leakage, malignancy grade).
3. To show that intense contrast enhancement is not identical to malignancy grade.

A-675 10:35
A. Thyroid
S.S. Özbek; Izmir/TR

Learning Objectives:
1. To understand the current roles of real-time US, Doppler techniques, US elastography and CEUS to differentiate between benign and malignant thyroid nodules.
2. To learn about current guidelines for thyroid nodule assessment.
3. To become familiar with the advantages and limitations of the various US techniques.

A-676 11:03
B. Lymph nodes
P.-Y. Marcy; Ollioules/FR

Learning Objectives:
1. To understand the current roles of real-time US, Doppler techniques, US elastography and CEUS to differentiate between benign and malignant superficial lymph nodes.
2. To understand MPUS criteria and their limitations.
3. To learn about MPUS in the assessment of sentinel lymph nodes.

A-677 11:31
C. Scrotum
M. Bertolotto; Trieste/IT

Learning Objectives:
1. To become familiar with the US morphology of the normal scrotal content as assessed by real-time US, Doppler techniques, US elastography and CEUS.
2. To understand the advantages and limitations of these US modalities in the assessment of the acute scrotum.
3. To understand the current roles of real-time US, Doppler techniques, US elastography and CEUS to differentiate between benign and malignant testicular and extratesticular scrotal mass lesions.

A-678 10:30
A. Imaging of the gastrointestinal tract
R.G.H. Beets-Tan; Amsterdam/NL

Learning Objectives:
1. To become familiar with the anatomy, normal variants and congenital disorders of the oesophagus, stomach, duodenum, small bowel, colon, rectum and anal canal.
2. To understand the imaging features of colonic diverticulosis, diverticulitis, tumour stenosis, ileocolic intussusception, colonic fistula, paracolic abscess, epiploic appendagitis, intraperitoneal fluid collection, colonic pneumatosi and pneumoperitoneum.
3. To learn typical radiological manifestations of inflammatory bowel diseases, malabsorption syndromes, infection and bowel ischaemia.
4. To become familiar with the staging of tumours of the gastrointestinal tract, including features that indicate nonresectability, and to understand the role of different imaging modalities including hybrid imaging in diagnosing and staging.

A-679 10:36
A. Thyroid
I.N. Pronin; Moscow/RU

Learning Objectives:
1. To provide practical tips and tricks for performing CT and MR perfusion in patients with brain tumours.
2. To illustrate how certain perfusion derived parameters (rCBV) can be correlated with tumour histology (e.g. angiogenesis, capillary leakage, malignancy grade).
3. To show that intense contrast enhancement is not identical to perfusion.
A-680 11:04
B. Clinical applications of amino acid PET in brain tumour patients
N. Galldiks; Cologne/DE

Learning Objectives:
1. To show that amino acid PET is gaining increasing importance in assessment of tumour activity and malignancy.
2. To demonstrate how amino acid PET can be useful in glioma delineation for treatment planning (e.g., resection, biopsy, radiation), detection of post-therapeutic effects, assessment of treatment response, and prognostication.
3. To provide information on new PET tracers (targeting tumour hypoxia, enzymes in neoplastic metabolic pathways, etc.) and the combination of tracers with therapeutic agents.

A-681 11:32
C. Assessment of brain tumour perfusion and abnormal vascular structure using arterial spin-labelling
X. Golay; London/UK

Learning Objectives:
1. To offer a short update on the physical principles and technique of arterial spin-labelling in assessing brain tumour perfusion.
2. To review the advantages and disadvantages of ASL as compared to contrast-enhanced perfusion imaging.
3. To provide clinical examples where ASL has contributed significantly to management and clinical decision making in brain tumour patients.

12:15 - 12:45  Room A
Headline Session

HL 3
Arthur de Schepper Honorary Lecture
Presiding:
P.M. Parizel; Antwerp/BE

A-682 12:15
From features to function: breakthroughs in breast imaging
F.J. Gilbert; Cambridge/UK

12:30 - 13:30  Room C
E³ - The Beauty of Basic Knowledge: Chest Imaging

E³ 25D
The most important measurements you need to know in chest radiology
Moderator:
N. Howarth; Chêne-Bougeries/CH

A-683 12:30
A. Heart and great vessels: how, why, when?
G. Fassa-Ashrafpoor; Chêne-Bougeries/CH

Learning Objectives:
1. To review the most useful measurements on cross-sectional imaging of the heart and great vessels.
2. To learn how to accurately perform these measurements.
3. To know when the measurements are of clinical importance.

A-684 13:00
B. Lung nodules: is volume better than size?
M. Prokop; Nijmegen/NL

Learning Objectives:
1. To review the management of pulmonary nodules seen on CT.
2. To learn how to accurately perform the measurement of nodule volume and size.
3. To know the limitations of the lung nodule measurement.

12:30 - 13:30  Room D
E³ - The Beauty of Basic Knowledge: A Survival Guide to Musculoskeletal Imaging

E³ 24D
Acute trauma: patterns in the peripheral skeleton
Moderator:
V.N. Cassar-Pullicino; Oswestry/UK

A-685 12:30
Acute trauma: patterns in the peripheral skeleton
J. Teh; Oxford/UK

Learning Objectives:
1. To become familiar with the imaging manifestations of common important injuries in the upper and lower limb.
2. To understand the underlying mechanism that result in combination of injuries.
3. To learn how to best employ imaging modalities in their diagnosis.

14:00 - 15:30  Room A
E³ - ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists

E³ 1521
Imaging of the skull base

A-686 14:00
A. Non-tumoural pathology of the temporal bone
B. Ozgen Mocan; Ankara/TR

Learning Objectives:
1. To learn the most common inflammatory lesions of the temporal bone.
2. To become familiar with malformations and common pathologies.

A-687 14:45
B. Tumours of the skull base
T. Beale; London/UK

Learning Objectives:
1. To become familiar with the imaging technique of the skull base.
2. To identify imaging criteria for improved differential diagnosis.

14:00 - 15:30  Room B
Special Focus Session

SF 15a
My three top tips for abdominal imaging

A-688 14:00
Chairman’s introduction
M. Zins; Paris/FR

Session Objectives:
1. To learn how to avoid common mistakes in abdominal radiology.
2. To understand how to get over an area of difficulty through the clinical expertise of selected abdominal radiologists.

A-689 14:05
Postoperative abdomen
D.J.M. Tolan; Leeds/UK

Learning Objectives:
1. To learn how to optimise detection of anastomotic leaks on CT using radiological signs and positive luminal contrast.
2. To recognise material in the abdomen surgeons may leave deliberately.
3. To recognise material in the abdomen surgeons may leave by accident.
A-690 14:13
Appendicitis
J.B.C.M. Puylaert; The Hague/NL

Learning Objectives:
1. To learn that US has a pivotal and unique role in appendicitis and should be done prior to CT.
2. To learn that US in acute abdomen allows the radiologist to get closer to the patient than CT and MRI.
3. To learn that US should be performed by abdominal radiologists, and not by clinicians or technicians.

A-691 14:21
Bile duct stones
J.A. Guthrie; Leeds/UK

Learning Objectives:
1. To quickly review different morphological aspects and “weapons” in the hand of radiologist to detect colonic polyps with CT colonography with small focus on correct preparation and the use of CAD.
2. To define large, small and intermediate polyp size and to review polyp pathology including the risk of cancer and high grade dysplasia moreover in small and intermediate polyps.
3. To summarise the current debate with regard to intermediate polyps (conservative management vs polypectomy) and the rationale for non-reporting of diminutive polyps.

A-692 14:29
Dilated pancreatic duct
R. Manfredi; Rome/IT

Learning Objectives:
1. To learn how to diagnose and manage adenocarcinoma of the pancreas mimickers: autoimmune pancreatitis and paradoodenal pancreatitis.
2. To appraise how to manage incidental cystic lesions of the pancreas.
3. To learn how to diagnose and manage neuroendocrine neoplasms of the pancreas.

A-693 14:37
Liver biopsy
V. Vilgrain; Clichy/Fr

Learning Objectives:
1. To understand the risk/benefit of liver biopsy.
2. To know the absolute contraindications.
3. To be aware of the most important technical tricks.

A-694 14:45
Bowel ischaemia
A. Filippone; Chieti/IT

Learning Objectives:
1. To appreciate the possible causes of mesenteric pneumatosis.
2. To learn about the different faces of ischaemic bowel wall.
3. To understand the meaning of peritoneal fluid.

A-695 14:53
Colon polyp
F. Iafrate; Rome/IT

Learning Objectives:
1. To learn about the proper timing of imaging studies in acute pancreatitis.
2. To learn about the imaging manifestations of necrotising pancreatitis.
3. To understand the different nature of fluid collections with regard to further therapy.

A-696 15:01
Acute pancreatitis
W. Schima; Vienna/AT

Learning Objectives:
1. To understand the reliability of mesenteric pneumatosis.
2. To learn about the different faces of ischaemic bowel wall.
3. To understand the meaning of peritoneal fluid.

A-697 15:09
Crohn’s disease
J. Rimola; Barcelona/ES

Learning Objectives:
1. To learn about useful signs indicating active Crohn’s disease.
2. To understand the changes which occur after treatment of intestinal inflammation.
3. To become familiar with complications related to Crohn’s disease.

A-698 15:17
Liver metastases follow-up
Y. Menu; Paris/FR

Learning Objectives:
1. To learn how to quickly identify three most common systemic treatments of liver metastases (cytotoxic, targeted and immune), and to understand why knowledge of the regimen is essential for the radiological report.
2. To understand the rationale of international standards for the evaluation of response to treatment, and how to build accordingly a useful report.
3. To appraise the respective objectives of neoadjuvant and palliative chemotherapy, and to be able to explain the specific endpoints for each clinical situation.

E3 1526a
Large airway disease
Moderator:
M. Occhipinti; Florence/IT

A-699 14:00
A. Diseases of the trachea
P.A. Grenier; Paris/FR

Learning Objectives:
1. To appreciate standard and dynamic techniques in assessing large airways.
2. To learn what is normal and what is disease in adults.
3. To know how imaging can help clinicians in assessing tracheal disease.

A-700 14:30
B. Tracheobronchial instability
M.O. Wielputz; Heidelberg/DE

Learning Objectives:
1. To appreciate the possible causes of tracheobronchial instability and its differential diagnosis.
2. To know how to assess airway instability with 4D-CT.
3. To understand how 4D-CT could help in treatment planning.

A-701 15:00
C. Quantitative analysis and imaging biomarkers of chronic obstructive pulmonary disease (COPD)
H.A. Gietema; Enschede/NL

Learning Objectives:
1. To consolidate knowledge of post-processing image tools and imaging biomarkers.
2. To understand how imaging biomarkers are related to clinical events and patient prognosis.
3. To discuss about the clinical relevance of phenotyping COPD and identifying COPD patients in a lung cancer screening setting.
14:00 - 15:30 Room O

E³ 1526b Imaging in child abuse: an update
Moderator: G.M. Magnano, Genoa/IT

A-702 14:00
A. Skeletal fractures
R.R. van Rijn, Amsterdam/NL

Learning Objectives:
1. To understand the basic mechanisms.
2. To learn about fracture patterns suggestive of abuse and the evidence behind.
3. To become familiar with the most important differentials.

A-703 14:30
B. Abusive head trauma
C. Adamsbaum, Le Kremlin-Bicêtre/FR

Learning Objectives:
1. To understand the basic mechanisms.
2. To learn about imaging findings suggestive of abuse.
3. To become familiar with the differentials and the controversies.

A-704 15:00
C. The medico-legal issues
A.C. Offiah, Sheffield/UK

Learning Objectives:
1. To learn about the information required by any court, and how to structure the radiological report.
2. To recognise imaging markers suggestive for abuse and how to raise the suspicion.
3. To become familiar with the terms that should be used when highly specific imaging markers for abuse are identified in an otherwise normal infant.

14:00 - 15:30 Room N

Cardiac

RC 1503 Imaging of cardiac function, perfusion and viability by MR

A-705 14:00
Chairman’s introduction
M. Francone, Rome/IT

A-706 14:05
A. Getting the best image quality
B. Jankharia, Mumbai/IN

Learning Objectives:
1. To become familiar with the latest technical and methodological advances in cardiac MRI.
2. To learn about important and typical pitfalls in cardiac MRI and how to avoid or overcome these.
3. To consolidate the knowledge about an optimised, integrated approach using cardiac MRI depending on the clinical question.

A-707 14:28
B. Differentiation of ischaemic and non-ischaemic cardiomyopathy
P. Croisille, Saint-Etienne/FR

Learning Objectives:
1. To correctly define various causes of cardiomyopathies and compare functional and structural changes occurring with ischaemic and non-ischaemic cardiomyopathies.
2. To recognise common and less common signal intensity abnormalities and late enhancement patterns to provide etiological differentiation of the various forms of cardiomyopathies.
3. To review the prognostic significance of various functional and tissue abnormalities observed by cardiac magnetic resonance in cardiomyopathies.

A-708 14:51
C. Best applications in congenital heart disease
J. Schäfer, Tübingen/DE

Learning Objectives:
1. To decide which modality (MDCT/MRI) is the most appropriate for which indication in CHD.
2. To learn about the role of various MR applications in the diagnosis and planning of therapy of CHD.
3. To be able to perform a morphological and functional assessment of the right and left ventricle in CHD.

15:14 Panel discussion: Has MRI matured to a one-stop shop in cardiac imaging?

14:00 - 15:30 Studio 2017

New Horizons Session

NH 15 Large cohorts: imaging biobanks

A-709 14:00
Chairmen’s introduction
M.H. Fuchsjäger, M. Pasterk, Graz/AT

Session Objectives:
1. To understand why biobanks should include imaging data.
2. To learn about the relevance of incidental findings in large cohorts.
3. To consolidate knowledge on integration and analysis of imaging data in biobanks.

A-711 14:05
Why biobanks should include imaging data
R.L. Vanninen, Kuopio/FI

Learning Objectives:
1. To understand why inclusion of imaging data is the logical next step of phenotypical characterisation in cohorts.
2. To learn about the importance of enriching clinical datasets in biobanks with imaging data.
3. To learn about biobanks in which imaging data have already been included.

A-712 14:30
Incidental findings in large cohorts (German national cohort)
S. Weckbach, Heidelberg/DE

Learning Objectives:
1. To consolidate knowledge on the significance of incidental findings in large cohorts.
2. To learn about how incidental findings may be detected in large cohorts.
3. To understand the management of incidental findings in large cohorts.
**Postgraduate Educational Programme**

**A-713 14:55**
Analysis of big imaging data (UK Biobank)
A. Jackson; Manchester/UK

**Learning Objectives:**
1. To consolidate knowledge on the technological basis necessary to enable analysis and interpretation of big data.
2. To learn about how imaging data can be integrated in large research databases.
3. To understand the importance of imaging on new biomarker development.

**15:20**
Panel discussion: What are the benefits of linking imaging and biobanks?

**14:00 - 15:30** Room L 8

**EIBIR Session**

**EIBIR 3**
Innovative solutions for diagnosis and treatment concepts for GIST patients from the MITIGATE project

**Moderator:**
S.O. Schönberg; Mannheim/DE

**A-714 14:00**
Introduction to the state-of-the-art therapy in GIST
P. Hohenberger; Mannheim/DE

**Learning Objectives:**
1. To learn about current therapy options for GIST patients.
2. To understand specificity of GIST treatment.

**A-715 14:10**
Improving the diagnostic imaging approach in GIST patients
C. Decristoforo; Innsbruck/AT

**Learning Objectives:**
1. To learn about the current imaging approach in GIST patients.
2. To discover the novel imaging approach applied in the MITIGATE clinical study.

**A-716 14:35**
Minimally invasive treatment of GIST patients in a compassionate use programme
S. Diehl; Mannheim/DE

**Learning Objectives:**
1. To understand minimally invasive treatment options.
2. To learn about the MITIGATE compassionate use programme and its minimally invasive treatment options.

**A-717 15:00**
Impact of the MITIGATE project on European GIST patients
A. Bruno-Lindner; Vienna/AT

**Learning Objectives:**
1. To learn about the need of European GIST patients.
2. To discover how patients might benefit from the developments of the MITIGATE project.

**15:25**
Discussion

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**Special Focus Session**

**SF 15b**
Breast cancer screening with tomosynthesis: the time is now

**A-718 14:00**
Chairman's introduction
P. Skaane; Oslo/NO

**Session Objectives:**
1. To learn about the need for improving breast cancer screening.
2. To learn about alternative screening techniques.
3. To learn about the potential benefits of DBT as compared with other modalities.

**A-719 14:05**
Screening with digital breast tomosynthesis in the USA: performance indicators and breast density
E.A. Morris; New York, NY/US

**Learning Objectives:**
1. To learn about recalls and cancer detection in the USA DBT screening studies.
2. To understand the false positive and the false negative interpretations in screening with tomosynthesis.
3. To understand the influence of breast density and age on the performance of DBT screening.

**A-720 14:30**
Screening with digital breast tomosynthesis in Europe: tumour characteristics and potential harms including overdiagnosis
F.J. Gilbert; Cambridge/UK

**Learning Objectives:**
1. To learn about the tumour characteristics of cancers detected with tomosynthesis.
2. To understand the potential influence of DBT screening on interval cancer rate and next round cancers.
3. To learn about the potential harms of tomosynthesis screening with special focus on so-called „overdiagnosis“.

**A-721 14:55**
Which challenges should we consider prior to tomosynthesis screening implementation?
G. Gennaro; Padua/IT

**Learning Objectives:**
1. To discuss radiation dose, number of DBT projections, and the need for conventional or synthetic 2D images in combination with DBT.
2. To learn about hanging protocols, reading time, and potential solutions for reducing the interpretation time.
3. To understand the „IT issues“ in DBT screening implementation.

**15:20**
Panel discussion: Is tomosynthesis ready for replacing 2D mammography in organised breast cancer screening?
Professional Challenges Session

PC 15a
Radiology at the core of interdisciplinary communication

A-722 14:00
Chairman’s introduction
E.J. Adam; London/UK

Session Objectives:
1. To appreciate the importance of communicating in a timely and clear way.
2. To understand the particular issues related to communicating verbally or using written or electronic information.
3. To appreciate how the communication style and needs will be different for different groups of people.

A-723 14:05
Sharing information within the hospital
D. Regge; Turin/IT

Learning Objectives:
1. To identify who you will be communicating with within the hospital and who will be communicating with you.
2. To learn how to avoid miscommunication or misunderstanding.
3. To learn how to promote effective communication.

A-724 14:30
Sharing information beyond the hospital
W.R. Jaschke; Innsbruck/AT

Learning Objectives:
1. To identify the key routes of communication outside the hospital, including teleradiology.
2. To understand barriers to good communication.
3. To learn how to promote good communication.

A-725 14:55
Sharing information with the patient
E. Briers; Hasselt/BE

Learning Objectives:
1. To understand what information patients require before they attend a radiology department.
2. To appreciate the communication needs of patients when they are undergoing investigations, and when they receive results.
3. To learn how to communicate effectively with patients.

15:20
Panel discussion: Conveying information clearly. Do we still need to ‘speak’ to each other?

14:00 - 15:30  Room F2

Emergency Imaging

RC 1517
The latest update in imaging of polytrauma patients

A-730 14:00
Chairman’s introduction: the role of proper imaging and management in patients after severe trauma
M. Stajgis; Poznan/PL

Session Objectives:
1. To understand the role of early and fast diagnostic imaging in patients after severe trauma.
2. To recognize the basic statistics in management of polytrauma patients, which have the impact on practical approach regarding selection of proper diagnostic modalities.
3. To be aware of the position and responsibilities of radiologist in „decision-making team”.

A-731 14:05
A. Ultrasound: when, why and by whom?
P.-A. Poletti; Geneva/CH

Learning Objectives:
1. To become familiar with the role of modern ultrasound in polytrauma patients.
2. To comprehend the rationale of using FAST protocol in selected patients.
3. To know the advantages and limitations of ultrasound imaging in emergency setting.
**Postgraduate Educational Programme**

**A-732** 14:31
B. CT: is it always whole-body?
F.H. Berger; Toronto, ON/CA

**Learning Objectives:**
1. To be familiar with currently worldwide accepted protocols in polytrauma CT imaging.
2. To know clinical conditions requiring whole-body CT.
3. To comprehend the selection of trauma patients for targeted CT examinations.

**A-733** 14:57
C. Where is the proper place for MRI?
K. Katulska; Poznan/PL

**Learning Objectives:**
1. To learn which patients are the best candidates for post-traumatic MRI.
2. To be familiar with standard and short MRI examination protocols.
3. To understand the impact of MR findings on further management of polytrauma patients.

**A-737** 14:00
Chairman's introduction
V. Gershan; Skopje/MK

**Session Objectives:**
1. To learn about the origins of dose reduction using iterative image reconstruction in CT.
2. To understand dose reduction using iterative image reconstruction in CT.
3. To learn about solutions and workarounds.

**A-738** 14:05
A. Basics of iterative image reconstruction in CT
M. Kortesniemi; Helsinki/FI

**Learning Objectives:**
1. To learn about the basic aspects of iterative reconstruction.
2. To learn about potential dose reduction via iterative reconstruction.
3. To compare iterative reconstruction with other techniques.

**A-739** 14:28
B. Iterative image reconstruction in clinical practice (dos and don'ts)
H. Alkadhi; Zurich/CH

**Learning Objectives:**
1. To understand the radiologist's requirements for image reconstruction.
2. To learn about current best practice in image reconstruction for clinical CT.
3. To learn about the potential benefits and pitfalls of using iterative reconstruction in clinical CT.

**A-740** 14:51
C. Image quality assessment of iterative reconstruction: pitfalls and future directions
C. Ghetti; Parma/IT

**Learning Objectives:**
1. To learn about basic image quality metrics employed in CT.
2. To understand why image quality assessment is difficult with iterative reconstruction.
3. To learn about up-and-coming methods for image quality assessment.

**A-741** 14:00
Chairmen's introduction: A team approach - why is this necessary?
T. Owman1, J. McNulty2; 1 Lund/SE, 2 Dublin/IE

**Session Objectives:**
1. To explore the added value of a team approach to radiological procedures.
2. To understand the impact of radiographer reporting on clinical practice.
3. To explore the benefits provided by a team approach in interventional procedures.
A-742 14:06
**A team-based approach to delivering safe practice**
J. Damilakis; Iraklion/GR

**Learning Objectives:**
1. To understand a team-based approach to ensuring patient safety during radiological procedures.
2. To consider how a joint approach may improve the culture of radiation safety within the clinical environment.
3. To highlight how a collaborative approach to practice leads to improved effectiveness and patient safety.

A-743 14:29
**The radiographer and radiologist: joint responsibility for reporting**
S. Rowe; London/UK

**Learning Objectives:**
1. To discuss the concept of joint reporting and responsibility and how this system may be developed within clinical practice.
2. To highlight the benefit of reporting abnormality detection by radiographers.
3. To discuss future opportunities for radiographers and radiologists in this area.

A-744 14:52
**A team approach in interventional procedures**
C. McLaren; London/UK

**Learning Objectives:**
1. To familiarise attendees with the active role of the radiographer when performing interventional procedure.
2. To discuss the professional issues and responsibilities within such a team.
3. To emphasise the benefits for patient care and patient safety.

15:15
Panel discussion: Can a team-based approach ensure patient safety?

14:00 - 15:30  Room M 4

**E³ - ECR Academies: Multiparametric Ultrasound (MPUS)**

**E³ 1520**

**Vascular multiparametric US**

A-745 14:00
**Chairman’s introduction**
P.S. Sidhu; London/UK

A-746 14:05
**A. Deep venous thrombosis and chronic venous insufficiency of the lower extremity**
G. O’Sullivan; Galway/IE

**Learning Objectives:**
1. To learn about the current role of MPUS to diagnose DVT.
2. To become familiar with the US examination technique: compression US and Doppler.
3. To learn how US is used to diagnose varicose veins and valve insufficiency.

A-747 14:33
**B. Abdominal vascular emergencies: ruptures and occlusions**
D.A. Clevert; Munich/DE

**Learning Objectives:**
1. To understand MPUS findings in arterial rupture (aneurysm, other).
2. To learn about Doppler techniques and CEUS to improve diagnosis of vascular occlusions and infarcts.
3. To understand the advantages and limitations of US techniques compared to CT.

14:00 - 15:30  Room M 5

**E³ - ECR Academies: Neuroradiology: from Morphology to Function**

**E³ 1522**

**Functional MRI of the brain opens new horizons**

A-749 14:00
**Chairman’s introduction**
T.A. Yousry; London/UK

A-750 14:06
**A. No function without structure: challenges in diffusion MRI and fibre tractography for clinical research**
C. Tax; Cardiff/UK

**Learning Objectives:**
1. To present an introduction to the use of diffusion MRI and fiber tractography of the brain.
2. To illustrate how these techniques have provided new insights into functional neuroanatomy.
3. To raise awareness about methodological challenges and limitations for clinical applications.

A-751 14:34
**B. Clinical utility of fMRI for preoperative brain mapping**
H. Urbach; Freiburg/DE

**Learning Objectives:**
1. To reveal how morphometric analysis of 3D data sets can help to reveal the true extent of a cerebral lesion in the presurgical work-up.
2. To demonstrate how fMRI is useful for documenting the spatial relationship of brain lesions to the adjacent eloquent cerebral cortex.
3. To illustrate how diffusion tensor tractography can reveal important white matter tracts such as the corticospinal tract and optic radiation.

A-752 15:02
**C. Introduction to resting state fMRI and functional connectomics**
M. Oldehinkel; Nijmegen/NL

**Learning Objectives:**
1. To understand how spontaneous fluctuations in activity in different parts of the brain can be used to study functional brain networks.
2. To review how resting-state functional MRI (rfMRI) can be used to map the macroscopic functional connectome.
3. To highlight some upcoming challenges in functional connectomics, using high-quality rfMRI data being generated by the Human Connectome Project.

16:00 - 17:30  Room A

**E³ - ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists**

**E³ 1621**

**Imaging of the chest**

A-753 16:00
**A. Fibrosing lung diseases**
F. Molinari; Lille/FR

**Learning Objectives:**
1. To become familiar with the differential diagnosis.
2. To identify the key imaging findings.
**A-754 16:45**
B. Pleural disease
C. Beigelman; Lausanne/CH

**Learning Objectives:**
1. To become familiar with the differential diagnosis.
2. To identify the key imaging findings.

**16:00 - 17:30  Room B**

**Abdominal Viscera**

**RC 1601**
**Abdominal MRI: from standard to advanced protocols**

**A-755 16:00**
Chairman's introduction
F. Caseiro-Alves; Coimbra/PT

**A-756 16:05**
A. Suspected pancreatic tumour
R. Manfredi; Rome/IT

**Learning Objectives:**
1. To learn about the role of MRI in the assessment of a patient with suspected pancreatic tumour.
2. To become familiar with the optimal MRI protocols including the role of DWI and secretin in this group of patients.
3. To appreciate the advantages and limitations of MRI in comparison with other imaging techniques.

**A-757 16:28**
B. Inflammatory bowel disease
J. Rimola; Barcelona/ES

**Learning Objectives:**
1. To learn about the role of MRI in patients with IBD.
2. To become familiar with the optimal MRI protocols including bowel distension in this group of patients.
3. To appreciate the role of functional imaging techniques for assessment of IBD.

**A-758 16:51**
C. Pelvic floor disorder
D. Weishaupt; Zurich/CH

**Learning Objectives:**
1. To learn about the clinical relevance of MRI in the management of patients with pelvic floor disorders.
2. To become familiar with the optimal patient preparation and MRI protocols in this group of patients.
3. To appreciate the advantages of MRI relative to other imaging modalities including conventional defecography.

**17:14**
Panel discussion: How to create an efficient MR protocol in abdominal diseases

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**16:00 - 17:30  Room C**

**State of the Art Symposium**

**SA 16**
**Detection and management of small renal masses**

**A-759 16:00**
Chairman's introduction
H.C. Thoeny; Berne/CH

**Session Objectives:**
1. To understand the imaging features of small benign and malignant renal masses.
2. To learn about the treatment options using imaging-guided minimally invasive treatment.
3. To appreciate typical normal and abnormal imaging findings during treatment monitoring.

**A-760 16:05**
Detection and characterisation of small renal masses
N. Grenier; Bordeaux/FR

**Learning Objectives:**
1. To understand the definition of small renal masses.
2. To understand the typical imaging findings of small renal masses on CT.
3. To become familiar with multiparametric MRI to characterise small renal masses.

**A-761 16:30**
Image-guided minimally invasive treatment
M. Krokidis; Cambridge/UK

**Learning Objectives:**
1. To become familiar with the clinical management of small renal lesions.
2. To understand the minimally invasive treatment options of small renal lesions.
3. To learn about the current evidence on the minimal invasive treatment of small renal tumours.

**A-762 16:55**
Treatment monitoring with imaging
G. Cardone; Milan/IT

**Learning Objectives:**
1. To become familiar with imaging techniques for patients under active surveillance.
2. To understand typical imaging findings after minimally invasive treatment.
3. To appreciate functional imaging techniques to assess early treatment response.

**17:20**
Panel discussion: What to do with small renal masses?

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**16:00 - 17:30  Room O**

**Paediatric**

**RC 1612**
**Imaging children with cancer**

**Moderator:**
C. Balassy; Vienna/AT

**A-763 16:00**
A. Imaging of abdominal masses at diagnosis: clues for benignity vs malignancy
Ø.E. Olsen; London/UK

**Learning Objectives:**
1. To become familiar with clinical characteristics and imaging features of a mass suggesting benignity.
2. To emphasise clinical and imaging manifestations of abdominal malignancies.
3. To learn how to report according to international standards.
B. From whole-body MRI to MR/PET

Learning Objectives:
1. To understand differences and pitfalls of whole-body MRI and MR/PET in children compared to adults.
2. To compare PET/MRI to PET/CT.
3. To discuss the impact of whole-body MRI and PET/MRI in paediatric oncology.

C. Imaging of complications of therapy

Learning Objectives:
1. To become familiar with short- and long-term complications of therapy.
2. To understand complications of surgery, radiotherapy and drug toxicity.
3. To emphasise the effects of immunosuppression in children undergoing chemotherapy.

Coronary CT angiography: how to get it done?

Learning Objectives:
1. To learn about cardiac CT acquisition techniques, pitfalls, and dose reduction strategies.
2. To summarise current indications and clinical applications of CT coronary angiography.
3. To review the diagnostic performance of CT for the diagnosis of coronary artery disease.

Template biopsy vs TRUS/MR-fusion guided biopsy

Learning Objectives:
1. To become familiar with the different fusion techniques.
2. To review the pros and cons of each approach.
3. To show complications and outcome.

Imaging after focal prostate therapy

Learning Objectives:
1. To understand image findings of the post-treated gland.
2. To show imaging characteristics of local recurrent disease.
3. To highlight some challenges in the follow-up after focal therapy.

Biopsy strategy

Learning Objectives:
1. To become familiar with indications and technique.
2. To demonstrate different biopsy strategies.
3. To show complications and outcome.

Panel discussion: Is there a role for MR imaging to steer the biopsy?

ESR-PAG 2

Big data - data management, standardisation, access and protection: the way forward in developing personalised/precision medicine

Learning Objectives:
1. To understand the importance of wider recognition for medical imaging and its role in personalised/precision medicine.
2. To understand the key issues of medical imaging in the development of personalised medicine.
3. To learn how patient involvement and education can facilitate the development of personalised medicine.
1. To learn about the multidisciplinary nature of perinatal autopsy, with reference to the scientific contribution of radiology and pathology.
2. To understand the limitations of both conventional autopsy, and conventional imaging techniques.
3. To appreciate how micro-CT works.

A-776 16:25
Patients' point of view (part I)
N. Bedlington; Vienna/AT

Learning Objectives:
1. To understand that patients are entitled to personal care (medicine) as this is to be seen as a minimal requirement.
2. To understand that patient wants precision medicine that their treatment is to be adjusted to the specific properties of their disease - genetic or otherwise.
3. To understand that, from a patients view, data sharing is a necessary instrument to improve the patient journey through her or his disease and that images are also data that need to be shared.

A-777 16:40
Patients' point of view (part II)
E. Briers; Hasselt/BE

Learning Objectives:
1. To understand that patients are entitled to personal care (medicine) as this is to be seen as a minimal requirement.
2. To understand that patient wants precision medicine that their treatment is to be adjusted to the specific properties of their disease - genetic or otherwise.
3. To understand that, from a patients view, data sharing is a necessary instrument to improve the patient journey through her or his disease and that images are also data that need to be shared.

A-778 16:55
Current US status pros and cons and issues
J.A. Brink; Boston, MA/US

Learning Objectives:
1. To discuss the US perspective.
2. To understand the issues from an US perspective.
3. To highlight the lessons learnt.

17:10
Panel discussion: Importance of data management in modern medicine - what are the main issues to be addressed?

16:00 - 17:30  Room E1
Multidisciplinary Session

MS 16
Virtual autopsy imaging in children: the role of pathologist vs radiologist, one big happy family?

A-779 16:00
Chairman's Introduction
C. Owens; London/UK

Session Objectives:
1. To learn about the multidisciplinary nature of perinatal autopsy, with reference to the scientific contribution of radiology and pathology.
2. To learn about the limitations of both conventional autopsy, and conventional imaging techniques.
3. To appreciate the role that novel imaging and pathology techniques have to play in future service provision.

A-780 16:05
Minimally invasive autopsy: setting the scene - why, how and by whom?
N.J. Sebire; London/UK

Learning Objectives:
1. To learn about novel minimally invasive autopsy techniques.
2. To understand how imaging fits into a modern clinical autopsy service.

A-781 16:25
State-of-the-art post-mortem imaging: the way it works and how we do it
O.J. Arthurs; London/UK

Learning Objectives:
1. To learn about the recent advances in cross-sectional imaging in a post-mortem setting.
2. To learn about the advantages and disadvantages of conventional PMCT and PMMR techniques.

A-782 16:45
Latest advances: the new kid on the block micro-CT - when and how?
J.C. Hutchinson; London/UK

Learning Objectives:
1. To learn how novel techniques like micro-CT can be used in the perinatal autopsy setting.
2. To appreciate how micro-CT works.
3. To learn what high resolution imaging can offer within a clinical setting.

17:05
Multidisciplinary case presentation and discussion

16:00 - 17:30  Room E2
Special Focus Session

SF 16b
Black and white spots in the brain

A-783 16:00
Chairman's introduction
H.R. Jäger; London/UK

Session Objectives:
1. To learn about the differential diagnosis of white matter lesions and cerebral microhaemorrhages (including small vessel disease, demyelination and trauma).
2. To understand clinical correlates including the prognostic and therapeutic impact of black spots and white spots.
3. To appreciate the best MR sequences used for detection of white and black spots and tools for quantitative analysis of disease burden.

A-784 16:05
White spots in the brain on T2 and FLAIR: what are they?
A. Rovira-Cañellas; Barcelona/ES

Learning Objectives:
1. To learn about the differential diagnosis of white spots.
2. To understand semi-quantitative and quantitative approaches for measuring the burden of white spots.
3. To appreciate the role of white spots as biomarkers for natural history and treatment of disease.

A-785 16:30
Black spots in the brain on SWI: differential diagnosis
M. Vernooij; Rotterdam/NL

Learning Objectives:
1. To learn about the differential diagnosis of black spots.
2. To understand semi-quantitative and quantitative approaches for measuring the burden of black spots.
3. To appreciate the role of black spots as biomarkers for natural history and treatment of disease.
A-786 16:55
Advanced MR imaging and quantification techniques: do they help?
S. Haller; Carouge/CH

Learning Objectives:
1. To understand how diffusion tensor imaging (DTI) might be helpful to
detect subtle structural brain changes related to minor traumatic brain
injury, which are not visible using standard structural MR sequences.
2. To understand the limitations of DTI for clinical applications and
notably the need for strict standardisation of both data acquisition and
data analysis.
3. To understand the principle potential of quantitative imaging analysis
tools of brain MR imaging, based on the example of cerebral micro
bleeds.

17:20
Panel discussion: How to image, quantify and report black and white
spots in the brain?

16:00 - 17:30  Room F1
E³ - European Diploma Prep Sessions

E³ 1623
Breast

A-787 16:00
Chairman's introduction
F. Pediconi; Rome/IT

Session Objectives:
1. To understand the methodological principles of mammography.
2. To learn the mammographic appearance of benign and malignant
lesions of the breast.
3. To become familiar with the imaging appearance of benign and
malignant breast lesions.

A-788 16:06
A. Fundamentals of mammography
S. Barter; Cambridge/UK

Learning Objectives:
1. To understand the anatomy, normal variants and abnormalities of the
female breast.
2. To become familiar with the technical aspects of diagnostic
mammography, especially in regard to dose and image quality.
3. To become familiar with the principles of current practice and risk/
benefit analysis in breast cancer screening.

A-789 16:34
B. Breast cancer diagnosis and interventions
M. Müller-Schimpfle; Frankfurt a. Main/DE

Learning Objectives:
1. To learn the different presentation of normal breast patterns and
the appearance of common benign diseases and of breast cancer at
mammography, ultrasound, and MRI.
2. To understand principles and basic application of a standardised
diagnostic categorisation systems such as the ACR breast imaging
reporting and data system (Breast Imaging Reporting and Data System®).
3. To become familiar with indications, contraindications and technical
aspects of image-guided interventional breast procedures (fine needle
aspiration, core needle biopsy, vacuum-assisted biopsy, presurgical
localisation).

A-790 17:02
C. Advanced imaging of the female breast
R.M. Mann; Nijmegen/NL

Learning Objectives:
1. To understand the role of advanced imaging techniques in evaluation
of the breast.
2. To use the added value of new techniques for lesion classification in
mammography, ultrasound and MRI.
3. To recognise the major imaging issues for common indications of
breast imaging.

16:00 - 17:30  Room F2
Emergency Imaging

RC 1617
Abdominal trauma: things not to forget
Moderator:
G. Schueller; Opfikon/CH

A-791 16:00
A. Liver and spleen
M. Scaglione; Castel Volturno/IT

Learning Objectives:
1. To become familiar with traumatic injuries of the liver and spleen that
can result in haemodynamic instability and other clinical complications.
2. To learn how to optimise scanning protocols to diagnose these
injuries.
3. To understand the impact of these imaging findings on further
management of patients and report accordingly.

A-792 16:30
B. Pancreas, bowel and mesentery
M.A. Patak; Zurich/CH

Learning Objectives:
1. To become familiar with traumatic injuries of the pancreas, bowel and
mesentery that can result in haemodynamic instability and other clinical
complications.
2. To learn how to optimise scanning protocols to diagnose these
injuries.
3. To understand the impact of these imaging findings on further
management of patients and report accordingly.

A-793 17:00
C. Urogenital tract
R.H. Oyen; Leuven/BE

Learning Objectives:
1. To become familiar with traumatic injuries of the urogenital tract that
can result in haemodynamic instability and other clinical complications.
2. To learn how to optimise scanning protocols to diagnose these
injuries.
3. To understand the impact of these imaging findings on further
management of patients and report accordingly.

16:00 - 17:30  Room D
Professional Challenges Session

PC 16
Ensuring the future role of radiologists

A-794 16:00
Chairman's introduction
J. Van Goethem; Antwerp/BE

Session Objectives:
1. To understand what challenges lie ahead.
2. To learn how to deal with these challenges.
3. To learn what you can do as a radiologist.

A-795 16:05
SWOT analysis of the radiologic profession
J.-Y. Meuwly; Lausanne/CH

Learning Objectives:
1. To understand our strengths and weaknesses within the medical world.
2. To recognise opportunities.
3. To identify threats lying ahead.
**A-796 16:28**
Turf battles: how to respond to the challenges

C. Loewe; Vienna/AT

**Learning Objectives:**
1. To identify possible future invasions in our radiological world.
2. To learn how to deal with turf battles.
3. To learn how to change battles in opportunities.

**A-797 16:51**
Always on the forefront: ensuring the future of radiology

G.P. Krestin; Rotterdam/NL

**Learning Objectives:**
1. To become familiar with new emerging radiological techniques.
2. To learn how to be ahead.
3. To safeguard the future of our profession.

**A-798 16:00**
Chairman’s introduction

M. Tosetti; Pisa/IT

**Session Objectives:**
1. To learn about MR image distortions.
2. To appreciate the appearance of metal-induced image distortions in MRI.
3. To appreciate image distortions in perfusion- and diffusion-weighted imaging.

**A-799 16:05**
A. Image artefacts in MRI and their mitigation

D.J. Lurie; Aberdeen/UK

**Learning Objectives:**
1. To identify common types of artefacts in MR images.
2. To learn about the physical origins of artefacts in MRI.
3. To learn methods of minimising artefacts on MR images.

**A-800 16:28**
B. Imaging around metal implants: artefact reduction in MRI

C. McGrath1, A. Fagan2; 1Belfast/IE, 2Dublin/IE

**Learning Objectives:**
1. To review the origin of signal in MRI.
2. To understand the MRI physics of artefact reduction around metal implants.
3. To understand the parameters used in an optimised imaging protocol.

**A-801 16:51**
C. Artefacts in perfusion and diffusion MRI

I. Troupias; Larissa/GR

**Learning Objectives:**
1. To review the artefacts and pitfalls of diffusion MRI on a qualitative basis, especially in terms of eddy currents and sensitivity to motion.
2. To review and evaluate the possible issues that can affect the accuracy of measurements regarding dynamic susceptibility contrast (DSC)-MRI (measurements of cerebral blood flow (CBF), cerebral blood volume (CBV), and mean transit time (MTT)).
3. To introduce possible strategies that have been developed to mitigate or overcome these artefacts and pitfalls.

**17:14**
Panel discussion: Clinically applicable tools/strategies for minimising/avoiding MR imaging artefacts

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**Panel discussion: The real challenge for radiologists is „how to change ourselves“**

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**Panel discussion: Always on the forefront: ensuring the future of radiology**

**Chairman’s introduction:**

G.P. Krestin; Rotterdam/NL

**Session Objectives:**
1. To become familiar with new emerging radiological techniques.
2. To learn how to be ahead.
3. To safeguard the future of our profession.

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**Panel discussion: Turf battles: how to respond to the challenges**

**Chairman’s introduction:**

C. Loewe; Vienna/AT

**Session Objectives:**
1. To identify possible future invasions in our radiological world.
2. To learn how to deal with turf battles.
3. To learn how to change battles in opportunities.

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**Panel discussion: Physics in Medical Imaging**

**RC 1613**

**MR: artefacts and devices**

**A-802 16:00**
Chairman’s introduction

G. Paulo; Coimbra/PT

**Session Objectives:**
1. To consider why publishing is important for the development of radiology and radiography.
2. To highlight the value of collaboration in medical imaging research.

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**A-803 16:05**
Why publish your work?

F. Zarb; Msida/MT

**Learning Objectives:**
1. To explore the importance of publishing for individual researchers and practitioners.
2. To explore the importance of publishing for clinical and academic departments.

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**A-804 16:20**
Journal selection: aims and scope, audience and metrics

J.M. Nightingale; Salford/UK

**Learning Objectives:**
1. To highlight the classifications of journals available to radiography and radiology authors (generalist, specialist and methodological).
2. To consider the benefits and limitations of publishing in different journal formats.
3. To explore the role of traditional (Impact Factor) and contemporary journal metrics in demonstrating impact, speed and reach of a journal.

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**A-805 16:35**
Ethics of publishing

J. McNulty; Dublin/IE

**Learning Objectives:**
1. To understand the ethical implications of article authorship.
2. To consider the nature of plagiarism in publishing and how it can be avoided.
3. To highlight potential conflicts of interest and how these should be managed and declared.

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**A-806 16:50**
Things to consider: the reviewer’s perspective

A. England; Salford/UK

**Learning Objectives:**
1. To identify the purpose of peer review.
2. To explain the steps within the peer review process.
3. To understand the qualities of a good reviewer.

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**A-807 17:05**
Editor’s ten top tips for publishing success

J.M. Nightingale; Salford/UK

**Learning Objectives:**
1. To discuss reasons why a manuscript may be rejected.
2. To emphasise how common manuscript errors can be avoided.
3. To highlight the author’s responsibilities in promoting their article.

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**Panel discussion: What are the barriers to publishing your research or becoming a reviewer and how can they be overcome?**
**A-808 16:00**  
Chairman's introduction  
**D. Regge;** Turin/IT  

**Session Objectives:**  
1. To explain when and how to replace PACS.  
2. To provide insight on how to improve interconnectivity and information sharing in medicine.  
3. To envisage the role of off-site archiving solutions in radiology.

**A-809 16:05**  
A. It's time for PACS replacement: how-to guide, recommendations and pitfalls  
**S. Morozov;** Moscow/RU  

**Learning Objectives:**  
1. To explain why and when PACS should be replaced.  
2. To provide recommendations for PACS replacement and risk assessment analysis including image migration issues.  
3. To give a practical example of how PACS is replaced in a large health facility or region.

**A-810 16:28**  
B. The paperless radiology department  
**M. Fatehi1,** **C. Heilmaier2;** 1Tehran/IR, 2Zurich/CH  

**Learning Objectives:**  
1. To provide reasons to give patient direct access to their medical imaging data.  
2. To describe the challenges and infrastructure needed to implement an imaging portal.  
3. To discuss first experiences and lessons learned.

**A-811 16:51**  
C. Will cloud-based PACS cause the traditional PACS to evaporate?  
**J. Schillebeecks;** Knokke/BE  

**Learning Objectives:**  
1. To explain the concept of cloud archiving and its advantages.  
2. To address limitations and risks of cloud PACS solutions.  
3. To give insight on future developments of cloud technology.

**A-812 16:00**  
Chairman's introduction  
**K. Nikolaou;** Tübingen/DE  

**Session Objectives:**  
1. To understand the basics of molecular imaging.  
2. To appreciate the unmet needs of oncological imaging.  
3. To learn the role of molecular imaging in oncology.

**A-813 16:05**  
A. Imaging of hypoxia  
**V.J. Goh;** London/UK  

**Learning Objectives:**  
1. To review the fundamentals of hypoxia imaging.  
2. To review the advantages and disadvantages of hypoxia imaging and its relation to perfusion.  
3. To learn about hypoxia imaging in radiation treatment.

**A-814 16:23**  
B. Imaging of proliferation  
**A. Kjær; Copenhagen/DK  

**Learning Objectives:**  
1. To understand basic principles of proliferation imaging.  
2. To become familiar with imaging of proliferation.  
3. To learn about difficulties in liver proliferation imaging.

**A-815 16:41**  
C. Imaging of metabolism  
**C. Nanni;** Bologna/IT  

**Learning Objectives:**  
1. To learn the clinical indications for FDG imaging.  
2. To become familiar with imaging protocol.  
3. To learn about difficulties in FDG imaging.

**A-816 16:59**  
D. Biomarker imaging with MR  
**M.E. Mayerhöfer;** Vienna/AT  

**Learning Objectives:**  
1. To learn the clinical indications for biomarker imaging.  
2. To become familiar with quantification.  
3. To learn about difficulties in quantification.

**17:17**  
Panel discussion: The pros and cons of molecular imaging in oncology
<table>
<thead>
<tr>
<th>Time</th>
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<tr>
<td>16:00</td>
<td>E - ECR Academies: Neuroradiology: from Morphology to Function</td>
<td>E³ 1622 Functional imaging of the spine</td>
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<td>16:00</td>
<td>A-821</td>
<td>Chairman's introduction</td>
<td>D. Balériaux; Brussels/BE</td>
<td></td>
</tr>
</tbody>
</table>
| 16:06 | A-822 | A. Measuring CSF flow: technique and clinical usefulness | B. Ertl-Wagner; Munich/DE | Learning Objectives:  
1. To review the physiology of CSF flow during the cardiac cycle.  
2. To evaluate the reliability of the quantification of CSF flow rates by use of phase contrast MRI.  
3. To show examples where alterations of CSF flow in the craniocervical junction can influence clinical management (e.g. in patients with Chiari Malformation Type I). |
| 16:34 | A-823 | B. Diffusion tensor imaging of the spinal cord in the assessment of intramedullary changes | M. Sasiadek; Wroclaw/PL | Learning Objectives:  
1. To review the technique of diffusion tensor imaging (DTI) in the assessment of the spinal cord.  
2. To document the usefulness of DTI in the detection of cervical spinal cord integrity alterations in different stages of degenerative spine disease.  
3. To discuss the value of DTI in other diseases of the spinal cord. |
| 17:02 | A-824 | C. Dynamic MR lumbar evaluation in degenerative spine disease | M. Muto; Naples/IT | Learning Objectives:  
1. To provide technical information on how to perform dynamic MRI of the lumbar spine.  
2. To discuss the advantages and disadvantages of dynamic MRI, as compared with static MRI.  
3. To document the added value of dynamic MRI of the lumbar spine in selected, illustrative case studies. |
Postgraduate Educational Programme

E³ - ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists

E³ 1721
Brain tumours

A-825 08:30
A. Paediatric brain tumours
M.I. Argyropoulou; Ioannina/GR

Learning Objectives:
1. To become familiar with different paediatric brain tumours.
2. To learn the imaging criteria for differentiation.

A-826 09:15
B. Adult brain tumours
P.C. Maly Sundgren; Lund/SE

Learning Objectives:
1. To become familiar with the different types of brain tumours.
2. To learn the imaging criteria for differentiation.

Abdominal Viscera

RC 1701
IgG4-related disease: what is it and what do I need to know?

A-827 08:30
Chairman's introduction
S.A. Jackson; Plymouth/UK

A-828 08:35
A. Pancreatic manifestations
R. Pozzi-Mucelli; Verona/IT

Learning Objectives:
1. To describe clinical and biological presentation of IgG4-related pancreatitis.
2. To describe morphological and functional (DWI, PET/CT, etc.) imaging features of IgG4-related pancreatitis.
3. To identify imaging findings for the differential diagnosis with other solid pancreatic lesions, i.e. pancreatic cancer, and to avoid unnecessary invasive therapeutic procedures.

A-829 08:58
B. Hepatobiliary manifestations
M. Ronot; Clichy/FR

Learning Objectives:
1. To describe clinical, biological presentation and morphological and functional imaging findings for the diagnosis of IgG4-related cholangitis.
2. To discuss the role of imaging to avoid unnecessary invasive diagnostic and/or therapeutic procedures.
3. To discuss the diagnostic criteria to differentiate IgG4-related cholangitis from other causes of cholangitis and biliary cancer.

A-830 09:21
C. Systemic manifestations
G. Morana; Treviso/IT

Learning Objectives:
1. To describe extra-pancreatic and extra-biliary manifestation of IgG4-related disease.
2. To describe the imaging findings of the most common extra-pancreatic and extra-biliary organ involvement.
3. To discuss the role of “whole-body” imaging modality for the diagnosis and the follow-up of IgG4-related systemic disease.

09:44
Panel discussion: Tips and tricks in clinical practice

08:30 - 10:00  Room C

Chest

RC 1704
Novelties in lung cancer imaging
Moderator:
B. Feragalli; Chieti/IT

A-831 08:30
A. New approaches to the management of pulmonary nodules
A. Nair; London/UK

Learning Objectives:
1. To learn about strengths and limitations of the recent British Thoracic Society guidelines in managing pulmonary nodules.
2. To become familiar with LungRads classification and reporting system in pulmonary nodule assessment.
3. To understand how LungRads may affect results in a lung cancer screening programme.

A-832 09:00
B. CT phenotypes of lung adenocarcinoma
M. Lederlin; Rennes/FR

Learning Objectives:
1. To become familiar with CT assessment of lung adenocarcinoma phenotypes.
2. To learn how CT-based radiomic features can capture information on phenotypes.
3. To understand if non-invasive evaluation of phenotypes can predict patient prognosis.

A-833 09:30
C. Imaging of immune-related response criteria (irRC)
O.L. Sedlaczek; Heidelberg/DE

Learning Objectives:
1. To become familiar with mechanisms of inducing lung cancer-specific immune response.
2. To learn about the response imaging patterns beyond those of cytotoxic agents.
3. To understand the clinical benefits from immune therapies using irRC compared to the conventional ones.

SF 17a
Paediatric parenchymal lung disease: what imaging technique to choose?

A-834 08:30
Chairman's introduction
H. Ducou le Pointe; Paris/FR

Session Objectives:
1. To be familiar with paediatric parenchymal lung disease.
2. To learn the advantages and drawbacks of each imaging modalities.
3. To understand the optimal use of the different imaging modalities.

A-835 08:35
Chest x-ray
P. Tomà; Rome/IT

Learning Objectives:
1. To learn about the aetiologies of paediatric parenchymal lung diseases.
2. To understand the differential diagnosis based on clinical and imaging findings.
3. To discuss the radiographic appearances of paediatric parenchymal lung diseases.
Postgraduate Educational Programme

A-836 08:55
US
S.P. Deftereos; Alexandroupolis/GR

Learning Objectives:
1. To learn about the role of ultrasonography (US) in paediatric parenchymal lung diseases.
2. To discuss the ultrasonographic appearances of parenchymal lung pathology in children.
3. To understand pitfalls and limitations of US of the chest/lung.

A-837 09:15
CT
P. Ciet; Rotterdam/NL

Learning Objectives:
1. To learn about the role of CT in paediatric parenchymal lung diseases.
2. To discuss the technique and protocols of CT of the lung parenchyma in children.
3. To learn about the differential diagnosis based on clinical and imaging findings.

A-838 09:35
MRI
M.O. Wielpütz; Heidelberg/DE

Learning Objectives:
1. To learn about the (potential) role of MRI in paediatric parenchymal lung diseases.
2. To discuss the technique and protocols of MRI of the lung parenchyma in children.
3. To learn about the differential diagnosis based on clinical and imaging findings.

09:55
Panel discussion: What imaging modality to choose and when?

08:30 - 10:00  Room N
E3 - ECR Master Class (Head and Neck)

E³ 1726a
Functional imaging in head and neck radiology: beyond morphology
Moderator:
M.M. Lemmerling; Ghent/BE

A-839 08:30
A. Diffusion-weighted MRI: apparent diffusion coefficient (ADC) and beyond
A.D. King; Hong Kong/HK

Learning Objectives:
1. To understand the concept of diffusion in oncology.
2. To learn how to evaluate diffusion images and numeric values.
3. To understand new trends and restrictions of the method.

A-840 09:00
B. Perfusion imaging in head and neck: what is new?
R. Maroldi; Brescia/IT

Learning Objectives:
1. To review the clinical usefulness of perfusion imaging in head and neck.
2. To understand advantages and disadvantages of perfusion.
3. To become familiar with the value of perfusion imaging in monitoring the early effects of non-surgical treatment.

A-841 09:30
C. MR/PET: the way to go
M. Becker; Geneva/CH

Learning Objectives:
1. To become familiar with the technique of MR/PET.
2. To discuss the value of MR/PET in head and neck oncology.
3. To be aware of the possible pitfalls.

08:30 - 10:00  Studio 2017
Genitourinary

RC 1707
Pitfalls in gynaecologic oncologic imaging: how to avoid them and minimise risks

A-842 08:30
Chairman's introduction
A. Sahdev; London/UK

Session Objectives:
1. To provide an overview of pitfalls and errors in interpretation of gynaecologic cancers.
2. To become familiar with strategies for avoiding pitfalls.

A-843 08:35
A. Mistakes in assessment of cervical cancer
M.M. Otero-García; Santiago de Compostela/ES

Learning Objectives:
1. To become familiar with pitfalls in staging of cervical cancer and in monitoring treatment response.
2. To learn how to differentiate mimics of cervical cancer.
3. To understand the central role of MRI in treatment planning.

A-844 08:58
B. Mistakes in assessment of endometrial cancer
T.M. Cunha, M. Horta; Lisbon/PT

Learning Objectives:
1. To become familiar with pitfalls in staging of cervical cancer and in monitoring treatment response.
2. To learn how to differentiate benign and malignant mimics.
3. To appreciate the complementary value of functional MRI techniques.
4. To understand the potential clinical impact of these mistakes in treatment planning.

09:44
Panel discussion: How can we improve interdisciplinary communication and avoid misunderstanding in our reports?

08:30 - 10:00  Room E1
E³ - ECR Master Class (Breast)

E³ 1726b
Taking clinical breast MRI to the next level

A-846 08:30
Chairman's introduction
J. Camps Herrera; Valencia/ES

Session Objectives:
1. To understand the concept of breast MR imaging biomarker and its role in the standardisation of the MRI technique.
2. To know how the results of the MIPA trial might influence the general approach to staging with breast MRI.
3. To understand the close relationship between pathology and MRI in the characterisation of high-risk lesions.
**Panel discussion: Breast MRI: what more evidence do we need?**

09:50

**Panel discussion: Errors in radiology, inevitable or preventable?**

09:40

**Panel discussion: Errors in radiology, inevitable or preventable?**

09:40

**Panel discussion: Errors in radiology, inevitable or preventable?**

09:40
**Postgraduate Educational Programme**

**08:30 - 10:00  Room F2  Oncologic Imaging**

**RC 1716**

**Diffusion-weighted imaging (DWI) in oncology: how I do it**

**A-857 08:30**
Chairman's introduction
D.-M. Koh; Sutton/UK

**Session Objectives:**
1. To understand the technical principles on DWI and to understand DWI-tailored protocols in function of the clinical questions to be answered.
2. To learn about calculation of true diffusion and perfusion fraction using DWI.
3. To learn about whole-body MRI vs DWI dedicated to one organ: strengths and weaknesses of both approaches.

**A-858 08:35**
A. DWI: how to optimise protocols
N. Papanikolaou; Lisbon/PT

**Learning Objectives:**
1. To learn about examination protocols and techniques.
2. To understand the different models describing diffusion in various organs and diseases.
3. To become familiar with basic and advanced post-processing aspects.

**A-859 08:58**
B. DWI in abdominal oncology: ready for clinical practice?
D.-M. Lambregts; Amsterdam/NL

**Learning Objectives:**
1. To learn about the different ways diffusion imaging protocols can be used for qualitative and quantitative evaluation of malignant tumours in the abdomen.
2. To understand the pitfalls of using DWI in abdominal oncology.
3. To become familiar with the current clinical applications for DWI in abdominal oncology.

**A-860 09:21**
C. DWI: whole-body imaging
V. Vandecaveye; Leuven/BE

**Learning Objectives:**
1. To learn about the most common indications of whole-body diffusion imaging in cancer staging and treatment planning.
2. To become familiar with normal anatomy and physiological signal at whole-body diffusion imaging.
3. To understand how to integrate qualitative and quantitative interpretation criteria into a structured report to optimise communication with the referring clinician.

09:44
Panel discussion: How to optimise DWI for clinical practice?

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**08:30 - 10:00  Room D  Musculoskeletal**

**RC 1710**

**MRI of articular cartilage and bone: areas of imaging confusion and practical solutions**

**Moderator:**
O. Papakonstantinou; Athens/GR

**A-861 08:30**
A. Bone oedema syndromes and avascular necrosis
B. Vande Berg; Brussels/BE

**Learning Objectives:**
1. To understand the aetiologies of bone marrow oedema syndromes.
2. To learn about the imaging characteristics of avascular necrosis of bone.

**A-862 09:00**
B. Osteochondral injury, subchondral fractures and traumatic bone oedema: what is important and how do I describe it
F.W. Roemer; Erlangen/DE

**Learning Objectives:**
1. To understand the pathomechanisms of osteochondral injury and subchondral fractures.
2. To learn about the imaging techniques and prognostic values.

**A-863 09:30**
C. Is this osteomyelitis? If not what else could it be?
A.B. Rosskopf; Zurich/CH

**Learning Objectives:**
1. To understand the imaging characteristics of osteomyelitis.
2. To learn the value of different imaging modalities for the diagnosis of osteomyelitis.

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**08:30 - 10:00  Room G  Physics in Medical Imaging**

**RC 1713**

**Artefacts and pitfalls in tomography**

**A-864 08:30**
Chairman's introduction
V. Tsapaki; Athens/GR

**Session Objectives:**
1. To learn about the origins of image artefacts in tomographic imaging.
2. To understand image distortions in hybrid imaging.
3. To learn about solutions and workarounds.

**A-865 08:35**
A. CT
J. Kuntz; Heidelberg/DE

**Learning Objectives:**
1. To understand the source of artefacts in clinical CT.
2. To understand the most important correction methods.
3. To find out what artefact correction techniques are actually provided by the CT vendors in their systems.

**A-866 08:58**
B. PET/CT
T. Beyer, I. Rausch; Vienna/AT

**Learning Objectives:**
1. To understand image distortions, artefacts and bias from methodological pitfalls.
2. To appreciate and understand solutions to frequent image distortions.
3. To understand the methodological limitations of PET/CT.
A-867 09:21
C. MR/PET
H.H. Quick; Essen/DE

Learning Objectives:
1. To identify common artefacts.
2. To understand the physical origin of and methods to resolve artefacts.
3. To understand the interrelation of MR artefacts and bias in PET quantification.

09:44
Panel discussion: Imagine imaging without artefacts: dos and don'ts in your clinical practice

Special Focus Session
SF 17c
How do radiographers enhance paediatric imaging?

A-868/A-869 08:30
Chairman's introduction: The role of the radiographer when imaging a paediatric patient
L.J.O.C. Lança; Lisbon/PT  E. Sorantin; Graz/AT

Session Objectives:
1. To learn about informed consent in paediatric imaging.
2. To emphasise the need of dose reduction practices in paediatric imaging.
3. To discuss emotional intelligence in paediatric imaging as a requirement for practice.

A-870 08:35
Informed consent: is this possible in paediatric imaging?
J. Portelli; Msida/MT

Learning Objectives:
1. To discuss informed consent in paediatric imaging.
2. To highlight the challenges for radiographers in paediatric imaging.
3. To focus on risk communication as part of informed consent during paediatric imaging.

A-871 08:58
Dose reduction in paediatric imaging
G. Paulo; Coimbra/PT

Learning Objectives:
1. To discuss the current research findings and their implications for paediatric imaging.
2. To illustrate essential practical approaches to minimising doses.
3. To highlight the importance of radiation safety culture in paediatric imaging.

A-872 09:21
Personality traits: a way of maximising cooperation during paediatric imaging
S.J. MacKay; Liverpool/UK

Learning Objectives:
1. To define and explain the different models of emotional intelligence (EI).
2. To discuss aspects of paediatric practice that require EI in order to deliver a quality paediatric radiography service for the patient and parent/guardian.
3. To discuss methods of improving emotional intelligence in radiographers.

09:44
Panel discussion: Challenges and opportunities when imaging paediatric patients

10:30 - 12:00  Room A
E³ - ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists

E³ 1821
Dementia and movement disorders

A-873 10:30
A. MR contribution to diagnosis and differential diagnosis in dementia
M. Sasiadek; Wroclaw/PL

Learning Objectives:
1. To become familiar with imaging in different types of dementia.
2. To learn the imaging criteria for differentiation.

A-874 11:15
B. Imaging in Parkinsonism and other extrapyramidal disorders
T. Stosic-Opincal; Belgrade/RS

Learning Objectives:
1. To become familiar with the different imaging modalities.
2. To learn the imaging criteria.

10:30 - 12:00  Room B
ESR meets Peru

EM 3
Peru in the radiological world
Presiding
L. Carrillo Diaz; Lima/PE  P.M. Parizel; Antwerp/BE

A-875 10:30
Introduction: Peruvian radiology: how is it going?
J.L. Guerrero Gil, L. Carrillo Diaz, P. Tapia Puente Arnao; Lima/PE

Session Objectives:
1. To become familiar with the Peruvian situation in the radiological world.
2. To show some radiological tools and their distribution over the country.
3. To give some information about radiological training in Peru.

A-876 10:35
MRI findings in CNS tuberculosis
R. Marquina Diaz; Lima/PE

Learning Objectives:
1. To give information about the characteristics of the MRI signs of the CNS tuberculosis in Peruvian patients.
2. To understand the accuracy of the MRI signs in CNS tuberculosis.
3. To show MRI images of CNS tuberculosis simulating other pathologies.

A-877 10:55
Interlude: From Peruvian mummies to bones: use of x-rays in Peruvian archaeology (part 1)
J.L. Guerrero Gil, P. Tapia Puente Arnao; Lima/PE

A-878 11:00
MRI findings in non-tuberculosis infectious diseases in the CNS
P. Tapia Puente Arnao; Lima/PE

Learning Objectives:
1. To learn about some infectious illness of the CNS in Peru and their MRI signs.
2. To give information about the accuracy of MRI signs in infection diseases.
3. To show MRI images of CNS infections simulating other pathologies.
A-879 11:20
Interlude: From Peruvian mummies to bones: use of x-rays in Peruvian archaeology (part 2)
J.L. Guerrero Gil, P. Tapia Puente Arnao; Lima/PE

A-880 11:25
Non-diagnosed spondyloarthritis in MRI of the spine for lower back pain
J. Carpio; Lima/PE

Learning Objectives:
1. To demonstrate that routine spine MRI for lower back pain is not sufficient for finding osteitis in spondyloarthritis.
2. To understand the MRI signs in lumbosacral spondyloarthritis.

11:45
Panel discussion: Is MRI the gold standard in CNS infection disease?

10:30 - 12:00  Room F1
E3 - European Diploma Prep Sessions

E3 1823
Principles of imaging and radiation protection

A-881 10:30
Chairman’s introduction
P. Vock; Spiegel/CH

Session Objectives:
1. To understand the technical and methodological principles of computed tomography.
2. To understand the technical and methodological principles of magnetic resonance tomography.
3. To learn the principles of radiation biology and radiation protection.

A-882 10:36
A. Principles of computed tomography
W.A. Kalender; Erlangen/DE

Learning Objectives:
1. To understand the physical basis of image formation of computed tomography and of the physics of helical, multidetector and dual-source CT.
2. To learn the scale of Hounsfield units and the principle of window centre and width.
3. To become familiar with modern CT technology.
4. To understand the principles of optimising CT protocols with a focus on patient dose reduction.

A-883 11:04
B. Principles of magnetic resonance imaging
T. Metens; Brussels/BE

Learning Objectives:
1. To become familiar with the physical basis of image formation in MRI including the principles of pulse sequences and relaxation times.
2. To understand the principles and main diagnostic applications for the most commonly used sequences in MRI, including T2-weighted sequences, T1-weighted sequences, STIR sequences, FLAIR sequences, other inversion recovery sequences, T2* / susceptibility-weighted sequences and MR angiography sequences.
3. To learn typical artefacts on MR imaging and to discuss their respective causes.
4. To understand absolute or relative contraindications against MR imaging and safety issues in the MR environment with regard to patients and staff.

A-884 11:32
C. Radiation protection
M. Mahesh; Baltimore, MD/US

Learning Objectives:
1. To understand the phenomena of x-ray interaction with matter and the consequences for image generation, image quality and radiation exposure.
2. To become familiar with the types and magnitudes of radiation exposure from natural and artificial sources and the concepts of dose determination and dose measurement for patients, occupationally exposed personnel and the public.
3. To learn the types and magnitudes of radiation risk from radiation exposure in medicine.
4. To understand the basic principles of radiation protection, as outlined by the ICRP (International Commission on Radiological Protection).
5. To become familiar with the concepts and tools for dose management in radiology with regard to adult and paediatric patients.

A-885 12:30
A. The hila
B. Ghaye; Brussels/BE

Learning Objectives:
1. To review the anatomy of the hila.
2. To learn how to identify hilar lesions.
3. To know the limitations of plain radiographic signs.

A-886 13:00
B. The mediastinum
M. Occhipinti; Florence/IT

Learning Objectives:
1. To review the mediastinal anatomy according to old and new classifications.
2. To learn how characteristic features can be helpful in the differential diagnosis.
3. To know how to choose the most appropriate imaging modality according to the diagnostic question.

E3 25E
Still tricky after all these years
Moderator: N. Howarth; Chêne-Bougeries/CH

A-887 13:00
Infective/inflammatory disorders
F.M.H.M. Vanhoenacker; Antwerp/BE

Learning Objectives:
1. To learn about the pathomechanisms involved in inflammatory and infections disorders.
2. To understand the imaging appearances and their differential diagnosis in the acute, sub-acute and chronic phases of infection.
3. To become familiar with the spectrum of imaging features of inflammatory disorders in the axial and peripheral skeleton.
E³ - European Diploma Prep Sessions

E³ 1923 Neuro

A-894 14:00
Chairman’s introduction
C. Manelfe; Toulouse/FR

Session Objectives:
1. To learn relevant imaging and interventional algorithms and important
imaging features of neurovascular disorders of the brain and spine.
2. To understand imaging features and prognostic implications of
tumours of the brain and spine.
3. To become familiar with the role of different imaging modalities
including hybrid imaging in diagnosing disorders of the central nervous
system.

A-895 14:06
A. Congenital and white matter disorders of the brain
A. Rossi; Genoa/IT

Learning Objectives:
1. To understand the development, normal anatomy and normal variants
of the brain.
2. To become familiar with common congenital disorders of the brain
and neurocutaneous syndromes.
3. To learn imaging features and differential diagnoses of white matter
disease, inflammation and neurodegeneration.

A-896 14:34
B. Neurovascular disorders and trauma of the brain
M. Forsting; Essen/DE

Learning Objectives:
1. To become familiar with the normal anatomy and normal variants
of the craniocervical arterial and venous system and its relevance to
interventional neuroradiology.
2. To learn the causes and imaging features of stroke, haemorrhage and
other common vascular lesions of the brain.
3. To understand the imaging features of traumatic injury to the brain
and spine.

A-897 15:02
C. Tumours of the brain and spine
M.M. Thurnher; Vienna/AT

Learning Objectives:
1. To understand the normal anatomy and normal variants of the spine,
spinal cord and nerve roots.
2. To learn imaging features of benign and malignant tumours of the
neurocranium.
3. To become familiar with the imaging features of benign and malignant
tumours of the spine.
SCIENTIFIC SESSIONS AND CLINICAL TRIALS IN RADIOLOGY (B)

Scientific session numbers are prefixed by SS. Presentation numbers are prefixed by the letter B. Sessions and abstracts are listed by days.

The Clinical Trials in Radiology (CTiR) sessions are listed at the end of this section (page 327)

There are 286 Invest in the Youth scientific paper presenters at ECR 2017. You can find their sessions marked with [SPEAKERS SUPPORTED BY INVEST IN THE YOUTH] on the following pages.
SS 201a
Hepatocellular carcinoma (HCC): detection, characterisation and therapeutic response

Moderators:
D. Ippolito; Monza/IT
S.A. Taylor; London/UK

B-0001 10:30
Feasibility of 10-min delayed hepatocyte phase imaging using a 30° flip angle in Gd-EOB-DTPA-enhanced liver MRI for the detection of hepatocellular carcinoma in patients with cirrhosis
J. Choi, E.-S. Cho, J. Kim, Y. Choi; Seoul/KR

B-0002 10:38
Assessment of gadoxetic acid-enhanced MRI phases for LI-RADS categorisation and non-invasive grading of hepatocellular carcinoma

B-0003 10:46
Comparison between acoustic radiation force impulse quantification data and perfusion-CT parameters in hepatocellular carcinoma
M. Esser, S. Schneeweß, M. Kolb, M. Kurucay, C. Ruff, K. Nikolaou, M. Horger; Tübingen/DE

B-0004 10:54
Evolution of indeterminate hepatocellular nodules at initial Gd-EOB-DTPA-enhanced MRI in cirrhotic patients
F. Agnello, R. Cannella, M. Galia, G. Sparacia, M. Miroddi, F. Midiri, G. Brancatelli; Palermo/IT

B-0005 11:02
Fate of subcentimeter arterially enhancing and hepatobiliary hypointense lesions seen on gadoxetate-enhanced MRI in patients at risk of HCC
C. Park, C. An, J.-Y. Choi, M.-J. Kim; Seoul/KR

B-0006 11:10
Hypovascular hypointense nodules on hepatobiliary phase without T2 hyperintensity on gadoxetic acid-enhanced MRI: long-term outcomes and risk factors of hypertavascularisation
H. Yang, J. Song, E. Choi, E. Park; Jeonju-si/KR

B-0007 11:18
Is CT perfusion a useful tool to predict response early after transarterial chemoembolisation?
D. Tamandl, F. Waneck, S. Unterhumer, A. Ba-Ssalamah, C. Loewe; Vienna/AT

B-0008 11:26
HCC showing complete response according to mRECIST on CT after a first session of TACE: is lipiodol deposition a good predictor of local recurrence?
M. Dioguardi Burgio, M. Ronot, M. Lagadec, C. Garcia-Alba, M. Zappa, A. Sibert, V. Vilgrain; Clichy/FR

B-0009 11:34
Role of IVIM in the verification of response to locoregional therapy in HCC
W.R.A. Abdel Hamid, R. Salah Eldein, Y. Abbas; Cairo/EG

SS 201b
Rectal cancer: response assessment and diagnostic biomarkers

Moderators:
L. Cevasco; Genoa/IT
S. Schmidt; Lausanne/CH

B-0012 10:30
Performance of high-resolution MRI in predicting tumoural response to neoadjuvant chemoradiotherapy in patients with rectal cancer
D.S. Feier, A. Cote, A. Lebovici, C. Caraiani, D. Floriani, F. Epure, C. Iancu, S.M. Dudea; Cluj-Napoca/RO

B-0013 10:38
DWI predictive value of response to CRT in local advanced rectal cancer
A. Palmisano, A. Di Chiara, A. Esposito, P. Passoni, L. Albarello, A. Del Maschio, F. De Cobelli; Milan/IT

B-0014 10:46
The value of ADC measurements for assessing treatment response of neoadjuvant chemoradiotherapy in patients with locally advanced rectal cancer
A. Lebovici, A. Cote, D.S. Feier, C. Caraiani, D. Floriani, F. Graur, C. Iancu, S. Dudea; Cluj-Napoca/RO

B-0015 10:54
Locally advanced rectal cancer: predicting response to neoadjuvant chemoradiotherapy using apparent diffusion coefficient textures
L. Liu, Z. Wang, Z. Yang, E. Jin; Beijing/CN

B-0016 11:02
DCE-MRI shows slower flow and more homogeneous vascularity in responding tumours after CRT for rectal cancer
R.A.P. Dijkhoff1, M. Maas1, G. Shakirin2, D.M.J. Lambregts1, J. van Griethuysen1, M. Webrecht1, M. Perkijn1, M. de Boer1, R.G.H. Beets-Tan1; 1Amsterdam/NL, 2Aachen/DE

B-0017 11:10
A modified 3-point MRI-predicted tumour regression grade incorporating diffusion-weighted image: locally advanced rectal cancer
B. Park, S. Cho, M. Lee; Taegu/KR

B-0018 11:18
Validity of MRI tumour volumetry as a biomarker in rectal cancer
E. Gasse; Swansea/UK

B-0019 11:26
Accuracy of MRI for predicting anterior peritoneal reflection involvement for locally advanced rectal cancer: prospective comparison with operation findings
K. Sim, B. Park, M. Kim, D. Sung, N. Han, S. Cho; Seoul/KR
B-0020 11:34
MRI can accurately predict sphincter preservation after chemoradiation

B-0021 11:42
Organ preservation for clinical complete responders after chemoradiation for rectal cancer, does timing of selection matter?
M. Maas1, B. Hupkens2, M. Martens3, M. van der Sande2, T. Melenhorst2, D. Lambregts3, G. Beets3, R.G.H. Beets-Tan3, Amsterdam/NL, 1Maastricht/NL, 2Sittard/NL.

B-0022 11:50
Air artefacts on diffusion-weighted MRI of the rectum: effect of applying a rectal micro-enema
J.J.M. van Griethuysen1, E.M. Bus1, M. Hauptmann2, L. Molenaar1, A. Kint2, M.J. Lahaye1, M. Maas1, G.L. Beets1, R.G.H. Beets-Tan1, Amsterdam/NL.

B-0023 10:30
The application of fat-water single-echo Dixon acquisition to time-resolved contrast-enhanced MRA
S. Riederer1, E. Stinson1, J. Glockner1, T. Trzasko1, P. Young1, Rochester, MN/US.

B-0024 10:38
Getting rid of the grind: automated analysis of large quantity data and intraindividual stability on MRI aortic blood flow measurements for vascular age assessment
A. Knorr1, T. Re1, B. Stieltjes1, D. Yates3, R. Schmieder1, J. Bremerich1, T. Heye3, Basle/CH, 1Cambridge, MA/US, 3Erlangen/DE.

B-0025 10:46
Is there more to aortic flow curves than meets the eye? - MRI blood flow analysis of large quantity data as a substitute marker for vascular age assessment
A. Knorr1, T. Re1, B. Stieltjes1, D. Yates3, R. Schmieder1, J. Bremerich1, T. Heye3, Basle/CH, 1Cambridge, MA/US, 3Erlangen/DE.

B-0026 10:54
Dual-energy CT angiography in peripheral arterial stents: an investigation of optimal scanning protocols with regard to image quality and radiation dose
A.M. Almutairi1, Z. Sun2, Z. Al Sabra1, S.A. Al Zaabi1, A.M.K. Abdel Aal1, D. Del Fabbro1, M. Donadon2, M. Tramarin2, R. Ceriani2, M. Zagura2, J. Eha3, H. Wodzick1, 1Cambridge, MA/US, 2Erlangen/DE, 3Tartu/EE.

B-0027 11:02
High pitch sub-second chest CT angiography using third-generation dual-source CT scanner: intra-patient comparison with standard acquisition
F. Sodagari1, H. Savas1, A. Arslanoglu1, V. Yaghmai1, Chicago, IL/US.

B-0028 11:10
4D flow can visualise and quantitatively analyse the characteristic reflection flow in infrarenal aorta and suction flow in renal arteries during diastole
M. Sugiyama1, T. Takehara1, M. Alley2, T. Watayama2, H. Nasu1, S. Yamashita2, A. Nozaki2, H. Kabasawa2, H. Sakahara1, H. Zilmer1, D. Lambregts3, G. Beets3, R.G.H. Beets-Tan3, Amsterdam/NL, 1Maastricht/NL.

B-0029 10:34
Differences in MRI and tonometry measured pulse wave velocity: effect of arterial composition, arterial length or technique bias?

B-0030 11:26
Optimising contrast media injection protocols in CT angiography at different tube voltages: evaluation in a circulation phantom using third generation dual-source CT
D. De Santis1, U.J. Schoepf2, D. Caruso2, M. Eid1, M.H. Albrecht1, A. Varga Szemes1, W.V. Lesslie1, C.N. De Cecco1, 1Charleston, SC/US, 2Latina/IT.

B-0031 11:34
Radiologic and biochemical correlates of arterial stiffness in patients with peripheral artery disease and in clinically healthy subjects
M. Zágora, J. Kals, M. Serg, P. Kampus, M. Zilmer, M. Jakobson, E. Unt, J. Eha, Tartu/EE.

B-0032 11:42
Investigation basis for the resistive factors in blood circulation by MRI and CT
G. Beralia, M. Beralia, Tbilisi/GE.

B-0033 11:50
Experimental ex-vivo flow studies in pig kidneys by multimodal angiography using DSA, MRA, and magnetic particle imaging
M.G. Kaul1, I. Molwitz1, A.M. Kaul3, S. Tatum1, B. Jackson1, C.M. Sommer1, H. Ittrich1, Hamburg/DE.

B-0034 10:39
Transarterial bland embolisation for HCC using cyano-acrylate glue and 40-100μm microspheres
E. Lanza1, V. Pedicini1, D. Poretti1, M. Tramarin2, M. Zagura2, J. Eha3, C. Schmidt2, 1Heidelberg/DE.

B-0035 10:47
Tumour response and survival outcomes of very small drug eluting beads used in trans-arterial chemoembolisation for unresectable hepatocellular carcinoma
A.M.K. Abdel Aal1, S. Moawad1, M. Hanaoka1, S. Tatum1, B. Jackson1, C. Baalmann1, N. Ertel1, A. Abouarab1, S. Saddekni1, Birmingham, AL/US.

B-0036 11:05
Evaluation of a newly developed biodegradable embolic agent for transcatheter arterial embolisation in a rabbit renal model
H. Wittgenstein1, M. Stechele1, J. Breinl1, J. Schnorr1, B. Rudolph1, C. Schmidt1, B. Hamm1, G. Günther1, F. Streitparth1, Berlin/DE.
B-0037 11:03
Evaluation of the effectiveness of transpulmonary chemoembolisation (TPCE) and intraarterial chemoperfusion (TACP) in treatment of colorectal lung metastases
A.I. Mekkawy1, A. Hassan1, M. El-Sharkaway1, H.M. Kamel1, D.B. Thabet1, N.E. Nour-Eldin2, N.N.N. Naguib2, T.J. Vogl2; *Assiut/EG; †Frankfurt a. Main/DE

B-0038 11:11
Effectiveness of intra-arterial steroid administration (IASA) for the treatment of steroid-refractory acute gastrointestinal GVHD
V. Bérczi, A. Tóth, J. Fábán, P. Reményi, T. Masszi; Budapest/HU

B-0039 11:19
Adjuvant stereotactic body radiotherapy following transarterial chemoembolisation using small diameter drug eluting beads in patients with unresectable hepatocellular carcinoma
A.M.K. Abdel Aal1, S. Moawad1, M. Hanaoka1, A. Abouarab1, S. Tatum1, K. Mahmoud1, R. Jacob1, B. Jackson2, S. Saddekni2; 1Frankfurt a. Main/DE

B-0040 11:27
Extended liver venous deprivation: the most powerful interventional radiology technique for liver preparation before major hepatectomy?
B. Guli1, L. Escal1, P. Riron1, M.-A. Pierredon1, E. Deshayes; Montpellier/FR

B-0041 11:35
Prototype metal artifact reduction algorithm in flat panel CT: performance in patients with intraarterial angiography during hepatic selective internal radiotherapy
Q.M. Hamie1, A. Kobe1, L. Mietzsch1, M. Manhart1, T. Pfammatter1, R. Guggenberger1; 1Zurich/CH; †Forchheim/DE

B-0042 11:43
Locoregional treatments for HCC in patients with high risk for intra procedural bleeding: is single-step combined therapy safe and feasible?
A. Pota1, R. Iezzi2, F. Carchesio1, A. Gasbarrini1, C. Colosimo1, L. Bonomo; 1Rome/IT

B-0043 11:51
Prospective randomised FAST II trial: evaluation of the response after regional chemoembolisation (TACE) of hepatocellular carcinoma (HCC) with two different protocols
T.J. Vogl1, M. Langenbach1, R. Hammerstingl1, T. Gruber-Rouh1; 1Birmingham, AL/US

B-0046 10:46
The role of diffusion weighted MR imaging for the characterisation of mediastinal lymphnodes
M.K. Garg1, E. Ramamoorthy2, P. Singh, A.N. Aggarwal1, N. Gupta; Chandigarh/IN

B-0047 10:54
Whole body MRI with diffusion-weighted imaging (DWI) for preoperative assessment of lymph node involvement in NSCLC patients: ADC value of primary tumour as prognostic factor
L. Calandriello1, M. Ciliberto1, G. Sica1, D. Coviello1, A. Larici1, L. Bonomo1; 1Rome/IT

B-0048 11:02
Lung cancer: short-term reproducibility of diffusion-weighted magnetic resonance imaging and intravoxel incoherent motion parameters at 3.0T
J. Jiang1, L. Cui1, J. Yin2, X. Gu3, S. Gong3; †Nantong/CH; ‡Suzhou/CHN

B-0049 11:10
A comparative analysis of dual-phase dual-energy CT and FDG-PET/CT for the prediction of histopathological invasiveness of non-small-cell lung cancer
R. Ito1, S. Iwano1, H. Shimamoto1, H. Umakoshi1, S. Ito1, K. Kato1, S. Naganawa; 1Aichi/JP

B-0050 11:18
Comparison of capability for therapeutic outcome prediction among CT texture analysis, dynamic perfusion MRI, dynamic ADCT and FDG-PET/CT: in NSCLC patients with chemoradiotherapy
W. Tani1, Y. Ohno1, Y. Kishida1, S. Seki1, T. Yoshikawa2, Y. Fujisawa2, M. Yui2, S. Ohyu2, N. Sugihara2; 1Kobe/JP; †Otawara/JP

B-0051 11:26
Radiomics features provide reliable measurements from manual contouring of tumours in lung cancer
A. Eilaghi1, M.A. Haider1, Y. Zhang1, A. Oikonomou1, L. Jimenez-Juan1, A. Berruti1, R. Maroldi1, Brescia/IT

B-0052 11:34
CT texture analysis in metastatic lung adenocarcinoma treated with tyrosine kinase inhibitors: prediction of survival
J. Cardinale1, V. Bettini1, G. Agazzi1, M. Ravanelli1, E. Roca1, D. Farina1, A. Berruti1, R. Maroldi1, Brescia/IT

B-0053 11:42
Early lung adenocarcinomas appearing as subsolid nodules: is systematic nodal dissection always essential?
S. Jeon1, C. Park1, J. Goo2; 1Seoul/KR

B-0054 11:50
Comparison of capability for differentiation of malignant from benign pulmonary lesions among CEST imaging, DWI and FDG-PET/CT
Y. Ohno1, M. Yui2, Y. Kishida3, S. Seki1, T. Yoshikawa2, M. Miyazaki2, K. Kyotani1, K. Sugimura2; 1Kobe/JP; †Otawara/JP; ‡Vernon Hills, IL/US

SS 204
Lung cancer: from diagnosis to prognosis
Moderators:
C.M. Schaefer-Prokop1, Amersfoort/NL
A. Snoeckx; Antwerp/BE

B-0044 10:30
Comparison of the capability for differentiating malignant from benign nodules among quantitatively assessed dynamic perfusion ADCT and MR indexes and FDG-PET/CT
W. Tani1, Y. Ohno1, Y. Kishida1, S. Seki1, T. Yoshikawa2, Y. Fujisawa2, M. Yui2, S. Ohyu2, N. Sugihara2; 1Kobe/JP; †Otawara/JP

B-0045 10:38
Comparison of capability for differentiation of malignant from benign pulmonary lesions among CEST imaging, DWI and FDG-PET/CT
Y. Ohno1, M. Yui2, Y. Kishida1, S. Seki1, T. Yoshikawa2, M. Miyazaki2, K. Kyotani1, K. Sugimura2; 1Kobe/JP; †Otawara/JP; ‡Vernon Hills, IL/US

SS 207
Kidney and urinary tract I
Moderators:
G.P. Krestin1, Rotterdam/NL
R. Salvador2, Barcelona/ES

B-0055 10:30
Do clinicians follow imaging recommendations on renal artery duplex ultrasound reports?
A.H. Rajaram1; 1Bangalore/IN

B-0056 10:38
Evaluation of image quality and radiation dose for low kilovoltage peak (kVp) with an adaptive statistical iterative reconstruction algorithm in computed tomography urography
L. Zheng1, Z. Zhou1; 1Shanghai/CN
**B-0058 10:54**
Rescanning in prone position in CT urography: is it really necessary for the evaluation of an incompletely opacified bladder?

P. Martingano; M. Muca, M.F. Cavallaro, M. Iannelli, M.A. Cova; Trieste/IT

**B-0059 11:02**
Role of diffusion-weighted magnetic resonance imaging in predicting renal dysfunction in chronic kidney disease patients

M.S. Shaaban, M. Sakr, A. Fathy, G. Kortam; Alexandria/EG

**B-0060 11:10**
Observational study on the incidence of nephrogenic systemic fibrosis in patients with renal impairment following gadoteric acid administration

A.I.B. De Backer; Ghent/BEL

**B-0061 11:18**
Perfusion MRI in early detection of renal fibrosis in patient with ADPKD: a preliminary study

A. Di Gaeta, E.L. Indino, S. Lai, D. Mastroluca, C. Catalano, V. Panebianco; Rome/IT

**B-0062 11:26**
DW-MRI as an alternative to biopsy in renal allograft patients with deteriorating renal function: a preliminary study

S. Barbieri, P. Steiger, A. Kruse, M. Ith, H.C. Thoeny; Berne/CH

**B-0063 11:34**
Usefulness of transplanted kidney evaluation by multiparametric ultrasonography: including two different types of ultrasound elastography

M. Yoo, D. Jung, Y. Oh, S. Park, K. Han; Seoul/KOR

**B-0064 11:42**
Diffusion-weighted imaging and diffusion tensor imaging in the evaluation of transplanted kidneys before and after furosemide

D.C. Castabianco, L. Mammino, V. Costanzo, P. Poti, P. Milone, L. Mauro, N. Sinagra, M. Veroux, S. Palumi; Catania/IT

**B-0065 11:50**
CT diagnosis and follow-up of urolithiasis using ultra-low dose hybrid and pure iterative reconstruction algorithms based on size

V. Vardhanabhuti1, S. Tenant1, C.-L. Pang1, P. Dissanayake1, C. Gutteridge2, C.J. Hyde1, C.A. Roobottom1; Hong Kong/UK, Plymouth/UK, Exeter/UK

**B-0066 10:30**
US localisation of abnormal findings in neck PETCT or scintiscan: a preliminary experience with 3D and 2D virtual navigation (VN) and bodymap technology (BMT) vs cognitive approach

G. Bizzarri, A. Bianchini, D. Valle, L. Velari, S. De Nuntis, A. Dell’Era, L. Di Vito, L. Forzoni, E. Papini; Albano Laziale/IT

**B-0067 10:38**
TSE or SPACE for high-resolution dental-MRI?

T. Hilgenfeld, M. Prager, S. Schwindling, A. Heil, S. Kuchenbecker, P. Rammelsberg, M. Bendszus, S. Heiland; Heidelberg/DE

**B-0068 10:46**
Multiparametric MRI of velopharyngeal inadequacy in patients who underwent primary palatoplasty

R. Magrini, N. Fior, F. Gali, M. Zaffaroni, S. Sbaraini, G. Carrafiello; Milan/IT

**B-0069 10:54**
Facial vascular anomalies: MRI and TRICKS-MR angiography diagnostic approach

O. Hassanien, U. Ghedia, R.L. Younes, E.A.I.N. Shaban; Mehalia/EG

**B-0070 11:02**
Intravoxel incoherent motion imaging of the head and neck: comparison of quantitative parameters between turbo spin-echo and echo-planar imaging

R. Mikayama, H. Yabuuchi, K. Kobayashi, S. Sonoda, M. Kimura, H. Honda; Fukuoka/JAP

**B-0071 11:10**
Computed tomography of the head and neck region: comparison of dual energy vs single energy administration

M. May, R. Heiss, M. Wiesmueller, M. Uder; Wiesbaden/Erlangen/DE

**B-0072 11:18**
Dental implant artefact reduction using novel dual-layer spectral CT


**B-0073 11:26**
Lateral position with gantry tilt further improves CT image quality reconstructed by single energy metal artifact reduction algorithm in the oral cavity

M. Onodera, K. Aratani, T. Shonai, K. Ogura, M. Hatakenaka; Sapporo/JAP

**B-0074 11:34**
Evaluation of laryngopharyngeal structures by CT scan using dynamic “eee” phonation maneuver

K.K. Obeng, P. Ignaciuk, J. Kim, F. Appiah, N. Darboe, E.J. Escott; Lexington/KY/US

**B-0075 11:42**
The role of CB-CT on the planning, surgical technique and follow-up of pterygoid implants: a controlled prospective study

G. Ferrero1, F. Fiz2, C. De Angelis2, E. Fabbro1, A. Corazza2, D. Orlandi2, I. Fiz2; “Pietra Ligure”/IT, “Genoa”/IT

**B-0076 11:50**
Quantitative and analytic assessment of incidental findings in patients exposed to CBCT

M. Iodice; Milan/IT

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**SS 208**
New technical developments in head and neck imaging

**B-0060 11:10**
**Moderators:**
A. Borges; Lisbon/PT
N.J.M. Freling; Amsterdam/NL
<table>
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<th>Session</th>
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<td>SS 210</td>
<td>Nerve and muscle</td>
<td>10:30 - 12:00</td>
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**SS 217 Emergency Imaging**

**Traumatic emergencies**

Moderators: M. Maas; Amsterdam/NL
S. Vaidya; London/UK

**B-0099** 10:30
A new low-dose multi-phase trauma CT-protocol and its impact on diagnostic assessment and radiation dose in multitrauma patients
Z. Alagic, A. Eriksson, S. Rezaei Motamed, M.C. Wick; Stockholm/SE

**B-0100** 10:38
Are follow-up ultrasound (US) studies of severely injured patients after negative multi-detector computed tomography (MDCT) a waste of time?
M. Schürer, T. Kahn, C. Josten, J.K.M. Fakler, P. Stumpp; Leipzig/DE

**B-0101** 10:46
Blunt cervical spine injury in adult polytrauma: incidence, injury patterns and predictors of significant ligament injury on CT
G. Chilvers, U. Januja, S. Choudhary; Birmingham/UK

**B-0102** 10:54
Traumatic arterial injuries of the extremities: MDCT angiography evaluation in emergency setting
C. Liguori, G. Russo, T. Cinque, S. Daniele, N. Gagliardi, A. Campanera, L. Romano; Naples/IT

**B-0103** 11:02
Structured reporting of facial skeletal trauma CT scan as a tool to reduce report turnaround time (TAT)
B.M. Jain, K.A. Bhagwat, R.B. Shashikiran, P.T. Reddy, K.P. N. Rathod, M. Karanji, V. Dev; Davanagere/IN

**B-0104** 11:10
CT injury score of blunt pancreatic trauma is useful in decision-making for treatment
Y.-C. Wong, L.-J. Wang, C.-H. Wu; Taiwan/TW

**B-0105** 11:18
Correlation of traumatic skin and subcutaneous injuries with the severity of trauma - analysis of whole-body emergency CT scans in 250 patients

**SS 210 Nerve and muscle**

**B-0106** 11:26
Assessment of CT scan need for patients with delayed presentation of head trauma
M.S. Khan, Y.B. Hadi, B. Ibrahim, M. Irfani, M. Aslam, U.F. Bhatti, W. Memon; Karachi/PK

**B-0107** 11:34
Maxillo-facial trauma: a surgical approach to CT reporting
G. Pasinatili, A. Sorbo, F. Romano, M. Altiero, G. Avitabile, E. Laccetti, M. Scaigione; Castel Volturno/IT

**B-0108** 11:42
Structured reporting of calcaneal CT in trauma: a checklist for daily practice
I. Altmann-Schneider, K. Bartlema, I. Dekkers, A. van der Molen; Leiden/NL

**B-0109** 11:50
Post-traumatic active bleeding in dual-phase CT: identification, characterisation and management implications
F. Guida, F. Romano, M. Altiero, E. Laccetti, I. Iadevito, M. Tanga, G. Pasinatili, M. Scaigione; Castel Volturno/IT

**B-0110** 10:30
Peripheral nerve ultrasound examinations without peripheral nerve abnormalities: prevalence and further assessment of extraneural findings
B. Bignotti, F. Zottetti, S. Airaldi, F. Rossi, G. Succio, C. Martinoli, A. Tagliafico; Genoa/IT

**B-0111** 10:38
Sciatic nerve diffusion tensor imaging in muscular disease
S. Keller, A. Golsari, Z.J. Wang; G. Adam; J. Yamamura; Hamburg/DE, \(2\)Dallas, TX/US

**B-0112** 10:46
Ultrasound anatomy of the infrapatellar branch of the saphenous nerve

**B-0113** 10:54
Ultrasound of the median nerve in patients with diabetes
F. Steinmahl, A. Loizides, L. Gruber, M. Kraupl, G. Mördorf, I. Gruber, B. Godney, H. Gruber; Innsbruck/AT

**B-0114** 11:02
Role of real time and shear wave sonoeleastography in the follow up of muscle thigh injuries in athletes: a three-years longitudinal study
A. Corazza, D. Orlandi, F. Ferrero, C. Messina, R. Sartoris, E. Silvestri, L.M. Sconfienza; Genoa/IT, \(2\)Pietra Ligure/IT, \(3\)Milan/IT

**B-0115** 11:10
Shear wave elastography of median nerve at carpal tunnel in upper extremity spasticity
H. Aslan, P.D. Analan; Adana/TR
B-0116 11:18
Quantification of muscle degeneration in patients with late-onset Pompe disease by MRI
A. Lollert, C. Stihl, A.M. Hötker, E. Mengel, J. König, K. Laudemann, C. Düber, G. Staatz; Mainz/DE

B-0117 11:26
Automated artifact correction of diffusion tensor data allows unbiased muscle fiber tracking in the thigh

B-0118 11:34
Proton density fat-fraction of rotator cuff muscles is associated with isometric strength 10 years after rotator cuff repair: a quantitative MR imaging study of the shoulder
P.M. Jungmann, D.C. Karampinos, C. Holwein, S. Buchmann, S. Ruschke, A.B. Imhoff, E.J. Rummeny, T. Baum; Munich/DE

B-0119 11:42
Ultrasound elastography in detection of supraspinatus muscle atrophy and fatty degeneration in the reference to MRI
V. Gazhonova, M. Emelianenko, M. Onishchenko; Moscow/ RU

B-0120 11:50
Evaluation of lower back muscle activity with functional magnetic resonance imaging
B. He; Kunming/CN

10:30 - 12:00 Room G
Physics in Medical Imaging

SS 213
CT technology and reconstruction algorithms
Moderators:
A. Alberich-Bayarri; Valencia/ES
A. Stadler; Vienna/AT

B-0121 10:30
Identification and quantification of multiple high-Z materials by spectral CT
M. Mophieh, R. Aamir, J. Healy, A.P.H. Butler, N.G. Anderson; Christchurch/NZ

B-0122 10:38
Modified dual-energy-based three material decomposition for calcium plaque removal on spectral CT data
B. Schmitt, B. Krauss, A. Pourmorteza, D.A. Bluemke, K. Grant, T. Flohr; Forchheim/DE, Bethesda, MD/US, Malvern, PA/US

B-0123 10:46
Comparison of metal artefact reduction in dual- and single-source CT: a vertebral phantom study
P. Jagoda, D. Schmitz, S. Wagenpfeil, A. Buecker, P. Minko; Homburg/DE

B-0124 10:54
Metal artefact reduction in CT: objective evaluation of three commercial algorithms
K.N. Rolstad; S. Flatabo, D. Aadnevik, I. Dalehaug, N. Vetti; Bergen/NO

B-0125 11:02
Accurate reconstruction of x-ray spectra in CT from simple transmission measurements
C. Leinweber; J. Maier, M. Kachelrieß; Heidelberg/DE

B-0126 11:10
Advanced electron density reconstruction for single-energy computed tomography
A. Ritter, R. Raupach, B. Schmidt; Forchheim/DE

B-0127 11:18
Iterative reconstruction algorithm in CT protocol optimisation
C.R. Gigliotti, A. Loria, F. De Cobelli, R. Nicoletti, G. Bianco, R. Calandrino, A. del Vecchio; Milan/IT

B-0128 11:26
Effects of five iterative reconstruction algorithms on low-contrast detectability in patients with varying abdominal diameters: a CT phantom study
A. Viny, D. Racine, C. Aberle, S. Schmidt, S. Schindera, F.R. Verdun, F. Becce, Lausanne/CH, Basle/CH, Aarau/CH

B-0129 11:34
The impact of new generation scanner CT and ASIR-V on dose reduction and image quality
M. Gatti, M. Fronda, D. Castellano, P. Isoardi, F. Marchisio, O. Rampado, R. Popolo, P. Foni, G. Gandini; Turin/IT

B-0130 11:42
Utilizing model-based iterative reconstruction to minimise radiation dose in chest CT examinations for diagnosing lung metastases of sarcoma patients: a phantom study
T. Kaasalainen, T. Mäkelä, A. Kelaranta, M. Kortesniemi; Helsinki/FI

B-0131 11:50
Monte-Carlo simulation of iodine enhancement in an anthropomorphic abdomen phantom: effects of different primary MDCT x-ray spectra on energy deposition
A. Steuwe, H.-U. Kauczor, W. Stiller; Heidelberg/DE

10:30 - 12:00 Room K
Radiographers

SS 214
CT imaging
Moderators:
K. Muscat; Birkirkara/MT
A. Palkó; Szeged/HU

K-03 10:30
Keynote lecture
F. Zarb; Msida/MT

B-0132 10:39
Using of eye Bismuth shields in CT scan: its influence on ESD and image quality

B-0134 10:47
A multi-site head CT topogram acquisition protocol analysis based on DICOM metadata
M. Santos, L. Bastião, N. Rocha, A. Silva; Aveiro/PT

B-0135 10:55
Investigating optimal abdominal CT protocol for obese patients
Optimisation of CT via analysis of computational fluid dynamics in cerebral aneurysm
M. Ogawara, T. Hirano, T. Yagi, M. Nakamoto, H. Nagahama; Sapporo/JP, Tokyo/JP
B-0137 11:11
Evaluate the effect of contrast media on patient dose in CT examination of abdomen-pelvic performed with AEC
O. Seraydarmansour; Tehran/IR

B-0138 11:19
Impact of acquisition protocol variations on effective dose for CT head examinations
M.R. Benhalim, A. England; Salford/UK

B-0139 11:27
Effective dose comparison between fixed tube current FTC and automatic tube current ATC methods for abdominal CT examinations
M. Alrowily, A. England, P. Hogg; Manchester/UK

B-0140 11:35
Establishment of diagnostic reference levels in computed tomography

B-0141 11:43
Single- and dual-energy quantitative CT adjacent to acetabular prosthetic components: a reliability study
B.R. Mussmann, P.E. Andersen, T. Torfing, S. Overgaard; Odense/DK

10:30 - 12:00 Room M1
Cardiac

SS 203
Cardiac CT: contrast agent and radiation dose
Moderators:
A. Esposito; Milan/IT
G. Feuchtner; Innsbruck/AT

B-0142 10:30
Reducing iodinated contrast agent concentrations with dual energy CT: a multivendor dynamic phantom study
R.W. van Hamersvelt; N.G. Eijsvoogel, C. Mihi; P.A. de Jong; N. Buil; M. Das; J.E. Wildberger; T. Leiner, M.J. Willemink; Utrecht/NL, Maastricht/NL, Brussels/BE

B-0143 10:38
Individualisation of injection protocols to the individual patients blood volume and automated tube voltage selection in coronary CTA
N.G. Eijsvoogel, B.M.F. Hendriks, B. Horehledova, J.L. Willigers, B.L.J.H. Kietselaer, H.J.G.M. Crijns, J.E. Wildberger, M. Das; Maastricht/NL

B-0144 10:46
Image quality and radiation dose of dynamic stress myocardial perfusion imaging at 70kV using third generation dual-source CT: comparison with second-generation scanner

B-0145 10:54
Low injection speed study on prospectively high-pitch coronary CT angiography: iodinated contrast media injection protocol with a flow rate at 3.5 ml/s scanned at 70 kVp
L. Zhang, X. Liu, B. Feng; Shenyang/CN

B-0146 11:02
Systemic hypotension following intravenous administration of non-ionic contrast medium: a randomised controlled double-blinded phase IV clinical trial

B-0147 11:10
The effect of iterative beam hardening correction on Agatston score: adaptive tube voltage modulation comes to calcium scoring

B-0148 11:18
CT imaging of the tricuspid valve in patients with tricuspid regurgitation: tailored contrast media protocol and dynamic analysis of the annulus

B-0149 11:26
False-positive calcifications and radiation dose in coronary artery calcium scoring using iterative reconstruction with a noise threshold
M. Garmer, C. Lehrenfeld, F. Metz, O. Klein-Wiele, B. Brandts, D. Grønemeyer; Bochum/DE

B-0150 11:34
57% dose reduction in coronary artery calcium scanning by using lower kVp and advanced modeled iterative reconstruction
M. Vonder, G. Pelgrim, T. Henzler, R. Vliegenthart, M. Oudkerk; Groningen/NL, Mannheim/DE

B-0151 11:42
High-pitch coronary CT angiography using the 3rd generation dual-source CT: initial experience in patients with high heart rate
L. Zhang, X. Liu, B. Feng; Shenyang/CN

B-0152 11:50
Non-inferior image quality in low-dose CCTA with knowledge-based iterative model reconstruction for overweight patient: unnecessary tube current modulation according to the body size

10:30 - 12:00 Room M2
Paediatric

SS 212
Paediatric cardiothoracic imaging
Moderators:
A. Serinara; Rome/IT
E. Sorantin; Graz/AT

B-0153 10:30
Evaluation of paediatric radiology services in hospitals in the UK
K. Halliday, K. Drinkwater; Nottingham/UK, London/UK, Eastbourne/UK

B-0154 10:38
CT lung perfusion in the long-term follow-up of congenital left-sided diaphragmatic hernia: results in a cohort of 28 children
M. Rémy-Jardin, T. Duchaussoy, A. Deschilde, V. Deken, A. Duhamel, J. Rémy; Lille/FR

B-0155 10:46
High-temporal resolution chest CT examinations in infants and young children without sedation or general anesthesia: frequency and severity of motion artifacts
**B-0156 10:54**
Functional magnetic resonance imaging compared to lung function in primary ciliary dyskinesia

S. Nyilas1, G. Bauman2, G. Sommer2, O. Pusterla2, F. Singer1, O. Bieri1, C. Heyer1, C. Koerner-Rettberg1, P. Latzin1, 1Basle/CH, 2Bochum/DE

**B-0157 11:02**
3T MR T1 mapping after arterial switch operation in patients with transposition of the great arteries

K. Rydén Suther, E. Hopf, O. Geier, H. Brun, B. Nguyen, A. Tomterstad, H. Lindberg, A.E. Fiane, C. de Lange; Oslo/NO

**B-0158 11:10**
Image quality comparison of applied and exploratory weight-dependent exposure charts of lower doses in paediatric chest radiography: a multi-centre study of a mobile DR systems

K. Shangleidi, T. Syahn, R. Lesanu; Gävle/SE

**B-0159 11:18**
Quality of paediatric AP/PA chest radiographs based on EC-guidelines - realisable in daily routine at an academic paediatric radiology division?

P.-C. Kröger, F. Schmidt, S. Otto, S. Langner; Greifswald/DE

**B-0160 11:26**
Role of lung ultrasound in the evaluation of pneumonia in children

I. Sefic-Pasic, A. Dzananovic, A. Pasic, S. Vegar Zubovic; Sarajevo/BA

**B-0161 11:34**
Role of lung ultrasound in paediatric intensive care units: comparison with bedside chest radiography

M. Mugnetti, G. Napoli, A.M. Chiesa, F. Ciccarese, P. Bertaccini, M. Zompatari; Bologna/IT

**B-0162 11:42**
The effect of iodinated contrast administered during a CT pulmonary angiogram during pregnancy on neonatal thyroid function

S. Cuilleton, A. Egan, B. Buckley, T. Tarmey, D. O’Donovan, P. Mayne, D. Sheppard; Galway/IE

**B-0163 11:50**
Effect of high concentration iodinated contrast medium in euthyroid children

A. Clemente, F. Avogliero, A. Di Giambattista, D. Della Latta, D. Chiappino; Massa/IT

**B-0164 10:30**
Histogram analysis of ADC from whole-body DW-MRI (WB DW-MRI) to predict very early response to chemotherapy in patients with metastatic colorectal cancer (mCRC): preliminary results


**B-0165 10:38**
Comparison of imaging response criteria in metastatic melanoma patients treated with immune checkpoint inhibitors: a single institution analysis

M. Morone1, L. Spain1, J. Winfield2, T. Schmid1, D.-M. Koh1, C. Messiou1, D. Collins1, A. Sohaib1, J. Larkin1, M. Ball1, Sutton/UK, 2London/UK

**B-0166 10:46**
3D imaging biomarkers: prediction of survival in patients with non-small cell lung cancer brain metastases treated with stereotactic body radiation therapy

M. Della Seta1, D. Kaul1, J. Chapiro1, B. Hamm1, F. Collettini1; 1Berlin/DE, 2New Haven, CT/US

**B-0167 10:54**
DWI and ADC in assessing early response to angiogenesis inhibitors in metastatic renal cell carcinoma

C. Marigliano, C. Sgrazzutti, A. Vanzulli; Milan/IT

**B-0168 11:02**
CT texture analysis as a predictor of response to therapy and prognosis in patients with metastatic renal cell carcinoma treated with first-line tyrosine kinase inhibitors

G. Bonera, G. Agazzi, M. Ravanelli, D. Farina, F. Ferrari, A. Berrett, R. Maroldi; Brescia/IT

**B-0169 11:18**
DCE-MRI to assess pathological response to neoadjuvant chemotherapy for high-grade soft tissue sarcomas

A. Crombe1, X. Buy1, N. Albert2, M. Touilmonde1, E. Stoeckle1, J.-M. Coindre2, A. Italiano1, M. Kind1; 1Bordeaux/FR, 2Contamines-sur-Arve/FR

**B-0170 11:26**
Response to neoadjuvant chemotherapy of skeletal-osteosarcoma/ Ewing sarcoma on the basis of MRI 18-FDG-PET by correlating with pathological necrosis

D.P. Wali1, S. Gupta2; 1Bangalore/IN, 2Mumbai/IN

**B-0171 11:34**
Can diffusion-weighted MR imaging be used for prediction and monitoring of treatment response in gall bladder carcinoma?

L. Singh, R. Sharma, D. Kandasamy, M. KS, S. Gamanagatti, R. Sahoo, A. Sharma, P. Garg, P. Sahni; New Delhi/IN

**B-0172 11:42**
CT-based tumour heterogeneity analysis in pancreatic carcinoma allows prediction of progression

J.P. Steinacker1, N. Stanescu-Siegmund1, T. Ettrich1, M. Baumhauer1, T.F.E. Barth1, M. Kornmann1, A. Beer1, M. Beer1, S.A. Schmidt1; 1Ulm/DE, 2Dossenheim/DE

**B-0173 11:50**
Sarcopenia is an independent prognostic factor for poor overall survival among patients with pancreatic adenocarcinoma

A. Lambert, J. Salleron, C. Gavoille, A. Viard, A. Ayav, T. Conroy, V. Laurent; Vandoeuvre-lès-Nancy/FR
SS 211b  
White matter diseases

Moderators:
E. Avdagic; Sarajevo/BA  
C. Lukas; Bochum/DE

K-02 10:30  
Keynote lecture
M.P. Wattjes; Amsterdam/NL

B-0175 10:39  
Microbleed location is related to white matter lesion morphology

B-0176 10:47  
MR features and cerebrospinal fluid and plasma oxidative stress biomarkers in different clinical phenotypes of neuroinflammatory acute attacks
D. Stojanov, S. Ljubisavljević, I. Stojanovic, S. Vojinovic; Nis/RS

B-0177 11:03  
Decreased white matter integrity (WMI) in SLE patients: a DTI study
J.S.B. Nystedt, M. Nilsson, A. Jönsen, P.M. Sundgren; Lund/SE

B-0178 11:11  
The role of multivoxel proton MRS in differential diagnosis of multiple sclerosis disease courses
A. Bogdan, J. Khomenko, G. Kataeva, L. Prakhova, A. Ilves; St. Petersburg/RU

B-0180 11:19  
Diagnostic value of contrast-enhanced T2 FLAIR in multiple sclerosis disease: a preliminary experience in 49 patients
M. Perri1, R. Balzano1, R. Izzo2, G. Guglielmi1, T. Popolizio1; 1San Giovanni Rotondo/IT, 2Naples/IT

B-0182 11:27  
Subpial cortical demyelination (SCD) in multiple sclerosis: a MRI study in patients of recent onset
S. Iafrate, L. Panebianco, S. Quarchioni, L. Patriarca, M. Varrassi, A. Splendiani, C. Masciocchi; L’Aquila/IT

B-0183 11:35  
Perfusion and brain volume changes connected to cognitive dysfunction in multiple sclerosis patients
I. Krotenkova; Moscow/RU

B-0184 11:43  
MRI characteristics of early cerebral lesions in asymptomatic boys with X-linked adrenoleukodystrophy
P.A. Caruso; Boston, MA/US

Abdominal Viscera

SS 301a  
Liver: advances in CT and MRI

Moderators:
O.V. Kucheruk; Moscow/RU  
L. Marti-Bonmati; Valencia/ES

B-0185 14:00  
Transient severe motion artifact related to gadoxetic acid enhanced liver MRI: incidence and risk evaluation at a European institution
L. Weil, V.H. Rausch, G. Adam, F.O. Henes, P. Bannas; Hamburg/DE

B-0186 14:08  
Liver function is significantly correlated with liver to portal vein contrast ratio during the hepatobiliary phase with Gd-EOB-DTPA-enhanced MR at 3 Tesla
W. Zhang, C. Hu, Suzhou/CN

B-0187 14:16  
Magnetic resonance elastography for prediction of radiation-induced liver disease after stereotactic body radiation therapy
S. Ichikawa, U. Motosugi, M. Oguri, H. Onishi; Chuo-shi, Yamanashi/JP

B-0188 14:24  
Self-gated 4D-MRI of the liver: comprehensive real-time imaging of hepatic enhancement

B-0189 14:32  
Evaluation of transient dyspnea during gadoxetic acid-enhanced liver MRI using free-breathing TiWI

B-0190 14:40  
Rapid continuous multiarterial MRI of hepatic arterial dominant phase during free-breathing
A. Othman, J. Weiss, K. Nikolau, M. Notohamiprodjo; Tübingen/DE

B-0192 14:56  
Intravoxel incoherent motion diffusion-weighted imaging of hepatic warm ischemia-reperfusion injury in a rabbit model
Q. Ji, Z. Chu, W. Shen; Tianjin/CN

B-0193 15:04  
Liver function evaluation at magnetic resonance imaging: comparison between liver enhancement and MELD
M. Di Martino, V. Ceci, S. De Vizio, A. Capalbo, K. Koryukova, C. Catalano; Rome/IT

B-0194 15:12  
Prediction of liver stiffness measurement using liver surface analysis on CT scan
M. Seong, T. Kang, M.-R. Kwon, J. Kim, S. Yang, J. Lee; Seoul/KR

B-0195 15:20  
Baseline values of DCE-CT of liver in patients with colorectal cancer
A. Bevilacqua1, S. Malavasi1, M. Ronot2, J.-L. Daire2, B.E. Van Beers2, V. Vilgrain3; 1Bologna/IT, 2Clichy/FR
Dynamic MRI of the pelvic floor in different body positions: success rate of MR defecography in supine vs left lateral body position
K. Schawkat1, B. Pfister1, H. Parker1, H. Heinrich1, B. Barth1, D. Weishaupt1, M. Fox1, C.S. Reiner1; "Zurich/CH, "Basel/CH"
B-0216 15:13
Wavelet-based angiographic reconstruction of CT perfusion data: diagnostic value in cerebral venous sinus thrombosis

14:00 - 15:30 | Room Z
Interventional Radiology

SS 309
Radioprotection in interventional radiology (IR)
Moderators:
V. Bérczi; Budapest/HU
N. Karunanithy; London/UK

B-0217 14:00
Procedural DAP can be used for relative dose estimation for staff dose in fluoroscopy-guided interventions

B-0218 14:08
Evaluation of radiation exposure in central venous catheter (CVC) placement in paediatric patients using two fluoroscopy protocols on a flat-panel system
R. Gerasia, S. Degiorgio, C. Tafaro, G.S. Gallo, A. Cucchiara, K. Cortis, L. Maruzzelli, R. Miraglia, Palermo/IT, Msida/MT

B-0219 14:16
Personalised dose feedback to medical staff involved in fluoroscopy-guided interventions: a new era in radiation dose monitoring

B-0220 14:24
Radiation dose estimation for lumbar spine pain relieving interventional procedures: comparison of CT fluoroscopy and conventional CT techniques
N. Rasouly; Kabul/AF

B-0221 14:52
Comparison of shoulder strain relief between radiation protection aprons
A.M. Koenig, D. Sasse, R. Etzel, A.H. Mahnken; Marburg/DE, Giessen/DE

B-0222 14:40
Characteristics of a new C-arm imaging system used during uterine artery embolisation for uterine fibroids treatment: reduced radiation exposure and improved image quality

B-0223 14:48
Evaluation of reduction in time and radiation exposure using a robotic tracking system for CT-guided percutaneous bone procedures - our experience
S. Quarchioni, F. Bruno, F. Smaldone, F. Arrigoni, S. Mariani, L. Zugaro, A. Barile, C. Masciocchi; L’Aquila/IT

B-0224 14:56
Evaluation of a novel positioning system for CT-guided interventions: preliminary results

B-0225 15:04
Increased freedom in AEC parameter selection can reduce dose and increase efficiency in interventional cardiology x-ray systems
M. Dehaes, N. Marshall; Leuven/BE

14:00 - 15:30 | Room O
Chest

SS 304
Interstitial lung disease (ILD) and COPD: quantification and function
Moderators:
J. Broncano; Cordoba/ES
P.A. Grenier; Paris/FR

B-0228 14:00
Is CT visual score able to demonstrate significant differences in distribution and progression of IPF abnormalities on the basis of smoking habit and treatment?

B-0229 14:08
Volumetric texture analysis in the characterisation of interstitial lung diseases in lung transplant patients
F. Gentili, V. Nardone, D. Spina, D. Bennett, A. Fausto, P. Tini, P. Rottoli, L. Volterrani, M.A. Mazzei; Siena/IT

B-0230 14:16
Utility of 3D computer-aided diagnosis system for pulmonary functional loss and treatment response assessments in connective tissue disease patients

B-0231 14:24
Interstitial lung disease in systemic sclerosis: comparison between quantitative CT and visual-scoring system before and after therapy
G. Cicchetti, M. Occhipinti, M. Rucco, S. Bosello, A. Larici, L. Bonomo, Rome/IT, Florence/IT

B-0232 14:32
Three dimensional structures of alveoli and alveolar ducts on magnified 3D print model based on micro CT of the lung specimen

B-0233 14:40
Quantitative CT analysis in COPD: do coexisting fibrotic changes influence pulmonary function in patients with advanced emphysema?
F.W. Feldhaus, D. Theilig, R.-H. Huebner, J. Kuhnigk, F. Doellinger; Berlin/DE, Bremen/DE
### SS 307  Kidney and urinary tract II

**Moderators:**

- P.K. Prassopoulos; Alexandroupolis/GR
- K.K. Pyra; Lublin/PL

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<thead>
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<th>Presentation</th>
<th>Time</th>
<th>Room</th>
<th>Abstract Title</th>
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<tr>
<td>B-0234</td>
<td>14:48</td>
<td></td>
<td>CT abnormalities in never-smoking HIV patients R. Scaglioni, G. Besutti, G. Ligabue, A. Santoro, S. Zona, A. Malagoli, G. Guaraldi, P. Torricelli; Modena/IT</td>
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<tr>
<td>B-0237</td>
<td>15:12</td>
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<td>Cardiac remodelling in COPD: An effect of reduced preload or increased afterload? J. Weir-McCall, A. Struthers, B. Lipworth, J. Houston; Dundee/UK</td>
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<td>B-0238</td>
<td>15:20</td>
<td></td>
<td>Pulmonary hypertension secondary to diffuse lung diseases: correlations between radiological findings and haemodynamic assessment A. Poerio, A. Bruno, F. Ciccarese, V. Cosi, F. Ragusa, A. Conficoni, F. Niro, D. Attinà, M. Zompatori; Bologna/IT</td>
</tr>
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### SS 308  Head and neck cancer: value of multiparametric and advanced imaging techniques

**Moderators:**

- P. De Graaf; Amsterdam/NL
- N.I. Traykova; Plovdiv/BG

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<tr>
<td>B-0241</td>
<td>14:16</td>
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<td>New radiologic classification of renal angiomylipomas B. Paris, S. Song; Seoul/KR</td>
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<td>B-0243</td>
<td>14:24</td>
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<td>Characterisation of adrenal lesions with histogram analysis using unenhanced MRI V. Romeo, R. Cucolo, S. Dell'Aversana, M. Coppola, P. Mainenti, M. Imbriaco, S. Maurea, A. Brunetti; Naples/IT</td>
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<tr>
<td>B-0244</td>
<td>14:32</td>
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<td>Quantitative ultrasound evaluation of cystic and solid tumours of the kidney: a fancy toy or an useful tool? C. Bruno, A. Bucci, C. Dallaierra, R. Pozzi-Mucelli; Verona/IT</td>
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<td>B-0245</td>
<td>14:40</td>
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<td>Perfusion CT in the evaluation of renal cell carcinoma S.S. Chauhan, R. Dixit, V. Chowdhury, N. Khurana; New Delhi/IN</td>
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<td>B-0247</td>
<td>14:56</td>
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<td>Evaluation of diffusion kurtosis imaging for detecting and grading the renal clear-cell carcinoma Q. Feng; Weifang/CN</td>
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<td>B-0248</td>
<td>15:04</td>
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<td>Four-dimension dynamic imaging by 640-slice multidetector CT for the diagnosis of urine flow related diseases J. Guan, Y. Guo, H. Wang; Guangzhou/CN</td>
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<tr>
<td>B-0249</td>
<td>15:12</td>
<td></td>
<td>3T multiparametric MRI in differentiating muscular-invasive and non muscular-invasive bladder cancer M. Grompone, M. Del Monte, E.L. Indino, V. Salvo, C. Catalano, V. Panebianco; Rome/IT</td>
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### Room L 8

#### Genitourinary

**Abstract Title:** Perfusion CT in the evaluation of renal cell carcinoma  
**Speakers:** S.S. Chauhan, R. Dixit, V. Chowdhury, N. Khurana  
**Place:** New Delhi/IN

**Abstract Title:** Elastography point quantification and chronic renal diseases  
**Speakers:** E. Danso, C. Lenfant, M. Jadoul, F. Houssiau, S. Aydin, J. Cosyns, N. Demoulin, T. Trefois, N. Michoux  
**Place:** Brussels/BE

**Abstract Title:** Evaluation of diffusion kurtosis imaging for detecting and grading the renal clear-cell carcinoma  
**Speakers:** Q. Feng  
**Place:** Weifang/CN

**Abstract Title:** Four-dimension dynamic imaging by 640-slice multidetector CT for the diagnosis of urine flow related diseases  
**Speakers:** J. Guan, Y. Guo, H. Wang  
**Place:** Guangzhou/CN

**Abstract Title:** 3T multiparametric MRI in differentiating muscular-invasive and non muscular-invasive bladder cancer  
**Speakers:** M. Grompone, M. Del Monte, E.L. Indino, V. Salvo, C. Catalano, V. Panebianco  
**Place:** Rome/IT
B-0255 14:40
Is quantitative ultrasound elastography valuable in the assessment of cervical lymphadenopathy?
V. Selvadasan, A. Prakash, V. Chowdhury, A. Gulati, S. Jain, A. Garg; New Delhi/IN

B-0256 14:48
Can qualitative and semi-quantitative ultrasound elastography contribute to the diagnosis of salivary gland tumours?
C.Z. Karaman, Y. Durum, A. Eryilmaz, F. Taşkın, E.H. Navaei; Aydın/TR

B-0257 14:56
Combination of diffusion weighted imaging and dynamic contrast-enhanced MRI improves differentiation of benign and malignant orbital masses
E.Y.L. Dai, A.T. Ahuja; Hong Kong/HK

B-0258 15:04
Usefulness of microvascular ultrasonography in differentiation between pleomorphic adenoma and Warthin tumour of salivary glands
S. Chae, I. Ryoo, S. Suh, A. Park, M. Ku, H. Seol; Seoul/KR

B-0259 15:12
Thyroid nodules: utility of ultrasound combined to cytopenure results in diagnosing malignant nodules that must be biopsied
G. Berrada, N. El Benna, O. Amriss, N. Moussali, Casablanca/Marocco

B-0260 15:20
MRI-based treatment response assessment for head and neck tumours chemoradiotherapy
N. Plakhotina, D. Kuplevatskaya, A. Smirnova, M. Anishkin, A. Mikhailov; St. Petersburg/Russia

B-0261 15:28
Accuracy of diffusion-weighted imaging and dynamic contrast-enhanced MRI for differentiating benign from malignant non-cystic lesions in floor of the mouth
Y. Yuan, X. Tao; Shanghai/China

14:00 - 15:30 Room E1

Computer Applications

SS 305
Machine learning in image interpretation
Moderators:
T. Bäuerle; Erlangen/DE
E. Svedström; Basle/Switzerland

K-04 14:00
Keynote lecture
O. Ratib; Geneva/CH

B-0262 14:09
Evaluation of CAD-RADS in coronary CTA: man vs machine
B. Szilveszter, M. Kolossváry, J. Karády, Z. Bagyura, M. Károlyi, A. Panajotu, Á. Jermendy, B. Merkely, P. Maurovich-Horvat; Budapest/HU

B-0263 14:17
A new computer-aided decision (CAD) system based on artificial neural networks for detecting breast lesions on MRI
M. Telegrafo, V. Bevilacqua, S. De Ceglie, A. Stabile Ianora, G. Angelelli, M. Moschetta; Bari/IT

B-0264 14:25
Why big image analytics is essential for imaging biobanks: an osteoporosis radiomics study
K.S. Mader, T.J. Re; J. Cyriac; B. Stieltjes; Zürich/CH, Basle/CH

B-0265 14:33
Fully-automated mean bone density calculation on 1,000,000 CT scans: groundwork for opportunistic osteoporosis screening
T.J. Re, A.W. Sauder, E.M. Merkle, B. Stieltjes; Basle/CH

B-0266 14:41
Automatic vertebreae localisation in arbitrary field-of-view spine CT using decision forests

B-0267 14:49
Quantitative CT metrics outperform pulmonary function testing for diagnosis of bronchiolitis obliterans syndrome after lung transplantation

B-0268 14:57
Semi-automatic software for time-efficient CT-based quantification of abdominal adipose tissue

B-0269 15:05
Using 3D image features for the prediction of survival in patients after liver transplantation

B-0270 15:13
Machine learning in whole-body oncology: fully automatic, multi-organ segmentation in whole-body-MRI, using classification forests and convolutional neural networks
I. Lavdas, B. Glocker, D. Rueckert, H. Mair, A. Sandhu, E. Aboagye, A.G. Rockall; London/UK

B-0271 15:21
Fully automated segmentation of rectal carcinomas using supervised learning techniques with expert-reader input

14:00 - 15:30 Room E2

Neuro

SS 311a
Stroke: CT and MRI
Moderators:
S. Jefic; Banja Luka/BA
U. Lamot; Ljubljana/Slovenia

B-0272 14:00
Detection of single-phase CTA-occult vessel occlusions by CT perfusion post-processing predicts favorable response to IV thrombolysis in acute ischaemic stroke

B-0273 14:08
Crossed cerebellar diaschisis in acute ischaemic stroke: impact on morphologic outcome, functional outcome and stroke-related complications
W.G. Kunz, W.H. Sommer, M.P. Fabritius, F. Schüler, M.F. Reiser, K.M. Thierfelder; Munich/DE
B-0274 14:16
Quantitative assessment of hyperacute cerebral infarction with intravoxel incoherent motion MR imaging: initial experience in a canine stroke model
S. Lu, Q. Gao, X. Xu, X. Liu, H. Shi, S. Liu; Nanjing/CN

B-0275 14:24
Automated assessment of early ischaemic damage on CT scans: as good as an expert?
C. Soncalves, S. Bowman, S. Liyanage, R. OrathPrabakaran, S. Shah, S. Gerry; P. Harman, P. Guyler; 'Southend-on-Sea/UK', 'Oxford/UK'

B-0276 14:32
MRI stroke protocol: one-stop shop in setting of acute infarct with multiple comorbidities
F. Mubarak; Karachi/PK

B-0277 14:40
Intraluminal thrombus detection in patients with acute ischaemic stroke using three-dimensional black blood contrast-enhanced MRI: comparison on SWI

B-0278 14:48
Site and rate of arterial occlusive disease in acute ischaemic stroke: a CT-angiography study of 50'807 cervico-cerebral arterial segments
D.C. Rotzinger, P.J. Mosimann, R.A. Meuli, P. Maeder, P. Michel; Lausanne/CH

B-0279 14:56
The application of Alberta Stroke Program Early CT Score (ASPECTS) to acute ischaemic stroke initial CT brain imaging and haemorrhagic transformation rates
M. Hanley, T. Tarmey, M. Costello, K. Donlon, P.A. McCarthy, R. Ó'Caoimh; Galway/IE

B-0280 15:04
Intracranial arterial calcification in black Africans with acute ischaemic stroke
R.B. Olatunji, A.J. Adekanmi, A.O. Ogunseyinde; Ibadan/NG

B-0281 15:12
Haemodynamic disturbances in CT perfusion (CTP) for infarct core volume prediction during acute Ischaemic stroke (AIS) in large vessel multiple occlusion
E. Puglielli, R. Lattanzi, G. Esposito, V. Di Egidio; Teramo/IT

B-0282 15:20
Correlation between iodine extravasation after mechanical revascularisation in acute ischaemic cerebrovascular stroke and haemorrhage development
M. Bonatti, F. Lombardo, A. Comai, G.A. Zamboni, G. Bonatti; 'Bolzano/IT', 'Verona/IT'

B-0283 14:00
MDCT assessment of esophageal perforations in the emergency setting
C. Liguori, A. Pinto, G. Ponticiello, C. Stavolo, S. Nicotra, L. Romano; Naples/IT

B-0284 14:08
Application of model-based iterative reconstruction algorithm in CT pulmonary angiography in emergency setting: dose reduction and image quality
L. Riva, D. Ippolito, C.R.G.L. Talei Franzesi, A. De Vito, C. Cangiotti, S. Sironi; Monza/IT

B-0285 14:16
Use of whole-body CT to detect patterns of CPR-related injuries after sudden cardiac arrest

B-0286 14:24
Role of high-frequency ultrasound in ocular emergencies
S.S. Sachar, Bareilly/IN

B-0287 14:32
Low-dose abdominal CT using pure iterative reconstruction in patients presenting to the emergency department with acute abdominal symptoms
F. Molony, M. Tomey, D. Ryan, K. James, T. Grey, N. Moore, M. Murphy, O. O'Connor, M. Maher; Cork/IE

B-0288 14:40
Dengue fever: markers on ultrasound predicting prolonged hospital stay and complications
P. Khokhani, K. Dhamecha, H. Shah; Anand/IN

B-0289 14:48
CT findings in impending rupture of atherosclerotic abdominal aortic aneurysms: a case control study
M. Giannotta, M. Piolanti, E. Pisano, L. Rignanese, F. Mognoni, A. Pilato, M. Zompatori, M. Imbriani; Bologna/IT

B-0290 14:56
MDCT signs accuracy in detection of acute perforated appendicitis
M. Porto, C. Liguori, S. Daniele, T. Cinque, C. D’errico, L. Romano; Naples/IT

B-0291 15:04
Interobserver variability in detection of acute abdominal bleeding with CT
J. Rabczak, M. Powierski, M. Pech, S. Penzlin, S. Neumann, R. Damm, B. Friese, P. Schindler, S. Titz; Magdeburg/DE

B-0292 15:12
To die or die hard? Plain radiography for acute non-traumatic abdominal pain presenting to the emergency department
M.E. Abd El Bagi, B. Almutairi, S. Alsolamy, S. Alrashidi, I. Alrashidi, N. Ashraf, M. Reutener, A. Mohammed, N. Afrasheed; Riyadh/SA

B-0293 15:20
Suspicion of acute appendicitis in adults: the value of ultrasound
G. Benedetto, A. Llavata Solaz, M. Ferrer Puchol; Alzira/ES

Emergency Imaging

SS 317 Non-traumatic emergencies
Moderators:
A. van Randen; Amsterdam/NL
S. Wirth; Munich/DE

B-0285 14:08
Application of model-based iterative reconstruction algorithm in CT pulmonary angiography in emergency setting: dose reduction and image quality
L. Riva, D. Ippolito, C.R.G.L. Talei Franzesi, A. De Vito, C. Cangiotti, S. Sironi; Monza/IT

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B-0289 14:48
CT findings in impending rupture of atherosclerotic abdominal aortic aneurysms: a case control study
M. Giannotta, M. Piolanti, E. Pisano, L. Rignanese, F. Mognoni, A. Pilato, M. Zompatori, M. Imbriani; Bologna/IT

B-0290 14:56
MDCT signs accuracy in detection of acute perforated appendicitis
M. Porto, C. Liguori, S. Daniele, T. Cinque, C. D’errico, L. Romano; Naples/IT

B-0291 15:04
Interobserver variability in detection of acute abdominal bleeding with CT
J. Rabczak, M. Powierski, M. Pech, S. Penzlin, S. Neumann, R. Damm, B. Friese, P. Schindler, S. Titz; Magdeburg/DE

B-0292 15:12
To die or die hard? Plain radiography for acute non-traumatic abdominal pain presenting to the emergency department
M.E. Abd El Bagi, B. Almutairi, S. Alsolamy, S. Alrashidi, I. Alrashidi, N. Ashraf, M. Reutener, A. Mohammed, N. Afrasheed; Riyadh/SA

B-0293 15:20
Suspicion of acute appendicitis in adults: the value of ultrasound
G. Benedetto, A. Llavata Solaz, M. Ferrer Puchol; Alzira/ES

Musculoskeletal

SS 310 Tumours and inflammation
Moderators:
R. Campbell; Liverpool/UK
E. Llopis; Valencia/ES

K-05 14:00
Keynote lecture
A. Oktay; Izmir/TR
**B-0294** 14:09  
Spondyloarthropathy (SpA): is sacroiliac (SI) joint imaging sufficient?  
S. Gupta, J.P. Singh; Gurgaon/IN

**B-0295** 14:17  
Presence of bone marrow edema on MRI of the sacroiliac joints is predictive of subsequent (5 years) radiographic progression in early onset non-radiographic axial spondyloarthritis  
A. Feydy, M. Dougados, A. Sepriano, R. Landewe, C. Demattei, A. Molto, M. de Hooge, V. Navarro, M. Reijnierse; Paris/FR

**B-0296** 14:25  
Whole spine MRI findings in SAPHO syndrome  
W. Xu, C. Li, X. Shao, X. Zhao, W. Zhang; Beijing/CN

**B-0297** 14:33  
Initial experience with dual-phase hybrid $^{18}$F-Fluoride PET/MRI in patients with ankylosing spondylitis  

**B-0298** 14:41  
Monitoring of tocilizumab treatment in patients with rheumatoid arthritis using selected imaging techniques  
T. Henzler; Mannheim/DE, M. Meyer, N. Vogler, H. Haubenreisser, M.M. Ong, S.O. Schönberg, S. Lütje, X. Baraliakos, J. Kirchner; Vienna/AT

**B-0299** 14:49  
Ultrasound superb microvascular imaging in the evaluation of synovial vascularity: a preliminary study  
S. Gitti, D. Orlandi, A. Corazza, E. Silvestri, M.A. Cimmino, L.M. Sconfienza; Milan/IT, Genoa/IT

**B-0300** 14:57  
MRI grading of cartilaginous tumours: comparison of texture analysis with visual MRI analysis  
C. Fritz, D.A. Müller, R. Sutter, M.C. Wurnig, M.A. Fischer, C. Jung, M.G. Kaul, R. Reimer; Aachen/DE

**B-0301** 15:05  
Use of shear wave elastography to differentiate benign and malignant fatty soft tissues tumours  

**B-0302** 15:13  
PET/MR evaluation of the relationship between metabolic activity on PET and cell-density on DWI for bone metastases  

**B-0303** 15:21  
Patient dose evaluation for whole-body skeletal CT using 100Sn filter for spectral shaping at 100kV in multiple myeloma  

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**Wednesday, 14:00 - 15:30 Room G**

**Physics in Medical Imaging**

**SS 313 Innovations in radiology**

Moderators:  
H. Bosmans; Leuven/BE, I. Sechopoulos; Nijmegen/NL

**B-0304** 14:00  
Evaluation of a new x-ray imaging system based on Talbot-Lau interferometry: initial images of the knee joints of healthy volunteers  
Y. Hara, J. Tanaka, M. Niitsu, Y. Hoshino; Saitama/JP, Hachioji/JP

**B-0305** 14:08  
Chest imaging with x-ray-field radiography: first human body experience  

**B-0306** 14:16  
Impact of dose reduction on dark-field signal intensities in chest radiographs of living pigs  
K. Hellbach, A. Bähr, P.B. Noël, S. Reu, A. Yoneyama, R. Baba; Kokubunji/JP, Munich/DE, Garching/DE

**B-0307** 14:24  
A fully functional prototype for establishing electrochemotherapy in initial usage with drug application and a G factor optimisation model  
A. Ritter, J. Pfeiffer, P. Isfort, M. Baumann, P. Bruners; Aachen/DE

**B-0308** 14:32  
Multispectral magnetic particle imaging for real-time 3D MPI-guided treatment of a vessel stenosis  

**B-0309** 14:40  
Impact of temporal resolution on quantitative renal perfusion MRI: assessment using a single contrast injection and a continuous golden angle radial sampling technique  

**B-0310** 14:48  
Novel high quantum efficiency photodiode for x-ray imaging  
M.A. Arthunen, J. Heinonen, V. Vähänissi, P. Repo, A. Vaskuri, H. Savin; Espoo/FI

**B-0311** 15:04  
Gridless scatter removal on standard digital radiography systems using the IBEX material identification technology  
P.D. Scott, B. Lopez; A. Ratcliffe, I. Cowling, I. Argyridis, K. Robson; Sedgfield/UK, Durham/UK, Newcastle upon Tyne/UK

**B-0312** 15:16  
Bone mineral density measurements on digital radiography systems: an experimental comparison between IBEX MAP technology and a DEXA system  
A. Ratcliffe, B. Lopez; J. Cowling, P. Scott, D. Rawlings; Sedgfield/UK, Newcastle upon Tyne/UK

**B-0313** 15:12  
Novel segmentation method using absorption- and phase-contrast x-ray images  
A. Yoneyama, R. Baba, K. Hyodo; Kokubunji/JP, Tsukuba/JP

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**B-0314** 15:21  
Initial experience with dual-phase hybrid $^{18}$F-Fluoride PET/MRI in patients with ankylosing spondylitis  
Scientific Sessions

**MR imaging**

Modulators:
- L. Natale; Rome/IT
- K. Taylor; Cambridge/UK

**B-0314** 15:20
Application of a single-energy electron-density reconstruction in radiation therapy planning
A. Ritter, B. Schmidt, R. Raupach; Forchheim/DE

**B-0315** 14:00
Short-term effects during examinations in an actively shielded 7T MR system
B. Hansson1, P. Höglund1, O. Johan1, K. Markenroth-Bloch1, M. Nilsson1, J. Franzke1, J. Wilén1, T. Owman1, J. Arborelius1; Lund/SE, Umeå/SE

**B-0316** 14:08
Assessment of incidental findings detected on research MRI scans of healthy volunteers
A. Lümann, H.-J. Wittsack, J. Aissa, G. Antoch, R. Lanzman; Düsseldorf/DE

**B-0317** 14:16
 Artefact evaluation in MRI of new materials for hip prostheses: a phantom study
D. Sousa1, P. Martini1, C. Ferreira2, S. Francesco1, M. Castelo-Branco1, R. Silva1, A. Verruijt1, PT; Coimbra/PT

**B-0318** 14:24
Investigation of radiographer and radiologist ability to manage MRI image quality issues for abdomen and pelvis examinations in Saudi Arabian and Irish centres
S. Al Dahery, A. McGee, L. Rainford; Dublin/IE

**B-0319** 14:32
Magnetic resonance imaging of anterior cruciate ligament tears: evaluation of standard orthogonal and tailored paracoronal imaging
L.M. Pequara1, P. Demioli, F. Zarb; Msida/MT

**B-0320** 14:40
Assumed factor analysis of MRI safety processes by MRI personnel: a FMEA approach
A. De Bock, A. Stadler, W. Schima; Vienna/AT

**B-0321** 14:48
Brain imaging: comparison of T1 FLAIR BLADE with conventional T1 SE
E. Lavdas, E. Giankou1, A. Tsikrika1, E. Kapsalaki1, G. Batsikas1, S. Kostopoulou1, D. Glotsoi1, K. Ninos1, D. Kavouras1, P. Mavroidis1, Athens/GR, Paros/GR, Larissa/GR, Chapel Hill, NC/US

**B-0322** 14:56
Patients’ MRI acoustic noise exposure in different protocol exams
V.M.F. Silva1, I.M. Ramos, J.A. Moreira, M. Marques; Porto/PT

**B-0323** 15:04
Application of the tractography method in the study of magnetic resonance imaging in paediatric patients in selected clinical situations
A. Przepiorka; Poznań/PL

**B-0324** 15:12
Patients knowledge about ultrasound, computed tomography and magnetic resonance

**SS 303**

**B-0325** 15:20
MRI safety procedures during the dismantling of one scanner
T. De Bondt, F. Vanhevel, M. Geldof, F. Deferme, P.M. Parizel; Antwerp/BE

14:00 - 15:30 Room K

**Cardiac**

**B-0326** 14:00
Rapid functional cardiac imaging between gadolinium injection and late enhancement: evaluation of a highly accelerated sequence with sparse data sampling and iterative reconstruction

**B-0327** 14:08
Cross-modality accuracy of dual-step prospective ECG-triggered dual-source CT compared with echocardiography and cardiac MR in the follow-up of heart-transplanted patients
D. Curione, C. Rutigliano, D. Di Molfetta, C. Grippi, B. Merlino, L. Natale, R. Marano, L. Bonomo, Rome/IT

**B-0328** 14:16
The effect of contrast administration on the threshold-based cardiac magnetic resonance (CMR) evaluation
F. Suhai1, I. Csécs, C. Csimbalmos, A. Tóth, Z. Dohy, B. Horváth, B. Szilveszter, B. Mekely, H. Vágó; Budapest/HU

**B-0329** 14:24
Assessment of left ventricular deformation in patients with ebstein’s anomaly by cardiac magnetic resonance tissue tracking
X. Liu1, Z.-G. Yang1, Y.-K. Guo1, R. Li1, K.-Y. Diao; Chengdu/CN

**B-0330** 14:32
Non-invasive evaluation of left ventricular function using CT and MRI: a meta-analysis
M. Kaniewska1, G.M. Schütz2, S. Willun1, P. Schlattmann2, M. Dewey3; Berlin/DE, Jena/DE

**B-0331** 14:40
Left ventricular absolute wall thickening: a unifying theory of heart failure?
J.C.L. Rodrigues1, B. Rooms1, K. Hyde1, S. Rohan1, M.C.K. Hamilton1, A.K. Nightingale1, J.F.R. Paton1, N.E. Manghat1, D.H. Mcliver2; Bristol/UK, Taunton/UK

**B-0332** 14:48
Value of post contrast Cine-SSFP images for visual assessment of global left ventricular function at 3T
A. Preuß1, S. Wyschkon1, M. Elgeti2, B. Hamm1, T. Elgeti1; Berlin/DE, Los Angeles, CA/US

**B-0333** 14:56
Left ventricular diastolic function estimation from magnetic resonance real-time cine imaging
C. Reiter1, G. Reiter1, A. Schmidt1, A. Greiser1, M. Fuchsjaeger1, U. Reiter1; Graz/AT, Erlangen/DE
SS 316 Female genitourinary cancers

Moderators:
- S. Guerrini, Siena/IT
- S. Kharuzhyk, Minsk/BY

B-0334 15:04
Subclinical changes in cardiac functional parameters as determined by MRI in patients with sleep apnea and snoring: findings from UK Biobank


B-0335 15:12
Cardiac MRI correlates of patient functional improvement after advanced pharmacotherapy for pulmonary arterial hypertension (PAH)

S. Terpenning, L. Melendres, M. Boivin, C. Bunn, L. Ketai; Albuquerque, NM/US

B-0336 15:20
Evaluation of myocardial strain by cardiac MRI: correlation with myocardial iron overload and echocardiography speckle tracking

C. Tudisca, A. Meloni, F. Pizzino, C. Gerardi, M. Midiri, A. Pepe; Rome/IT

B-0337 14:00
Differential diagnosis of ovarian tumours: value of multiparametric MRI

A.E. Solopova, A.D. Makatsaria, S.K. Ternovoy; Moscow/ RU

B-0338 14:08
Delayed detection of recurrence on postoperative PET-CT in patients with advanced ovarian cancer: a study of initially missed lesions on MDCT

H. Bae, D.C. Jung, S.Y. Park, Y.T. Oh; Seoul/KR

B-0340 14:16
Dedicated diffusion-weighted MR imaging for staging peritoneal metastases: a preoperative selection tool for cytoreduction surgery (CRS) candidates

I. van't Sant-Jansen, S. Chandrasegaram - Shanmuganathan, D.M.J. Lambregts, W. van Driel, N.F.M. Kok, R.G.H. Beets-Tan, G.L. Beets, A.G.J. Aalbers, M.J. Lahaye; Amsterdam/NL

B-0341 14:24
The usefulness of preoperative radiological assessment of peritoneal cancer index (PCI) as predictive factor for optimal debulking and survival: a preliminary study

G. Avesani, M. Arshad, J. Liang, A. Thornton, H. Lu, A.G. Rockall; Bolzano/IT, London/UK

B-0342 14:32
Diagnosis of peritoneal metastases: comparison of DWIBS MR imaging with FDG 18PET CT

R. Balaji; Chennai/IN

B-0343 14:40
Added value of diffusion-weighted magnetic resonance imaging in the staging of cervical carcinoma

S.M. Mansour, S. Fakhry; Cairo/EG

B-0344 14:48
Histological type of cervical cancer: can it be evaluated with mpMRI

E. Tarachkova, M. Shorikov, V. Panov, I. Tyurin, B. Dolgushin; Moscow/RU

B-0345 14:56
Invasive stromal cancer cervix post-therapy: MRI pulse sequences comparative diagnostic merits

S.A. Hussein, M.K.A. Asran, M.H. El Naggar, R.M. Kamal, T.A. Raafat; Cairo/EG

B-0346 15:04
DW-MRI: an early predictive assay for treatment outcome in locally advanced cervical cancer

A.M. Telecsa, M. Micco, B. Gui, M. Giuliani, E. Rodolfino, P. Cambi, P.P. Grimaldi, A.L. Valentini, L. Bonomo; Rome/IT

B-0347 15:12
Factors affecting inferior vena cava retrieval: 5-year experience from a district hospital

H. Lee, W. Wong, C. Chan; Hong Kong/HK
B-0357 14:56
Functional and structural changes in brain's default mode network in early stages Parkinson's disease patients acc to voxel-based morphometry and resting-state fMRI comparison
E. Seliverstova, Y. Seliverstov, M. Krotenkova, R. Konovalov, S. Illarioshkin, I. Krotenkova; Moscow/RU

B-0358 15:04
Mirror imaging
A. Sharma1, J. Lay1, I.Q. Grunwald2, A.L. Köhn1, P. Harman1, S. Bowman1, S. Kelavkar1, R. Aspinall2, C. Law4; 1Southend-on-Sea/UK, 2Chelmsford/UK, 3Worcester, MA/US, 4Palo Alto, CA/US
SS 601a
Focal liver lesions: characterisation and therapeutic response
Moderators:
A. Filippone; Chieti/IT
P. Rodríguez; Madrid/ES

B-0366 10:30
The role of quantitative analysis on T2WI and DWI in differentiating haemangiomas from malignant liver tumours
K. Ozturk, E. Soylu Ozturk, C. Bilgin, G. Savci; Bursa/TR

B-0359 10:38
Usefulness of a multi-arterial phase protocol for MRI characterisation of hypervascular liver lesions using Gadoxetic Acid
L. Graziofi; R. Ambrosini1, R. Faletti2, B. Frittoli1, G. Battisti3; 1Brescia/IT, 2Turin/IT, 3Spoleto/IT

B-0360 10:46
A breakthrough in non-contrast MR characterisation of hepatic focal lesions
W.R.A. Abdel Hamid, R. Salah Eldein, Y. Abbas; Cairo/EG

B-0361 10:54
Role of 3-Tesla diffusion-weighted magnetic resonance imaging in differentiation between benign and malignant hepatic lesions
M.T.A.A. Ali, D.M. Nabil, M.F. Osman, M.D. Homos; Cairo/EG

B-0362 11:02
Visibility of hepatic focal lesion: comparison between kupper phase images of sonazoid-enhanced ultrasound and hepatobiliary phase images of gadoxetic acid-enhanced MRI

B-0363 11:10
Radiological-pathological correlation of hepatocellular adenoma and focal nodular hyperplasia with atypical clinical or radiological features on Gd-BOPTA enhanced MRI
B. Gest; R.L. Miclea, M.G.J. Thomeer, F.E.J.A. Willemsen, R.S. Dwarkasing; Rotterdam/NL

B-0364 11:18
Intra-patient comparative MRI study of MultiHance and Primovist to differentiate HCA from FNH
I.J.S.M. Vanhoeymissen, M.G. Thomeer, B. Gest, S. van Koeverden, L.M.M. Braun, R.S. Dwarkasing, R.A. De Man, J. Uzermans; Rotterdam/NL

B-0365 11:26
Role of CT perfusion in differentiating haemangiomas from liver metastasis in patient with known primary tumour: initial experience
J. Singh1, S. Sharma1, K. Kaur1, S. Singh2, N. Aggarwal2, S. Sood3; 1New Delhi/IN, 2Shimla/IN, 3Chandigarh/IN

B-0367 11:34
Detection and viability of colorectal liver metastases after neoadjuvant chemotherapy: a multiparametric PET/CT-MR study
V. Dunet; N. Halici; A. Akyie; J.O. Prior1, C. Sempoux; A. Denys1; S. Schmidt; 1Lausanne/CH, 2Vevey/CH

B-0368 11:42
Prediction and response assessment after chemotherapy of colorectal liver metastases: can ADC values evaluated at 3T MRI represent a reliable biomarker?
F. Paciardi; F. Donati, P. Boraschi, R. Cervelli, M. Castagna, L. Urbani, R. Gigoni, D. Caramella; Pisa/IT

B-0369 11:50
Posttherapeutic changes of the liver parenchyma on hepatobiliary MR imaging after radioembolisation
R. Seidel, M. Mehrman, P. Fries, G. Schneider, A. Buecker, A. Massmann; Homburg/DE

B-0370 10:30
Increasing efficiency of MRE for detecting Crohn’s disease activity through proper sequence selection
J. Rimola1, A. Cofiño2, I. Alfaro1, S. Rodríguez; I. Ordás1, J. Panes2; Barcelona/ES, 3Gijón/ES

B-0371 10:38
Magnetic resonance enterography in the evaluation of anti-TNF alpha therapy response
I. Martini, C. Briani, F. Landolfi, G.M. Barelli, E. Iannicelli; Rome/IT

B-0372 10:46
Detectability of inflammatory bowel disease in Diffusion-weighted MR imaging (DWI): which imaging plane and b-values should be preferred?
C. van Riswijk1, T. Lauenstein1, S. Kinner; Essen/DE, 2Düsseldorf/DE

B-0373 10:54
Bowel distention degree does influence DWI ADC values throughout the whole bowel length: results from two consecutive studies in healthy subjects
I. Apine, S. Atteka, J. Pokrotnieks, M. Leja, G. Krumina; Riga/LV

B-0374 11:02
Semi-automatic assessment of the small bowel and colon in Crohn’s disease patients using MRI (the VIGOR++ project)
C.A.J. Puylaert1, P.J. Schüffler2, R.E. Naziroglu3, J.A.W. Tielbeek1, Z. Li3; 1New York/NY/US, 2Delft/NL, 3London/UK

B-0375 11:10
Comparative study with magnetic resonance of bowel and perineal disease between adult and paediatric patients affected by Crohn’s disease
D. Bencardino, F. Maccioni, V. Buonocore, F. Mazzamurro, C. Catalono; Rome/IT

B-0376 11:18
Time is money: ultrashort protocol of MRI fistulogram for perianal fistulae
A. Balani; S. Shaikh1, A. Kumar1, S. Alwala, S. Marda1, C. Chatur; 1Secunderabad/IN, 2Hyderabad/IN

B-0377 11:26
Virtual monoeneregetic dual-energy CT enterography: optimisation of Kev settings and the added value for small bowel diseases
S. Lee; S. Kim, S. An, H.-J. Kang, J. Kang, J. Han; Seoul/KR

B-0378 11:34
The value of CT enterography in predicting the need of surgery in Crohn’s disease: what advises can radiologists give to gastroenterologists in advance?
M. Jiang, X. Li, Z. Li; Guangzhou/CN
### Interventional Radiology

#### SS 609 Urogenital interventions

**Moderators:**
- J.M. Pulido, Las Palmas/ES
- A. Rebonato, Perugia/IT

#### B-0381 10:30
**Percutaneous varicocele embolisation: a retrospective cohort study of recurrence, pain and fertility on follow-up in a single centre 7-year study**
- H. Shiwani1, S. Shaikh2; 1New Delhi/IN

#### B-0382 10:38
**Salvage cryoablation after curative treatment in locally recurrent prostate cancers**
- M. Barat, L. Colleter, P. Mongiat Arthus, F. Desgrandchamps, E. de Salvatore, Paris/FR

#### B-0383 10:46
**Leiomyoma-based selection of patients for uterine artery embolisation: which leiomyomas are best suited for embolisation?**
- N.N.N. Naguib, N.-E.A. Nour-Eldin, T. Gruber-Rouh, M. Al-Subhi, T.J. Vogl; Frankfurt a./Main/DE

#### B-0384 10:54
**To evaluate the effectiveness and the safety of magnetic resonance-guided focused ultrasound (MRgFUS) in the treatment of submucosal uterine fibroids**

#### B-0385 11:02
**Pre-abortion uterine artery embolisation in high haemorrhage risk pregnancies**
- P. Venetucci1, F. Venetucci1, S. Pizzetta1, F. Pane1, A. Brunetti1; 1Naples/IT, 2Rocchetta Sant’Antonio/IT

#### B-0386 11:10
**Uterine fibroids treated with MRI-guided high-intensity focused ultrasound (MRgFUS): clinical outcomes in comparison to current therapeutic strategies**
- A. Napoli1, P. Scipione, M. Anzidei, F. Andrani, S. Dababou, C. Catalano; Rome/IT

#### B-0387 11:18
**Role of embolisation with N-butyl cyanoacrylate in recurrent post-surgical varicoceles**
- M.M. Zaitoun, E.R. Elsayed, S.B. Elsayed; Zagazig/EG

#### B-0388 11:26
**Renal angiomyolipoma: effects of selective arterial embolisation on glomerular filtration rate**

### SS 604 Pulmonary nodules and screening

**Moderators:**
- M.-P. Revel, Paris/FR
- M. Simic, Zagreb/HR

#### B-0389 11:34
**Comparison of radiofrequency and cryoablation for renal masses exceeding 3cm**
- J. Gregory, C. Delavaud, J. Bdbay, A. Khairoune, O. Helenon, J.-M. Correas; Paris/FR

#### B-0390 11:42
**Trans-rectal-ultrasound (TRUS) guided biopsy with MRI-TRUS fusion: feasibility study using a multipurpose magnetic tracking system**
- G. Bizzarri1, A. Bianchini1, D. Valte1, L. Di Vito1, L. Velani1, L. Lodigiani1, A. Dell’Era1, V. Anelli1; Albano Laziale/IT, Rome/IT

#### B-0391 11:50
**Renal sympathicolysis by transaortic peripherial ethanol injection in pigs with the use of an experimental injections catheter: a feasibility study**
B-0399 11:26
Influence of reconstruction methods to measurement accuracy for computer-aided volumetry (CADv) at standard-, reduced-, low-dose and ultra-low-dose CT in QIBA phantom study
T. Sekitani1, E. Suehiro1, N. Negi1, K. Fujii1, Y. Fujisawa1, N. Sugihara1, K. Aoyagi1, T. Yoshikawa1, Y. Ohno1; ‘Kobe/JP, ’Ottawa/JP

B-0400 11:34
Effect of image reconstruction with ADMIRE in low-dose and ultra-low-dose CT volumetry of solid pulmonary nodules: a phantom study
M. Eberhard, D. Stocker, T. Nguyen-Kim, M. Wurnig, T. Frauenfelder, S. Baumüller; ‘Zurich/CH’

B-0401 11:42
Comparison of the effect of model-based iterative reconstruction (MBIR) and filtered back projection (FBP) algorithms on software measurements in pulmonary ground-glass nodules

B-0402 11:50
Deep learning applied to automated chest x-ray screening
B. Fos Guarinos1, A. Alberich-Bayarri2, A. Ten-Esteve2, I. Bosch-Roig2, L. Martí-Bonmatí2; ’Sueca/ES, ’Valencia/ES

B-0403 10:30
Sarcopenia assessed using preoperative CT-scans as a marker of prostate tumour aggressiveness on T2-weighted MR-image registration of rectal tumours and mesorectum during radiotherapy
J.J.M. van Griethuysen1, S. Trebeschi1, D.M.J. Lambregts1, M.J. Lahaye1, T.B. Nguyen, R. Houshyar; ’Orange, CA/US

B-0404 10:39
Stiffness of benign and malignant prostate tissue measured by shear-wave elastography
O. Rouviere1, C. Melodelima1, A. Hoang-Dinh1, F. Bratan1, G. Pagnoux1, T. Sanzalonde1, S. Crouzet1, M. Colombel1, F. Mège-Lechevallier1, R. Souchon1; ‘Lyons/FR, ’Grenoble/FR

B-0405 10:46
Chronic prostatitis: retrospective cohort-study of persistence of signs on T2-weighted MR-images
U.G. Mueller-Lisse1, M.K. Scherr2, U.L. Mueller-Lisse1, A. Meister1, M.F. Reiser1, M. Kühn1; ‘Munich/DE, ’Murnau am Staffelsee/DE

B-0406 10:54
Interobserver agreement in the volumetric assessment of peri-prostatic fat, a marker of prostate tumour aggressiveness
D. Nörenberg1, C. Kelly-Morland2, V. Goh3, G. Cook4, D. Cahill5; ‘Munich/DE, ’London/UK

B-0407 11:02
Effectiveness of intramuscular hyoscine butylbromide compared with intravenous administration in improving image quality in pelvic MRI
M.B. Taylor1, A. Kilburn1, L. McDaid1, C. Shepherd1, D. Ryder1, S. Bonington1, B. Carrington1; ’Manchester/UK

B-0408 11:10
Effect of hyoscine butylbromide on prostate multiparametric MRI anatomical and functional image quality
I. Cagil1, N. L. Hansen1, A. J. Patterson1, T. Barrett1; ‘Cambridge/UK, ’Aachen/DE

B-0409 11:18
Screening of prostate cancer by means of fast MR protocol: feasibility study
G. Foti1, E. Demuzio1, F. Cavicchioli1, A. Molinari1, S. Cavalleri1, G. Carbognin1; ’Negrar/IT

B-0410 11:26
Multiparametric magnetic resonance imaging of the canine prostate gland as an animal model prior to MRgFUS
K. Lorenz1, K. Skierbiszewska1, T. Jasinski1, K. Siewruk, Z. Gajewski1; ’Warsaw/PL

B-0411 11:34
Comparison of the Likert score and a quantitative model in characterising prostate focal lesions on pre-biopsy multiparametric MRI
A. Hoang-Dinh1, R. Souchon1, C. Melodelima1, F. Bratan1, F. Mège-Lechevallier1, A. Ruffion1, S. Crouzet1, M. Colombel1, O. Rouviere1; ‘Lyons/FR, ’Grenoble/FR, ’Pierre Bénite/FR

B-0412 11:42
T2 correlated PSA density
K. Dzturk, Y. Kordan, G. Savci1; ’Bursa/TR

B-0413 11:50
Efficacy of PSA density for predicting prostate cancer utilising volumes from mpMRI and TRUS
A. Ushinsky1, S. Fardin1, M. Nguyenat1, C. Green1, E. Uchio1, C. Lall1, T.B. Nguyen1, R. Houshyar1; ’Orange, CA/US

B-0414 10:39
Radiomics of primary staging diffusion-weighted MRI to predict neoadjuvant treatment response in rectal cancer

B-0415 10:47
T2-weighted MR image registration of rectal tumours and mesorectum during radiotherapy
A. Bani Yassien1, G. Ghobadi1, M. Starling1, B. van Triest1, D.M. Lambregts1, A. Betgen1, C.A.M. Marijnen2, U.A. van der Heide1; ’Amsterdam/NL, ’Leiden/NL

B-0416 10:55
Pathological complete responders after chemoradiotherapy in rectal cancer, what can be learned from imaging for the selection?
M. Maas1, M. van der Sande1, B. Hupkens2, M. Martens3, D. Lambregts1, S. Breukink1, F. Bakers1, G. Beets1, R.G.H. Beets-Tan1; ’Amsterdam/NL, ’Maastricht/NL, ’Sittard/NL
**B-0417 11:03**

Nodal staging in complete responders (ypT0) after CRT for rectal cancer, how can we better select the ypN0 patients for organ preservation?

M. Maas, M. van der Sande, B. Hupkens, M. Martens, D. Lambregts, F. Bakers, S. Breukink, G. Beets, R.G.H. Beets-Tan, Amsterdam/NL, *Maasstricht/NL, #Sittard/NL*

**B-0418 11:11**

Evaluation of rectal cancer response to therapy: role of MR-tumour regression grade to predict pathological complete response

S. Picchia, M. Rengo, D. Caruso, D. Bellini, M. Zerunian, A. Laghi, Latina/IT, #Rome/IT

**B-0419 11:19**

Rectal cancer: comparison of MR-TRG, volume ratio and signal intensity decrease for the identification of complete responders after radiotherapy

S. Picchia, M. Rengo, D. Caruso, D. Bellini, M. Zerunian, A. Laghi, Latina/IT, #Rome/IT

**B-0420 11:27**

The value of diffusion kurtosis imaging to assess pathological complete response to neoadjuvant chemoradiation therapy in rectal cancer

F.-X. Hu, T. Tong, W.-J. Peng; Shanghai/CN

**B-0421 11:35**

DW MRI by 3T in the response assessment of locally advanced rectal cancer after chemoradiotherapy: apparent diffusion coefficient value as an imaging biomarker

R. Cervelli, P. Boraschi, F. Donati, F. Pacciardi, A. Cacciato, D. Campani, D. Caramella, Pisa/IT

**B-0422 11:43**

Role of MRI and added value of diffusion-weighted and gadolinium-enhanced MRI for the diagnosis of local recurrence from rectal cancer

V. Molinelli, N. Tarollo, F. Picentino, E. Macchi, M. Angeretti, E. Bracchi, C. Fugazzola; Varese/IT

**B-0423 11:51**

Diffusion-weighted MRI and ADC value: their role in detection of metastatic lymph nodes in patients with primary rectal cancer


**B-0424 10:30**

Non-invasive monitoring of therapeutic response in sorafenib-treated orthotopic hepatocellular carcinoma mouse models using photoacoustic and fluorescence imaging

S. Lee, J. Kim, J. Lee, J. Han; Seoul/KR

**B-0425 10:38**

Hyperpolarised MRI using 13-C-pyruvate reveals alterations in the metabolic phenotype of DEN-induced HCC in a rat model not revealed by 18F-FDG-PET

G. Kaiser, E. Bliemelsrieder, D. Keim, L.S. Gebrekidan, G. Topping, P. Schilling, M. Schwaiger, E.J. Rummeny, R. Braren; Munich/DE

**B-0427 10:54**

Time-lapse MRI: single-cell tracking in experimental autoimmune encephalomyelitis

M. Masthoff, S. Gran, X. Zhang, L. Wachsmuth, L. Sorokin, J. Roth, M. Eisenblatter, M. Wildgruber, C. Faber; Münster/DE

**B-0428 11:02**

High resolution magnetic resonance imaging of HPF-labelled mouse natural killer cell

L. Zheng, Z. Zhang, A. Larson; Shanghai/CN, #Chicago, IL/US

**B-0429 11:10**

Directing neuronal differentiation of stem cells with a small interfering RNA-complexed MRI-visible cationic polymersome to counteract inhibitory microenvironment in stroke

L. Lu, J. Shen, X. Duan, F. Zhang, W. Young, M. Chen; Guangzhou/CN

**B-0430 11:18**

Alanine loaded HMSNs: a potential contrast agent for MRS imaging

J. Wang, Z. Yao; Shanghai/CN

**B-0431 11:26**

Histological correlation of dGEMRIC and T2 mapping in an ovine femoroacetabular impingement model: preliminary results


**B-0433 11:34**

Whole-body imaging of mice using a long circulating blood pool tracer to perform multi-patch MRI


**B-0434 11:42**

Insulin-dependent triglyceride-rich lipoprotein uptake into brown adipose tissue visualised by 7T MRI and intravital microscopy


**SS 602a**

Breast density and background parenchymal enhancement

Moderators:
W. Alomaim; Dublin/IE
R.A. Kubik-Huch; Baden/CH

**B-0444 10:30**

Single nucleotide polymorphisms in relation to mammographic density in women with breast cancer

H. Sartor, J. Brandt, O. Melander, S. Zackrisson; Münster/DE

**B-0435 10:38**

Determining factors of radiation dose in digital breast tomosynthesis (DBT) and full-field digital mammography (FFDM) utilised automated breast density and volumetric measurements


**B-0436 10:46**

Comparison of automated volumetric breast density measurements by two different applications

**B-0437** 10:54
Reproducibility of automated mammographic density measures between two digital mammography device vendors
M. Abdolell, K.M. Tsuruda, P. Brown, J.S. Caines, C.B. Lightfoot, S.E. Iles; Halifax, NS/CA

**B-0438** 11:02
Reliability of automated breast density measurements vs visual assessment in mammography

**B-0439** 11:10
Accuracy of fully automated volumetric FGT measurement with MRI of the breast: correlation with anthropomorphic breast phantoms
G.J. Wenger, K. Pinker, T.H. Helbich, W.-D. Vogl, S. Spilker, H. Bickel, S. Polanec, P.A.T. Baltzer; Vienna, Austria

**B-0440** 11:18
Breast MRI background parenchymal enhancement: a potential bridge to molecular cancer subtype?
G. Di Lorenzo, M. Telegrafo, V. Ranieri, A. Cirilli, C. Giardina, A.A. Stabile Ianora, G. Angelelli, M. Moschetta; Bari, Italy

**B-0441** 11:26
Association of breast density and region of interest size with apparent diffusion coefficient value of normal fibroglandular tissue at MRI
N. Radovic, G. Ivanac, M. Crnogorac, E. Divjak, T. Cicvara-Pecina, J. Petrovic, B. Brkljacic; Zagreb, Croatia

**B-0442** 11:34
Effect of parenchymal pattern in women with dense breasts, variation with age and impact on screening outcomes: observations from a UK screening programme

**B-0443** 11:42
Positive predictive values by breast density in the Norwegian Breast Cancer Screening Programme
N. Moshina, M. Roman, S. Sebuodegard, S. Hofvind; Oslo, Norway

**B-0445** 11:50
Reliability of 5th edition vs 4th edition BI-RADS mammographic density scales
M. Abdolell, K.M. Tsuruda, P. Brown, J.S. Caines, G. Schaller, C.B. Lightfoot, S.E. Iles; Halifax, NS/CA, Sydney, Australia

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**SCIENTIFIC SESSIONS**

**SS 611** Stroke: endovascular treatment

Moderators:
S. Rohde; Dortmund, Germany
M.A. van Buchem; Leiden, Netherlands

**K-08** 10:30
Keynote lecture
A. Krainik; Grenoble, France

**B-0446** 10:39
Iatrogenic complications during mechanical thrombectomy for acute ischaemic stroke: potential mechanisms, rescue strategies, and clinical outcomes in a multicentre study
### SS 602b

**Contrast-enhanced spectral mammography and other new techniques**

**Moderators:**
- E.M. Fallenberg, Berlin/DE
- K. Pinker-Domenig, Vienna/AT

#### B-0456 10:30

One step beyond contrast-enhanced spectral mammography: malignancy potential score as a new diagnostic tool in mammography

M.E. Múñoz, M.S. Múñoz, L. Mignini, A.M. Pendino; Rosario/AR

#### B-0457 10:38

Contrast-enhanced spectral mammography for the evaluation of breast calcifications: diagnostic performance and impact on surgical planning

E. Nikolentzou, C. Tzimas, E. Gloutlaki, E. Feida, A.N. Chalazonitis; Athens/GR

#### B-0458 10:46

The added value of contrast-enhancing mammography in assessment of breast asymmetry

O. Abeyakoon, S. Morcher, S. Bohndiek, F.J. Gilbert; Cambridge/UK

#### B-0459 10:54

3T multiparametric MR: contrast-enhanced (DCE) MR with DWI and single-voxel spectroscopy could predict the assessment of prognostic indicators in breast cancer?

M.B.I. Lobbez, I. Houben, V. Kalia, P. Nelemans, P. Moyle, S. Bohndiek, F.J. Gilbert; Maastricht/NL, Reykjavik/IS

#### B-0460 11:02

Role of magnetic resonance spectroscopy using choline peak as a malignancy marker in diagnosis of breast lesions classified BI-RADS III and IV

S. Montemezzi; Verona/IT

#### B-0461 11:10

Adjoint screening with 3-D functional infrared imaging in women with dense breasts: interim-analysis of a prospective study

M.M.K.M. Barakat, N. Chalabi; Cairo/EG

#### B-0462 11:18

Detection of breast masses in dense breast tissue with a contrast-enhanced cone-beam breast CT

S. Wienbeck, V. Stahnke, E. von Fintel, J. Lotz, U. Fischer; Göttingen/DE

#### B-0463 11:26

Quantitative optoacoustic imaging detects increased haemoglobin in malignant lesions

O. Abeyakoon, S. Morscher, M. Wallis, P. Moyle, S. Bohndiek, F.J. Gilbert; Cambridge/UK

#### B-0464 11:34

Systematic review: translation of optoacoustic imaging into the breast clinic

O. Abeyakoon, S. Morscher, S. Bohndiek, F.J. Gilbert; Cambridge/UK

#### B-0465 11:42

Study of the nipple-areola complex with MRI and microcoils

M.E. Munoz, M.S. Munoz, L. Mignini, A.M. Pendino; Rosario/AR

### SS 610

#### SS 610b

**Bone health and osteoporosis**

**Moderators:**
- J.L. Bloem, Leiden/NL
- T. Zahel, Munich/DE

#### B-0467 10:30

Dose reduction in MDCT-based bone mineral density and microstructure assessment: effects of low-dose simulation and sparse sampling


#### B-0468 10:38

Establishing a method to measure bone density using spectral CT


#### B-0469 10:46

L1 vertebra CT density measurements are too variable with different scanning protocols to be used as a simple screening test for osteoporosis

E.-L. Gerety, M.A. Hopper, P.W.P. Bearcroft; Cambridge/UK

#### B-0470 10:54

CT-based bone strength prediction using finite element analysis: how much dose is needed?


#### B-0471 11:02

Femoral neck strength prediction in osteoporosis patients: trabecular bone analysis using tomosynthesis images


#### B-0472 11:10

Validation of bone volume percentage and pore size measurements extracted from MR and MDCT against synthetic bone phantom


#### B-0473 11:18

Characterisation of sharp force trauma and thermal injuries on human bone samples: a forensic MicroCT study

G. Pelletti, G. Cucchetti, D. Miotto, G. Viel, P. Fais, S. Montisci, S.D. Ferrara, C. Giraudo; Padua/IT, Bologna/IT, Vienna/AT

#### B-0474 11:26

The effect of vertebral osteoarthrosis (VO) and vertebral fractures (VF) on trabecular bone score (TBS): preliminary results

A. Poloni, C. Monaco, S. Rapisarda, G. Di Leo, C. Messina, L.M. Sconfienza; Milan/IT, San Donato Milanese/IT

#### B-0475 11:34

Lumbar bone marrow perfusion in osteoporosis rabbit with dynamic contrast enhancement MRI: correlation with BMD and MVD

H. Yang, Y. Li, F. Lv, O. Yu; Chongqing/CN
**Physics in Medical Imaging**

**SS 613**

**Radiation dose estimation, measurement and reduction**

Moderators:
- S.M. Niehues; Berlin/DE
- I.A. Tsalafoutas; Athens/GR

**K-10 10:30**

**Keynote lecture**

A. Trianni; Udine/IT

**B-0478 10:39**

*Dose evaluation in dental, interventional and radiotherapy CBCT: the EFOMP-IAEA-ESTRO guidelines*

H. de las Heras1, R.M. Sánchez Casanueva2, K. Mair3, A. Baumgartner1, F. Schöfer1, Zorneding/DE, Madrid/ES, Kempten/DE, Munich/DE

**B-0479 10:47**

*Patient dose in CT: what is the impact of the generation of the CT scanner? Results of a decade of patient dose collection in France*

P. Roch, D. Celler, S. Preuil, C. Etard; Fontenay-aux-Roses/FR

**B-0480 10:55**

*Dental scan MDCT: comparison of dose levels and image quality assessment between three centres in two European countries*

S. Puggina1, S. Galo1, M. Calderone3, L. Best1, K. Katsari5, R. Illing5, Monselice/IT, Padova/IT, London/UK, Amsterdam/NL

**B-0481 11:03**

*Effective and equivalent organ doses conversion factors in coronary angiography and percutaneous coronary interventions with a radial access*

M. Brambilla, B. Cannillo, R. Mathoeud, A. Bongo, A. Carriero; Novara/IT

**B-0482 11:11**

*Radiation exposure during CT-guided interventional procedures for adults*

N. Gubinina, S. Suntharalingam, K. Nassenstein, J. Theysohn, A. Ringelstein, M. Forsting, A. Wetter; Essen/DE

**B-0483 11:19**

*Monte-Carlo evaluation of mean glandular dose in spot compression mammography*

A. Sarno1, D.R. Dance2, R.E. van Engen2, K.C. Young2, P. Russo1, F. Di Lillo1, G. Mettivier1, K. Bliznakova1, Sechopoulos/IT, Naples/IT, Guildford/UK, Nijmegen/NL, Varna/BG

**B-0484 11:27**

*SSDE calculations in thoracoabdominal CT: comparison of different approaches*

C. Aberle1, M. Obmann1, B. Stieltjes1, S. Schindera2, Basle/CH, Aarau/CH

**B-0485 11:35**

*Accuracy of size specific dose estimate (SSDE) calculation from water-equivalent diameter of the center slice in computed tomography*


**B-0486 11:43**

*Initial estimation of an optimal dose protocol for evaluation of the lumbar spine of human cadaveric specimens in the upright position with a novel 3D x-ray system*

R.M. Benz1, D. Harder1, J. Voigt2, A. Fieselmann1, F. Amsler1, R. Menz1, A.L. Fältowski1, B. Stieltjes1, A. Hirschmann1, Basle/CH, Erlangen/DE

**B-0487 11:51**

*How contrast data management complements dose data management: preliminary results*

L. Pyfferoen1, K. Van De Moortele1, F. Zanca2, M.-S. Walgraeve1, C. Lafay2, J.W. Casselman1, Bruges/BE, Buc/FR

**Radiographers**

**SS 614**

**Dose optimisation**

Moderators:
- M. Mecht; Brno/CZ
- L.A. Rainford; Dublin/IE

**B-0488 10:30**

*Evidence of dose optimisation with a single UK radiology department*

A. England1, L. Harding1, R. Penney1, R. Wilde1, F. Dunn1, A. Manning-Stanley1, P. Evans1, Manchester/UK, Warrington/UK, Liverpool/UK

**B-0489 10:38**

*Obese patients in projection radiography: double the weight, quadruple the dose*

S.J.M. Alqahtani1, K.M. Knapp1, R. Welbourn2, J.R. Meakin1, R. Palfrey1, K. Thomson1, S.J. Rimes2, Exeter/UK, Taunton/UK

**B-0490 10:46**

*Do post-processing algorithms influence radiographic exposure factors?*

M. Hardy1, B. Snaith1, A. Martin1, C. Quinn1, Bradford/UK, Wakefield/UK, Bolton/UK

**B-0491 11:04**

*Factors influencing the effective dose and dose reduction for abdominal radiography*

J. Jang, Y. Cho, J.-H. Park; Seoul/KR

**B-0492 11:02**

*The anode heel effect: a dose reducing approach in digital thoracic spine radiography?*

P. Glynn; Dublin/IE

**B-0493 11:10**

*An evaluation of the size-specific dose estimates (SSDE) in fast kVp switching dual-energy imaging*

K. Yagami1, T. Miyoshi1, S. Shigeyama1, H. Okada1, S. Suzuki1, Gifu/JP, Toyooka/JP

**B-0494 11:18**

*An investigation into knowledge of radiation dose as an influential factor in collimation practice*

J. Doyle, K. Matthews; Dublin/IE
B-0495 11:26
Impact of the anode heel effect on image quality and effective dose for AP pelvis: a pilot study
C. Buissink1, M. Bowdler2, A. Mohammed1, S. Al-Mursheyd1, T.K. Urdahl1, S.C. Soares1, Y.R. Rey1, J. Jorge1, L. Peters1; Groningen/NL, 1Manchester/UK, 2Oslo/NO, 3Lisbon/PT, 4Lausanne/CH

B-0496 11:34
Radiation dose from pelvic radiography: a comparison of three digital radiography (DR) systems
A. England1, P. Evans1, F. Dunn1, A. Manning-Stanley1, L. Harding2, E.M. Taylor2; 1Manchester/UK, 2Warrington/UK, 3Liverpool/UK

B-0497 11:42
Steps to an optimisation process
J. Santos1, C. Almeida1, G. Paulo1; 1Coimbra/PT, 2Lisbon/PT

B-0498 11:50
Universal dose electronic ID (UdoseeID): a step into the future without barriers
L.P.V. Ribeiro, A. Abrantes, L. Guerra, R.P. Almeida, F. Ramos, S. Rodrigues, J. Guerreiro, A. Ribeiro; Faro/PT

10:30 - 12:00 Room M 1

Cardiac

SS 603
Myocardial infarction
Moderators:
M. Hrabak Paar; Zagreb/HR
A. Tóth; Budapest/HU

K-07 10:30
Keynote lecture
M. Gutberlet; Leipzig/DE

B-0499 10:39
An experimental study on use of 7T MRI for evaluation of myocardial infarction in SD rats
Y. Zhang1, L. Yang1, F. Gao2; 1Ankara/TR, 2Guizhou/CN

B-0500 10:47
Prospect CMR study: prognostic stratification in patients with stellevation myocardial infarction over transthoracic echocardiography by CMR
G. Pontone1, D. Andreini1, G. Ferro1, A. Guaricci2, M. Guglielmo2, S. Mushtaq1, A. Baggio1, P. Carità2, M. Pepi1; 1Milan/IT, 2Palermo/IT, 3Bari/IT

B-0501 10:55
T1 and T2 Mapping cardiovascular magnetic resonance to differentiate acute from chronic myocardial infarction

B-0502 11:03
Feature tracking assessment using cardiovascular MRI for the prediction of adverse left ventricular remodelling after STEMI
J. Lee1, S. Kim1, J. Kim1, M.-R. Kwon1, M. Seong1, S. Yang1, Y. Cho1; Seoul/KR

B-0503 11:11
Depiction of adverse remodelling after ST segment elevation myocardial infarction by T1 mapping and ECV on 3 Tesla MRI
Ö. Ateş1, K. Erkan1, A. Ertem1, F. Eyüpkoç1, F. Arslan1, C. Sabanoğlu1, T. Cimen1, Z. Güven1, E. Kızıltunç1; 1Ankara/TR, 2Utrecht/NL

10:30 - 12:00 Room M 2

Paediatric

SS 612
Paediatric abdominal imaging
Moderators:
K. Illadis; Brighton/UK
M. Raissaki; Iraklion/GR

K-09 10:30
Keynote lecture
M. Hrabak Paar; Zagreb/HR

B-0509 10:39
Advanced virtual monoenergetic reconstruction of dual-energy abdominal CT angiography of children: comparison with conventional monoenergetic reconstruction
H. Choi1, Y. Choi1, J.-E. Cheon1, W. Kim1, I.-O. Kim1; Seoul/KR

B-0510 10:47
Advanced virtual monochromatic reconstruction of dual-energy abdominal CT in children: optimisation of kiloelectron volt settings to improve image contrast
T. Kim1, Y. Choi1, J.-E. Cheon1, W. Kim1, I.-O. Kim1; Seoul/KR

B-0511 10:55
Plicae palmatae on MRI in paediatric population
M. Kitami; Sendai/JP

B-0512 11:03
MRI and transient elastography for the assessment of hepatic steatosis and elasticity in non-alcoholic fatty liver disease of children
J. Shin1, H. Shin1, H. Yoon1, M.-J. Kim1, M.-J. Lee1, H. Koh1; Seoul/KR

www.myESR.org
B-0513  11:11
The significance of radiographic and ultrasonographic findings in the management of necrotising enterocolitis - results from a survey
M. Ahle, E. Rubesova, H. Ringertz, Linköping/SE, Stanford, CA/US

B-0514  11:19
Analysis of clinical and ultrasound determinants of adnexal torsion in children and adolescents
R. Jourjon, B. Morel, S. Itant, A. Audureau, H. Ducou le Pointe, E. Blondiaux, Paris/FR

B-0515  11:27
Value of sonographic pseudogestation sac sign in diagnosing Meckel diverticulum in children presenting with bleeding per rectum: a decade's experience

B-0516  11:35
Anorectal malformations: diagnostic value and reliability of MRI distal pressure colostogram in comparison with the fluoroscopic examination
D. Maslava, Z. Holubova, M. Kyncl, L. Poš, R. Škába, Prague/CZ

B-0517  11:43
Utility of dynamic sequence in defeco-MRI for the evaluation of patients with ano-rectal malformation
C. Tudisco, S. Salerno, C. Geraci, G. La Tona, A. Lo Casto, M. Midiri, Palermo/IT

B-0518  11:51
Modified-Seldinger technique for paediatric percutaneous nephrostomy
K. Rangarajan, D. Kandasamy, M. Jana, L. Singh, V. Ramalingam, New Delhi/IN

10:30 - 12:00  Room M 3

Computer Applications

SS 605

Image quantification, texture analysis and imaging biomarkers
Moderators:
M.E. Mayerhöfer; Vienna/AT
E.R. Ranschaert; Mo/BE

B-0519  10:30
Texture-based analysis of dual-energy CT and monochromatic imaging for quantification of steatosis hepatitis: correlation with pathology
B. Hoppel, K. Goatman, P. Rogalla, Vernon Hills, IL/US, Edinburgh/UK, Toronto, ON/CA

B-0520  10:38
Early diagnosis of bronchiolitis obliterans syndrome after lung transplantation using functional respiratory imaging

B-0521  10:46
Role of 320-row CT with semi-automatic 3D analysis software for evaluating the response to systemic therapy of multicentric HCC according to the mRECIST criteria
M. Moschetta, M. Telegrafo, G. Dilenzo, G. Di Giovanni, I. Cornacchia, A. Stabile Ianora, G. Angelelli, Bari/IT

B-0522  10:54
Fully automated method for lung emphysema quantification from multidetector CT images

B-0523  11:02
Cerebral white matter, grey matter and cerebrospinal fluid segmentation in CT using VCAST: a volumetric cluster annotation and segmentation tool
S. van de Leemput, J.A. Meijer, M. Prokop, R. Mannings, Nijmegen/NL

B-0524  11:10
Validation of a semi-automated technique to accurately measure abdominal fat distribution using CT and MRI for clinical risk stratification

B-0525  11:18
3D CT texture analysis of neuroendocrine pancreatic neoplasms
M. D’Onofrio, V. Ciavardino, N. Cardobi, R. De Robertis, R. Pozzi-Mucelli, Verona/IT

B-0526  11:26
Quantitative CT metrics from the transplanted lung may predict FEV1 after lung transplantation

B-0527  11:34
A new integrated biomarker for IVIM/diffusion MRI: clinical feasibility study
D. Le Bihan, Gif-Sur-Yvette/FR

B-0528  11:42
Automatic visual-like classification of lung tumour heterogeneity in DCE-CT sequences
S. Baciocco, D. Barone, A. Bevilacqua, G. Gavelli, Bologna/IT, Meldola/IT

B-0529  11:50
Design and implementation of a parallel filter for real-time fluoroscopy imaging

14:00 - 15:30  Room B

Abdominal Viscera

SS 701a

Benign and malignant pancreatic diseases: advances in imaging
Moderators:
N. Alberti; Bordeaux/FR
D. Weishaupt; Zurich/CH

B-0530  14:00
Pancreatic lipid deposition is determined by environmental rather than genetic factors: a classical twin study
A. Panajotu, M. Kolossváry, S. Papp, Á.L. Jermendy, D.L. Tárnoki, Budapest/HU

B-0531  14:08
Differences in pancreatic proton-density fat fraction by MRI in subjects with prediabetes, diabetes, and controls from the general population
B-0532 14:16
Optimising quality and diagnostic performance of the MDCT by using low tube voltage in patients with suspected pancreatic adenocarcinoma
E. Kondratyev, V.J. Aznaurov, I.A. Blokhin, P. Davydenko, G.G. Karmazanovsky; Moscow/RU

B-0533 14:24
Timing-specific contrast media protocol enhances image quality at reduced contrast volume and radiation dose during computed tomography of the pancreas

B-0534 14:32
CT features of non-hypervascular endocrine tumours of the pancreas: a comparison with pancreatic adenocarcinoma
G. Zamboni, M. Chincarini, M.C. Ambrosetti, F. Lombardo, R. Negrelli, E. Boninsegna, R. Pozzi-Mucelli; Verona/IT

B-0535 14:40
Insulinoma detection with cross-sectional imaging: comparison of biphasic-enhanced CT, volume perfusion CT and 3T multiparametric MR
L. Zhu, H.-D. Xue, Z.-Y. Sun, P. Li, Z.-Y. Jin; Beijing/CN

B-0536 14:48
Correlation between appearance of the retroportal fat plane at preoperative CT and pathology findings in resected adenocarcinoma of the pancreatic head
F. Lombardo1, G.A. Zamboni1, M.C. Ambrosetti1, M. Chincarini2, M. Bonatti, G. Maleo1, G. Marchegiani2, R. Pozzi-Mucelli1; 1Verona/IT

B-0537 14:56
Body composition parameters, pancreatic volume and texture as radiological predictors of pancreatic fistula after Whipple procedure
I. Shrainer, V. Voropaev, E.A. Mershina, Z.A. Kovalenko, V.K. Lyadov, V.E. Sinitsyn; Moscow/RU

B-0538 15:04
Evaluation of perfusion in pancreas graft using 640-slice computed tomography
M.S. Khubutia, S.K. Ternovoy, R.S. Muslimov, Y.A. Anisimov, A.V. Pinchuk, N.S. Serova; Moscow/RU

B-0539 15:12
Diagnostic role of new generation multidetector-CT scanner in detection and characterisation of incidental pancreatic cystic lesions: comparison with MRCP
D. Ippolito1, A. Nasatti1, C. Talei Franzesi, A. De Vito, E. Orsini, S. Lombardi, S. Sironi, Monza/IT

B-0540 15:20
MDCT vs endoscopic USG in evaluation of pancreatic masses
S. Gupta; Delhi/IN

B-0541 14:00
Reduced scan range abdominopelvic CT in patients with suspected acute appendicitis: impact on diagnostic accuracy and effective radiation dose

B-0542 14:08
Impact of low-dose abdominal CT on diagnostic accuracy and image quality in patients with suspected appendicitis
C. Storz1, M. Kolb1, J. Weiß1, J. Kim1, F. Bamberg1, A. Othman1; 1Tübingen/DE, 2Seoul/KR

B-0543 14:16
The impact of CT findings in resolving appendicitis
K. Ozturk; E. Soylu Ozturk, G. Savci; Bursa/TR

B-0544 14:24
MDCT experience of male anterior peritoneal reflection: investigate and measurement in patients with appendicitis
J. Xu; Shanghai/CN

B-0545 14:32
CT findings of terminal ileum wall thickening in differential diagnosis of right lower quadrant pain
M.M. Baris, O. Hatem, O. Topalak, O. Sagol, M. Secil; Izmir/TR

B-0546 14:40
Systematic evaluation of the effect of low-dose CT on diagnostic performance in patients with suspected acute diverticulitis
S. Walter1, M. Maurer1, J. Weiss1, F. Bamberg1, J. Kim1, K. Nikolaou1, A. Othman1; 1Tübingen/DE, 2Seoul/KR

B-0547 14:48
To use CT for management decision in small intestinal obstruction: surgery or conservative treatment?
J.-D. Chen, C.-M. Tiu, Y.-H. Chou; Taipei/TW

B-0548 14:56
Can the characteristics of bowel wall and signs on CT differentiate the aetiology of bowel obstruction?
E. Güler1, N. Elmas, M. Harman, S. Türk, T. Köse; İzmir/TR

B-0549 15:04
Mesenteric panniculitis: is malignancy associated with higher grade of CT changes?
T. Grubesic, Z. Matana Kastelan, D. Miletic; Rijeka/HR

B-0550 15:12
Evaluation of dynamic ultrasound scanning in the diagnosis of equivocal abdominal hernias with surgical comparison
P.R. Jayaram, J. Barrett; Bury St Edmunds/UK
Interventional Radiology

SS 709 Non-vascular interventions

Moderators:
B. Kastler; Paris/FR
L. Ponhold; St. Pölten/AT

B-0551 15:20 Noise insertion in abdominal computed tomography for suspected body packing: where is the limit of extensive dose reduction?

B-0552 14:00 Prospective randomised MIRA trial: microwave vs radiofrequency ablation of hepatocellular carcinoma - first results

B-0553 14:08 MWA of liver tumours with thermosphere technology: prospective analysis of ablation zone predictability in vivo with different liver conditions and operative approaches
P. Marra, M. Colombo, F. Ratti, F. Cipriani, C. Sallemi, M. Venturini, L. Aldrighetti, A. Del Maschio, F. De Cobelli; Milan/IT

B-0554 14:16 Percutaneous microwave ablation of exophytic tumours in hepatocellular carcinoma patients: safe or not?
X. Jing, J. Ding, Y. Zhou, Y. Wang; Tianjin/CN

B-0555 14:24 Comparison of multi-modality and mono-modality fusion imaging using ultrasound in the intraoperative immediate evaluation of the therapeutic response of liver thermal ablation
E. Xu, Y. Long, K. Li, Z. Su, L. Lv, G. Zeng, R. Zheng; Guangzhou/CN

B-0556 14:32 Cone-beam CT for percutaneous drainage of abdominal and pelvic collections: technical considerations, success rates, complications and dose compared to CT-fluoroscopic guidance
J. Das, D. Lohan, I. Davidson, D. Sheppard, R. McLoughlin, G. O’Sullivan; Galway/IE

B-0557 14:40 Microwave ablation of pulmonary neoplasms with enabled constant spatial energy control to achieve a predictable spherical ablation zone: retrospective evaluation

B-0558 14:48 Respiratory phase tracking with visual patient feedback facilitating consistent level of breath-hold during image-guided interventions: an exploratory study
W.J. Heerink, M.D. Dorrius, H.J. Groen, R. Vliegenthart, M. Oudkerk; Groningen/NL

B-0559 14:56 Performance of a robotic assistance device in computed tomography-guided percutaneous diagnostic and therapeutic procedures
A. Smakic, N. Rathmann, M. Kostrzewa, S.O. Schönberg, C. Weiß, S. Diehl; Mannheim/DE

B-0560 15:04 Ablation zone geometry in microwave ablation of the liver - comparison of two systems using a semi-automatic segmentation software

B-0561 15:12 Hybrid dynaCT-guided hookwire localisation of pulmonary lesions prior to surgical resection in the same hybrid operating theatre
C. Chu, E. Dal, C. Ng, R. Lau, R. Wong, S. Yu; Shatin/HK

B-0562 15:20 Clinical significance of postinterventional contrast medium injection after CT-guided drainage
H. Goessmann, M. Haimeri, W. Uller, L. Bayer, V. Teusch, F. Poschenrieder, L.-M. Dendl, A. Schreyer; Regensburg/DE

B-0563 14:00 Are patients’ age, height, weight and heart rate relevant in pulmonary CTA?
J. Sapasta Urrutia, S. Santos Ochoa de Eríbe, L. Alonso Irigaray, E. De las Heras Díez, R. Cobos Campos, J. Etxano; Vitoria-Gasteiz/ES

B-0564 14:08 CT pulmonary angiography during pregnancy: radiation dose of commonly used protocols and the effect of z-axis optimisation

B-0565 14:16 Influence of 90-kVp low-tube-voltage pulmonary CT-angiography on radiation dose, image quality and diagnostic accuracy for the detection of pulmonary embolism using ADMIRE
L. Lena, M. Beeres, D. Leithner, J.L. Wichmann, S. Martin, M. Albrecht, T.J. Vogl, J.-E. Scholtz; Frankfurt a. Main/DE

B-0566 14:24 ECG-gated pulmonary CT angiography for the prediction of right ventricular dysfunction in patients suspected of acute pulmonary embolism
N.A. Nikitin, S.M. Minin, M.E. Amelin; Novosibirsk/RU

B-0567 14:32 Value of low-dose ECG cardiac gating for the assessment of right ventricular dysfunction in patients with suspected pulmonary embolism
J.C. Schaefer, H. Haubenreisser, M. Meyer, S.O. Schönberg, T. Henzler; Mannheim/DE

B-0568 14:40 Small left atrium: a sign of pulmonary embolism
A.E. Mahfouz, F. Al-Khafaji, H. Sherif; Doha/QA

B-0569 14:48 Diagnostic value of CT measurements as a predictor of pulmonary hypertension in TAVI patients
M. Eberhard, J. Pavicevic, M. Mastalerz, T. Frauenfelder, F. Tanner, T. Nguyen-Kim; Zurich/CH
B-0570 14:56
Non-invasive estimation of mean pulmonary arterial pressure in suspected pulmonary hypertension based on automated 3D volumetry of pulmonary CT angiography
C. Melizzi1, S. Wörz1, B. Egenlauf3, S. Partovi4, K. Rohr2, E. Grünig2, H.-U. Kauczor1, C.P. Heussel1, F. Rengier2; ‘Heidelberg/DE, ‘Cleveland, OH/US

B-0571 15:04
Low-kilovoltage chest CT angiography at the recirculation phase: a new option to optimise the image quality
A. Hutt, S. Gicquel, J.-B. Faivre, M. Rémy-Jardin, J. Remy; ‘Lille Cedex/FR

B-0572 15:12
Intra-individual comparison of direct subtraction vs dual-energy for imaging of pulmonary perfusion: a feasibility study
D.J.M. Grob1, E.J. Smit2, L.J. Oostveen1, M.M. Snoeren1, C.M. Schaefer-Prokop1, I. Sechopoulos1, M. Brink1; ‘Wijmegen/NL, ‘Amersfoort/NL

B-0573 15:20
Ventilation/perfusion ratio map by dual-energy CT after xenon inhalation and intravenous contrast media
N. Honda1, H. Osada1, W. Watanabe2, K. Aoki1, M. Nakayama1, T. Itoh1, K. Otani2; ‘Kawagoe/JP, ‘Tokyo/JP

14:00 - 15:30 Room N

Genitourinary

SS 707
Male urogenital system - prostate cancer: diagnosis and PI-RADS scoring
Moderators:
B.K. Barth; Zurich/CH
P. Puech; ‘Lille/FR

B-0574 14:00
Prostate volume assessed by TRUS and its correlation with post-void residue
A. Mereu; E. Scapin, L. Saba; ‘Monserrato/IT

B-0575 14:08
Role of multiparametric MRI in the follow-up of patients with a clinical suspicion of prostate cancer
G. Cappello1, S. Mazzetti, V. Giannini, L. Vassallo, F. Russo, D. Regge; ‘Candolo/IT

B-0576 14:16
Sub-differentiating equivocal PI-RADS 3 lesions in multiparametric MRI of the prostate
N.L. Hansen1, B. Koo2, A. Warren3, C. Kastner1, T. Barrett2; ‘Cologne/DE, ‘Cambridge/UK

B-0577 14:24
Clinically significant prostate cancer: evaluation of PI-RADS v2 score 3 lesions on prebiopsy MRI
J. Kim, C. Kim, M.-R. Kwon, R. Kim, J. Yim; ‘Seoul/KR

B-0578 14:32
Multiparametric MRI of the prostate: prospective evaluation of PI-RADSv2 in detection of prostate cancer using ISUP grading system for validation

B-0579 14:40
Updating prostate image reporting and data system version 2 (PI-RADS v2) for the detection of clinically significant prostate cancer in patients with elevated PSA level
C.-C. Wang, J.-S. Huang; ‘Kaohsiung City/TW

B-0580 14:48
Quantitative analysis of dynamic contrast-enhanced MRI for prostate cancer detection: is there an added value compared to PI-RADS v.2 classification?
G. Cristel, A. Esposito, S. Antunes, G. Brembilla, L. Brunetti, A. Briganti, F. Montorsi, A. Del Maschio, F. De Cobelli; ‘Milan/IT

B-0581 14:56
Monocentric experience in the detection of prostate cancer comparing PI-RADS Version 1 and Version 2: the role of dynamic contrast enhancement (DCE)
G. Michelini, L. Panebianco, A. Mancini, A. Pace, C. Gianneramo, C. Marsecano, I. Capretti, R. Manetta, C. Masciocchi; ‘L’Aquila/IT

B-0582 15:04
Multiparametric MRI of prostate cancer for the prediction of lymph node metastasis
G. Brembilla1, A. Esposito, G. Cristel, F. Giganti, L. Brunetti, P. Dell’Oglio, A. Briganti, F. Montorsi, F. De Cobelli; ‘Milan/IT

B-0583 15:12
Evaluation of clinical outcome for prostate cancer after radical prostatectomy using PI-RADS v2
R. Kim, C. Kim, J. Yim, J. Park; ‘Seoul/KR

B-0584 15:20
Usefulness of PI-RADSv1 vs PI-RADSv2 in multiparametric MR imaging of prostate cancer recurrence after radical radiotherapy
J. Rembak-Szynkiewicz1, A. Hebda1, K. Kansy1, A. Badzinski1, B. Bobek-Billewicz1; ‘Gliwice/PL, ‘Sosnowiec/PL

14:00 - 15:30 Room L 8

Head and Neck

SS 708
Temporal bone imaging: hearing loss and vestibular symptoms
Moderators:
P. Golofit; ‘Koszalin/PL
B. Verbiest; ‘Leiden/NL

B-0585 14:00
Abnormal regional activity and functional connectivity in resting-state brain networks associated with aetiology confirmed unilateral pulsatile tinnitus in the early stage of disease
H. Ly1, P. Zhao, Z. Liu, R. Li, L. Zhang, P. Wang, F. Yan, L. Liu, Z. Wang; ‘Beijing/CN

B-0586 14:08
Evaluation of cochlear implants with Dyna CT previous and after surgery: what the radiologist needs to know/what the otologist wants to know
P. LarroFlores1, E. Barcena Ruiz1, X. Santos Sala1, C. Sierra, M. Calderon Sanchez; ‘Madrid/ES

B-0587 14:16
MR imaging strategies in cochlear implants with novel self-aligning magnets, 1.5T vs 3T, high-bandwidth vs WARP artefact reduction: a phantom study
A. Pomschar, M.F. Reiser, B. Ertl-Wagner; ‘Munich/DE
Longstanding sensorineural hearing loss: impact of aetiology of hearing loss on the size of the cochlear nerve


The new classification system for inner ear malformations: the INCAV system


Diagnostic accuracy of the perilymphatic signal drop on a 3D FIESTA C sequence at 3 Teslas to differentiate vestibular schwannomas from meningoimias of the internal auditory canal

A. Venkataram, A. Karol, A. Charpiot, C. Debruy, P. Froust, N. Meyer, F. Veillon; Strasbourg/FR

Effect of the duration of hearing loss on the size of the cochlear nerve in patients with longstanding sensorineural hearing loss


Diagnostic performance of reformatted isotropic thin-section helical CT images in the detection of superior semicircular canal dehiscence

G. Sparacita, F. Agnelli, R. Cannella, A. Anastasi, A. iaia, K. Traylor, M. Miriti; Palermo/IT, Newark/DE/US

MRI findings in infants with auditory neuropathy spectrum disorder due to thiamine deficiency

P.A. Caruso; Boston, MA/US

Detection and measurement accuracy of cholesteatomas: a comparison between non-EPI RESOLVE DWI and 3T MRI vs EPI DWI PROPELLER on 1.5T MRI

P.G. Chan, M. Thong, W. Maclaurin, S. Kerr, H. Kavnoudias, V. Cousins; Melbourne/AU

Comparison between a flat-panel angiography system and a 64-slices multissection computed tomography scanner in the cross-sectional imaging of the temporal bone

G. Conté, E. Scola, C. Sina, S. Galloni, R. Brambilla, L. Lombardi, F. Triulzi; Milan/IT

Interpretation time for digital breast tomosynthesis vs digital mammography in a population-based screening program


Syntetic 2D + tomosynthesis for population breast cancer screening: first year of a pilot study

F. Gaumer, G. Romanucci, S. Brunelli, P. Bricoli, L. Cugola, C. Fedato, M. Zorzi, S. Montemezzi; Verona/IT, Dorsoduro (VE)/IT, Padua/IT

The accuracy of digital breast tomosynthesis (DBT) and spot compression views for the diagnosis of different soft tissue breast lesions in a screening programme

J.J. James, E.J. Cornford, Y. Chen, A.E. Turnbull; Nottingham/UK, Loughborough/UK, Derby/UK

Added value of one-view digital breast tomosynthesis combined with digital mammography according to readers concordance: changing in BIRADS rate and follow-up management

F. Galati, F. Marzocca, E. Bassetti, M. Luciani, F. Pediconi, C. Catalano; Rome/IT

One-view digital breast tomosynthesis as a standalone modality for breast cancer detection: do we need more?

A. Rodriguez-Ruiz, A. Gubern-Mérida, M. Imhof-Tas, S. Lardenoije, N. Karssemeijer, R. Mann, I. Sechopoulos; Nijmegen/NL

The accuracy of digital breast tomosynthesis (DBT) and spot compression views for the diagnosis of different soft tissue breast lesions in a screening programme

J.J. James, E.J. Cornford, Y. Chen, A.E. Turnbull; Nottingham/UK, Loughborough/UK, Derby/UK

Comparison of detectability and characterisation of microcalcifications with digital mammography (DM), synthesised 2D additional views were considered

C.S. Lo, L.H.Y. Sinn, K.W.M. Wong, T.P.W. Lam, W.W.M. Lam; Hong Kong/HK

To compare total radiation dose of FFDM alone and FFDM+DBT when additional views were considered

C.S. Lo, L.H.Y. Sinn, K.W.M. Wong, T.P.W. Lam, W.W.M. Lam; Hong Kong/HK

Comparison of detectability and characterisation of microcalcifications with digital mammography (DM), synthesised 2D mammography (4M) and digital breast tomosynthesis (DBT)


Is digital breast tomosynthesis (DBT) favourable for the evaluation of breast microcalcifications and for the pre-procedural study of stereotactic biopsy?


To what extent is the detectability of breast microcalcifications and spiculated lesions dependent on display luminance level?

C. Ferrari, A. Primolevo, F. Cartia, C. Cavatorta, M. Lualdi, E. Pignoli, M. Plebani, P. Verderio, G. Scaperrotta; Milan/IT
SS 711
Brain tumours: lesion characterisation and treatment evaluation

Moderators:
M.A. Lucic; Sremska Kamenica/RS
S. Thust; London/UK

B-0607 14:00
Tumour vascular pattern on MRI: a new and promising potential biomarker of glioblastoma survival
A. Gimenó1, G. Blasco1, P. Daunis-i-Estadella1, C. Biarnés1, J. Sanchez-Gonzalez2, A. Alberich-Bayarri2, M. Puigdemont1, S. Pedraza1, J. Puig1, Girona/ES, 2Madrid/ES, 3Valencia/ES

B-0608 14:08
Medulloblastoma in adults: identifying imaging biomarkers of genetic status in a prospective multi-centre study
Y.C. Keij1, M. Warmutz-Metz2, C. Reh3, J. Enkirch1, H.H. Schild1, T. Pietsch1, E. Hattingen1, P. Hau1, 1Bonn/DE, 2Würzburg/DE, 1Graz/AT

B-0609 14:16
Apparent diffusion coefficient and permeability parameters from dynamic contrast-enhanced perfusion MR imaging: preliminary correlation study with glioma genetic profiles
J. Zhao, J.-P. Chu, Y.-L. Wang, X.-B. Li, J.-Y. Wang, Y.-K. Song, Guangzhou/CN

B-0610 14:24
Hybrid methionine PET/MRI and MR spectroscopy in the diagnostic workup of primary brain tumour
C. Deuschl, S. Göröcke, T. Pöppel, H. Quick, M. Forsting, L. Umutlu, M. Schlammn, Essen/DE

B-0611 14:32
Micro-fractionated brain cancer high-dose radiosurgery observed using 3D x-ray phase contrast CT
G.B. Berboni1, P. Romanelli1, G. Battaglia1, A. Mittone1, M.F. Reiser2, G. Auweter1, T. Gaal1, A. Bravini1, P. Coan1, Garching/DE, 1Milan/IT, 1Pozzilli/IT, 1Grenoble/FR, 2Munich/DE

B-0612 14:40
Assessment of intracranial meningioma-associated calcifications using susceptibility-weighted magnetic resonance imaging
L.C. Adams1, S.M. Böker, Y.Y. Bender, E. Fallonberg, M. Wagner, R. Buchert, B. Hamm, M. Makowski, Berlin/DE

B-0613 14:48
The role of diffusion-weighted imaging for radiological identification of molecular subgroups of medulloblastoma in children
L. Filograna, A. Mastronuzzi, E. Miele, C. Carducci, A. Cacchione, A. Napolitano, A. Carai, E. Ferretti, G.S. Colafati, Rome/IT

B-0614 14:56
Residual tumour identification with intra-operative CEUS during glioblastoma resection
F. Prada1, M. Del Bene1, A. Martegani2, L. Aian3, L.M. Sconfienza3, G. Mauri2, L. Solbiati3, B. Pollo1, F. DiMeco1, Milan/IT, 1Como/IT, 3San Donato/IT, 3Rozzano/IT

B-0615 15:04
Texture analysis on diffusion-tensor imaging: discriminating glioblastomas from single brain metastasis
K. Skogen1, A. Schulz1, E. Helseth1, J.B. Dormagen1, B. Ganeshan1, A. Server1, Oslo/NO, 2London/UK

B-0616 15:12
Progressive disease in glioblastoma: benefits and limitations of semi-automated volumetry

B-0617 15:20
Quantitative analysis of brain tumours perfusion with contrast-enhanced ultrasound
F. Prada1, C. Richetta1, M. Del Bene1, L.M. Sconfienza3, G. Mauri2, L. Solbiati3, F. DiMeco1, Milan/IT, 3San Donato/IT, 3Rozzano/IT

14:00 - 15:30 Room E2

Oncologic Imaging

SS 716
Imaging nervous system and musculoskeletal tumours

Moderators:
F.A. Gallagher; Cambridge/UK
B.M. Schaarschmidt; Düsseldorf/DE

B-0618 14:00
Radiomics reveals prognostic information from baseline MRI in patients with glioblastoma
M. Ingrisch1, M.J. Schneider1, D. Nörenberg1, G. Negrao de Figueiredo1, K. Maier-Hein2, B. Suchorska1, M.F. Reiser1, J.C. Tonn1, B. Ertl-Wagner1, Munich/DE, Heidelberg/DE

B-0619 14:08
Cerebrovascular events in glioblastoma multiforme patients
T. Auer, M. Renovanz, F. Marin1, M.A. Brockmann, Y. Tanyildizi, Mainz/DE

B-0620 14:16
1H magnetic resonance spectroscopy of supratentorial WHO grade II gliomas
A. Nebe1, B. Bobek-Billewicz, G. Stasik-Pres, P. Wawrzyniak; Gliwice/PL

B-0621 14:24
Multiparametric MRI assessment of glioblastoma for predicting patient survival
A. Gimenó1, G. Blasco1, P. Daunis-i-Estadella1, C. Biarnés1, J. Sanchez-Gonzalez2, A. Alberich-Bayarri2, M. Puigdemont1, S. Pedraza1, J. Puig1, Girona/ES, Madrid/ES, Valencia/ES

B-0622 14:32
Evaluation of deep brain large metastasis after hypofractioning stereotactic radiotherapy
A.V. Smirnova1, O. Lukina1, N. Plakhotina1, P. Ivanov, A. Kuzmin, I. Zubatkina; St. Petersburg/RU

B-0623 14:40
Brain gliomas recurrence imaging after chemoradiation therapy
A.V. Smirnova1, O. Lukina1, N. Plakhotina1, I. Lobanova2, A. Kuzmin1, A. Tkachev3, St. Petersburg/RU, Nizhny Novgorod/RU, 2Volgograd/RU

B-0624 14:48
MRI evaluation of sacral chordoma treated with carbon ion hadron therapy
D. Stoppa1, S. Camisa, L. Preda, G. Viselner, G. Fontana, M. Fiore, P. Fossati, E. Ciurlia, R. Orecchia; Pavia/IT

B-0625 14:56
Does elevated glucose metabolism correlate with higher cell density in neurofibroma?
D. Berzaczy, T. Traub-Weidinger, M. Mayerhoefer; Vienna/AT
**B-0627 15:04**

3D texture analysis distinguishes low-grade chondrosarcoma from enchondroma

C.S. Liwon, C.G. Lisson, R. Mayer-Steinacker, T.F.E. Barth, A. von Baer, M. Schultheiss, M. Baumhauer, M. Beer, S.A. Schmidt; 1Ulm/DE, 2Heidelberg/DE

**B-0628 15:12**

Ewing's sarcoma: comparative diagnostic merits of different MRI pulse sequences

M.M. Saleh, T.A. Raafat, Y.M. Said, M.K.A. Asran, N.M. Abdel Wahab; Cairo/EG

**B-0629 14:00**

A survey by the European Society of Breast Imaging on the utilisation of breast MRI: technical notes

P.A.T. Baltzer, P. Clauser, P. Kapetas; 1Vienna/AT, 2Athens/GR, 3Milan/IT, 4Budapest/HU

**B-0630 14:08**

A survey by the European Society of Breast Imaging on the utilisation of breast MRI: clinical indications

P. Clauser, H. Prosch, R. Mann, A. Athanasioiu, K. Pinker, T.H. Helbich, F. Sardanelli, G. Forrafi, H. Prosch; 1Vienna/AT, 2Nijmegen/NL, 3Athens/GR, 4Milan/IT, 5Budapest/HU

**B-0631 14:16**

Kinetic breast MRI parameters of normal parenchyma in healthy individuals and invasive ductal carcinoma patients

M. Nadrljanski, Z. Jokovic, Z. Milosevic; Belgrade/RS

**B-0632 14:24**

Occult nipple-areola complex (NAC) involvement in breast cancer patients: can we predict it with preoperative MRI before nipple sparing (NSM) or skin sparing (SSM) mastectomy?

C. Berzovics, F. Esposito, M. Durando, G. Mariscotti, M. Brunetti, L. Bergamasco, P. Fonio, G. Gandini; Turin/IT

**B-0633 14:32**

MRI to predict nipple-areola complex (NAC) involvement: an automatic method to compute the 3D distance between the NAC and tumour

V. Giannini, S. Mazzetti, V. Donzonio, E. Tabone, F. Arabia, S. Pedalino, D. Regge, L. Martinich; Candiolo/IT

**B-0634 14:40**

MRI evaluation of post-mastectomy irradiated breast implants: prevalence and analysis of complications

M. Telegrafo, L. Relia, A. Cirilli, V. Ranieri, A. Stabile Ianora, G. Angelelli, M. Moschetta; Bari/IT

**B-0635 14:48**

Multi-parametric MRI in differentiation of benign and malignant breast lesions: imaging interpretation and radiology-pathology correlation

Y.G.S.E. Shokry, R.M.K.E. Kamal, M.R.L. Louis, S.A.M.S. Salem; Cairo/EG

**B-0636 14:56**

Breast cancer radiomics in the semantic feature space: association with therapeutically relevant subtypes

P. Clauser, P. Kapetas, R. Woitek, M. Bernathova, F. Leone, K. Pinker, T.H. Helbich; 1Vienna/AT, 2Monza/IT

**B-0637 15:04**

The spatial relationship of malignant and benign breast lesions to the fat-gland interface in three-dimensional magnetic resonance imaging

S. Shin, W. Kim; 1Seoul/KR, 2Daegu/KR

**B-0638 15:12**

MRI for the assessment of malignancy in mammographic microcalcifications

B. Bennani-Baiti, M. Dietzel; 1Vienna/AT, 2Erlangen/DE

**B-0639 15:20**

Correlation of the radiological findings with the Baker score of capsular contracture: does it have added value?

G. Bar On, H. Maresky, V. Kent, G. Landau, I. Wiser, P. Gottlieb, S. Tal; Zrefin/IL

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**B-0640 14:09**

Meniscus T2 relaxation time and knee joint degeneration

R. Kilowski, B. Beduhn, F. Liu; Madison, WI/US

**B-0641 14:17**

Assessment of meniscal and cartilage damage of the knee with ultrahigh field imaging at 7Tesla: a comparison to 3Tesla imaging with arthroscopic correlation

B. Friebe, M. Richter, S. Penzlin, C. Staerke, F. Godenschweger, J. Ricke, S. Kropf, F. Fischbach, O. Speck; Magdeburg/DE

**B-0642 14:25**

Weight loss regimens in obese and overweight individuals impact cartilage degeneration: 96-month data from the Osteoarthritis Initiative

G.C. Feuerriegel, A.S. Gersing, B.J. Schwaiger, J. Zarnowski; 1Magdeburg/DE, 2San Francisco, CA/US

**B-0643 14:33**

Risk factors for biochemical cartilage alterations in young asymptomatic individuals


**B-0644 14:41**

Simultaneously measured T2 and dGEMRIC indices do not correlate in an experimental, ovine FAI model

F. Schmaranzer, L. Arendt, N. Wolfer; 1Innsbruck/AT, 2Zurich/CH
B-0645 14:49
Can the offset correction in experimentally induced ovine, cam FAI stop the process of biochemical and histologic cartilage degeneration: a pilot study
F. Schmaranzer1, L. Arendt1, N. Wolfer1, C. Zurmühle1, S. Steppacher1, K. Nuss1, P. Kircher1, B. von Rechenberg1, M. Tannast1; ‘Berne/CH’, ‘Zurich/CH’

B-0646 14:57
Follow up after matrix based autologous chondrocyte transplantation of the hip vs microfracture: a comparative 3T-MRI-study

B-0647 15:05
Cartilage repair tissue composition assessed with 3T MRI correlates with trabecular bone remodeling in patients with spongiosa augmented matrix-associated chondrocyte implantation
A.S. Gersing, F. Amsler1, J. Voigt2, A. Fieselmann2, M.-S. Walgraeve1, L. Pyfferoen1, K. Van De Moortele1, C. Lafay1, F. Zanca2, J.W. Casselman1; ‘Bruges/BE’, ‘Buc/FR’

B-0648 15:13
Standing CT imaging to enable earlier and more accurate detection, diagnosis, and longitudinal monitoring of knee osteoarthritis features
N. Segal1, A. Guermazi2; 1 ‘Barcelona/ES’, 2 ‘Munich/DE’

B-0649 15:21
MRI scoring of osteoarthritis of the ankle
S.M. Abolmaes, S.B.L. Low, J.G. Cahir, A.P. Toms; ‘Norwich/UK’

SS 713
Performance optimisation in medical imaging

B-0650 14:00
Initial evaluation of image performance of a novel 3D x-ray system: phantom-based comparison of 3D tomography with conventional computed tomography
R.M. Benz1, M. Garcia1, F. Amsler1, A. Fieselmann2, L. Pyfferoen1, K. Van De Moortele1, C. Lafay1, F. Zanca2, J.W. Casselman1; ‘Bruges/BE’, ‘Buc/FR’

B-0651 14:08
A human cadaver study to evaluate automatic image quality assessment in chest CT
C. Franci1, A. De Crop1, B. De Roo1, P. Smeets1, E. Achten1, T. Van Hooft1, K. Bacher1; ‘Ghent/BE’, ‘Roeselare/BE’

B-0652 14:16
Clinical use of digital scatter correction in bedside chest radiography to improve image quality and reduce patient dose
C. Cases1, D. Mentrup1, A. Ruiz1, R. Pallerol1, A. Gimenez1, I. Gich1, M. Ribas1, A. Capdevila1; ‘Barcelona/ES’, ‘Hamburg/DE’

B-0653 14:24
Towards automated clinical image quality assessment in CT: 3D model observer applied to simulated images of a virtual lung phantom
I. Hernandez-Giron1, W.J.H. Veldkamp1, G.J. Streekstra1, M.E. Suleiman1; 1 ‘Amsterdam/NL’

B-0654 14:32
Performance evaluation of a dual-layer spectral CT: initial results

B-0655 14:40
Objective comparison of high- and low-contrast detectability for three clinical protocols on eight CT scanners
D. Racine1, A. Viry1, F. Becce1, S. Schmidt1, A. Ba1, A. Schegerer1, F.R. Verdun1; ‘Lausanne/CH’, ‘Oberschleißheim/DE’

B-0656 14:48
Properties of primary MDCT x-ray source spectra: influence on total energy deposition and spatial absorption distribution
A. Steuwe, H.-U. Kauczor, W. Stiller; ‘Heidelberg/DE’

B-0659 15:12
Effect of acquisition geometry on image quality of a digital tomosynthesis system for general radiography
A. Maldera1, M. Sotto, P. Colombo, A. Torresin; ‘Milan/IT’

B-0660 15:20
Impact of detector type, dose and image processing on the quality of digital neonatal chest x-ray images

B-0661 14:00
A multicentre international study to develop and validate a reproducible assessment tool for evaluating the image quality of digital mammograms

B-0662 14:08
The impact of image blurring on lesion detection performance in full field digital mammography FFDM
A.K. Abdulliah1, J. Thompson1, C. Mercer1, R. Aspin1, J. Kelly1, P. Hoggi1; ‘Salford/UK’, ‘Chester/UK’

B-0663 14:16
Radiation doses received by women attending BreastScreen NSW in 2014
M.E. Suleiman, P.C. Brennan, P. Kench, M.F. McIntee; ‘Lidcombe/AU’
**B-0664** 14:24
Students, teaching-staff and clinical radiographers' perspectives about difficulties and challenges in mammography education and training
C.S. Reis1, J. Pires Jorge2, B. Strøm3, N. Richil Meystre4, A. Henner5, T. Kuukse6, E. Metsala1; *Lausanne/CH, 1Bergen/NO, 4Oulu/Fl, 6Helsinki/Fl

**B-0665** 14:32
Assessing risk of pain in mammography
S. Pacifico, Rome/IT

**B-0666** 14:40
Ergonomic analysis in mammography: strategies to improve radiographers’ activity and postures
N. Cerneal1, P. Serranheira1, P. Goncalves1, C.S. Reis2, 1Lisbon/PT, 2Perth/AU

**B-0667** 14:48
The effect of mean glandular dose variations on effective risk from full-field digital mammography in screening

**B-0668** 14:56
Radiographers’ practice in mammography departments: challenges in training and clinical performance
E. Metsalä1, N. Richil2, J. Jorge2, A. Henner3, T. Kuukse3, C. Reis3; *Lausanne/CH, 2Oulu/Fl, 3Helsinki/Fl, 4Tartu/EE, 5Helsinki/Fl

**B-0669** 15:04
Importance of training the radiographer in communication technique with female patient with breast cancer
H. Mohammed; 2Doha/QA

**B-0670** 15:12
Radiographer’s role in the conscious participation in breast screening: the importance of interpersonal aspects and communication
M. Simoncini1, M. Biondi1, M. Virgilio2, L. Giuliani2, C. Ottolino1; *Pomezia/IT, 2Rome/IT

**B-0671** 15:20
Mathematical modelling of radiation-induced cancer from screening mammography

**B-0674** 14:16
Calciﬁed coronary artery disease: advanced calcium subtraction improves luminal visualisation and diagnostic conﬁdence in dual-energy coronary CT angiography
D. De Santis; M.H. Albrecht, M. Eid, C.N. De Crocco, A. Varga Szemes, T.M. Duguay, U.J. Schoepf; 1Charleston, SC/US

**B-0675** 14:24
Assessing genetic and environmental inﬂuences on epicardial and abdominal fat quantities: a classical twin study
A.L. Jermendy1, M. Kolossvary1, Z.D. Drobnı́1, A.D. Tarnoki1, D.L. Tarnoki1, J. Karady1, S. Vorosı́1, B. Merkely1, P. Maurovich-Horvát1; *Budapest/HU, 2Rimond, VA/US

**B-0676** 14:32
PARIS (Plaque At RISK) study: the association between intraplaque haemorrhage and thrombin generation in symptomatic carotid atherosclerotic plaques
G.A.JC. Crombag1, H. Sporkı́1, A. van der Lugt1, J. Hendriks2, P.J. Nederkoorn1, J.W. Wildberger1, H. ten Cate1, R.J. van Oostenbrugge1, M.E. Kooi1; *Maastricht/NL, 2Rotterdam/NL, 3Utrecht/NL, 4Amsterdam/NI

**B-0677** 14:40
Epicardial adipose tissue and pericoronary fat tissue thickness in patients with essential hypertension environmentally exposed to cigarette smoke
P. Gac, P. Jazwiec, M. Poreba, G. Mazur, R. Poreba; Wroclaw/PL

**B-0678** 14:48
Iterative model reconstruction improves semiautomated plaque quantification in coronary CT angiography
I. Kocsman1, M. Karolyi, B. Szilveszter, M. Kolossvary, J. Karady, A. Jermendy, A. Bartykowszki, B. Merkely, P. Maurovich-Horvát; Budapest/HU

**B-0679** 14:56
Contrast-enhanced MRI of inﬂammatory component of coronary atherosclerosis in patients with acute coronary syndrome
W.J. Jong1, N.V. Belokopytova1, T.A. Sheikovnikova1, E.A. Aleksandrova1, E.Y. Pushnikova, V.D. Aptekar, Tomsk/RU

**B-0680** 15:04
Relationship between complications during pregnancy and coronary atherosclerosis later in life in African-American women assessed by coronary computed tomography
J.L. Wichmann1, J.H. Nunez1, R. Vliegenthart2, K. Otani3, S.E. Litwin1, P.B. Morris1, T.J. Vog1, N.K. Wenger1, U.J. Schoepf1; 1Charleston, SC/US, 2Groningen/NI, 3Tokyo/JP, 4Frankfurt a. Main/DE, 5Atlanta, GA/US

**B-0681** 15:12
Sensitivity and speciﬁcity of epicardial adipose tissue thickness measured with 128-slice computed tomography as a marker predicting significant lesions in coronary arteries
P. Gac, P. Jazwiec, O. Kornafel-Flak, R. Poreba; Wroclaw/PL

**B-0682** 15:20
Downstream investigation of non-cardiac incidental ﬁndings in patients undergoing CT coronary angiography: ﬁndings from the multi-center randomised controlled SCOT-HEART trial
M.C. Williams1, A. Hunter1, J. Dreisbach1, J.R. Weir-McCall1, M. Macmillan1, S. Mirdad1, E.J.R. van Beek1, D.E. Newby1, G. Roditi1; *Edinburgh/UK, 2Glasgow/UK, 3Dundee/UK
**SS 703b**

**Acute chest pain and non-ischaemic cardiomyopathies**

**Moderators:**
S. Feger; Berlin/DE  
S. Harden; Southampton/UK

**K-12 14:00**

**Keynote lecture**
V.E. Sinitsyn; Moscow/RU

**B-0683 14:09**

Triple rule out in patients with acute chest pain: economic aspects  
M. Fusaro, G. Tessarin, M. Milana, M. Tessarin, L. La Torre, G. Morana;  
Treviso/IT

**B-0684 14:17**

Acute chest pain CT in comparison with standard treatment: a cost-effectiveness study  
J.L. Wichmann, K. Otani, C.M. Carri, C. Tesche, S.E. Litwin, R.R. Bayer,  
C.N. De Cecco, T.J. Vogl, U.J. Schoepf; Charleston, SC/US,  
Tokyo/JP, Frankfurt a. Main/DE

**B-0685 14:25**

Coronary CT angiography-derived plaque quantification in patients with acute coronary syndrome  
C. Tesche, D. Caruso, C.N. De Cecco, T.M. Duguay, D.C. Shuler,  
J.D. Rames, M.H. Albrecht, A. Varga-Szemes, U.J. Schoepf; Charleston, SC/US

**B-0686 14:33**

Global and regional left ventricular myocardial deformation in cardiac amyloid light-chain amyloidosis: assessment with cardiovascular magnetic resonance tissue tracking  
R. Li, Z.-G. Yang, Y.-K. Guo; Chengdu/CN

**B-0687 14:41**

Myocardial contractile dysfunction is correlated with maximum wall thickness and myocardial lipid accumulation in Fabry's disease: a CMR study with tissue tracking technique  
N. Galea, R. Ammendola, M. Francone, A. Fiorelli, F. Ciolina, A. Frustaci,  
C. Catalano, I. Carbone; Rome/IT

**B-0688 14:49**

Myocardial strain analysis using feature-tracking CMR approach for the differential diagnosis of amyloidosis vs HCM: a novel approach besides conventional imaging sequences?  
G. De Rubeis, F. Cilia, N. Galea, I. Carbone, M. Francone, C. Catalano;  
Rome/IT

**B-0689 14:57**

Denoising effect on T2* values in magnetic resonance imaging with application in iron load of patients with thalassaemia major  
M. Doelanghe, S. Gholami Bardeji, Z. Gholami Bardeji, S. Sefidbakht,  
R. Jalli; Shiraz/IR

**B-0690 15:05**

The cardiac MRI sphericity index in the dilated cardiomyopathy: new diagnostic and it prognostic marker  
A. Zidi, I. Ben Amara, R. Aouini, A. Ben Halima; Tunis/TN

**B-0691 15:13**

Stratification of arrhythmic risk in HCM patients on the basis of oedema and myocardial scar on late gadolinium enhancement-cardiac magnetic resonance (LGE-CMR): a 11-year follow-up study  
S. Bertugno, L. Nocetti, F. Fiocchi, A. Barbieri, Y. Bartolacelli, P. Torricelli,  
G. Ligabue; Modena/IT

**B-0692 15:21**

Age- and gender-specific differences and magnetic resonance characteristics of hypertrophic cardiomyopathy  
Z. Dohy, C. Czimbalmos, I. Csécs, A. Tóth, F. Suhai, B. Horváth, E. Dinya,  
B. Merkely, H. Vágo; Budapest/HU
**SS 1016a**
**Imaging in prostate cancer**

**Moderators:**
P.A.T. Baltzer; Vienna/AT
M. Spahn; Berne/CH

**B-0693**
**10:30**
Effect of PI-RADSv2 instead of PI-RADSv1 in the analysis of multiparametric prostate MRI at 3T for prostate biopsies
A. Malich, I. Papageorgiou, R. Chelaru, A. Kott; Nordhausen/DE

**B-0694**
**10:38**
The role of PI-RADSv2 in determining who needs active surveillance or definitive treatment according to PRIAS
B. Park, J. Park; Seoul/KR

**B-0695**
**10:46**
Clinical outcome following a low-suspicious multiparametric MRI or benign MRI-targeted biopsies for prostate cancer detection: a 3-year follow-up study
L. Boesen, N. Nørgaard, V. Loegager, H.S. Thomsen; Herlev/DK

**B-0696**
**10:54**
Accuracy of multiparametric MRI with PI-RADS V2 assessment in detecting infiltrations of the neurovascular bundles prior to prostatectomy
M. Sauer, J. Weinrich, G. Salomon, G. Adam, D. Beyersdorff; Hamburg/DE

**B-0697**
**11:02**
Validation of prostate imaging reporting and data system version 2 using a MR-ultrasound fusion biopsy in prostate cancer diagnosis
Y. Nam, S. Kim, Y. Yeo; Daegu/KR

**B-0698**
**11:10**
Manual adjustment in mpMRI-directed prostate biopsy significantly improves the detection rate of prostate cancer: experience in 180 patients
S. Alesi, L. Nicosia, P. Pricolo, B. Jereczek-Fossa, V. Cubadda, G. Renne, G. De Cobelli, M. Bellomi, G. Petralia; Milan/IT

**B-0699**
**11:18**
Early dynamic imaging increases the detection rate of local recurrence in prostate cancer patients with biochemical relapse referred for 68Ga-PSMA-11 PET/CT

**B-0700**
**11:26**
Detection rate of PET/CT in patients with biochemical relapse of prostate cancer using 68Ga-PSMA I&I and comparison with published data of 68Ga-PSMA HBED-CC

**B-0701**
**11:34**
Assessing early treatment induced changes on diffusion signal of prostate cancer: comparison of two radiotherapy schemes
N. Papageorgiou, G. Manikis, I. Santiago, A. Galvaø, C. Greco, Z. Fuks, C. Matos; Lisbon/PT, 1Irkiløv/GR

**B-0702**
**11:42**
IVIM of prostate cancers: assessing grade and response to treatment
R. Balaji; Chennai/IN

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**SS 1001**
**New techniques in abdominal imaging**

**Moderators:**
D. Prezzi; London/UK
C. Stoupis; Männedorf/CH

**B-0703**
**11:50**
Multiparametric MRI of prostate cancer bone disease: correlation with bone biopsy histological and molecular features

**B-0704**
**10:30**
Evaluation of different methods to optimise contrast media amount in abdominal CT of obese patients
F. Rivosecchi, D. Caruso, M. Rengo, D. Bellini, M. Zerunian, A. Laghi; Latina/IT

**B-0705**
**10:38**
Clinical robustness of accelerated and optimised abdominal DWI
J. Taron, P. Martirosian, J. Weiß, A. Stemmer, A. Othman, K. Nikolaou, M. Notohamiprodjo; Tübingen/DE

**B-0706**
**10:46**
Diagnostic value and radiation dose reduction of model-based iterative reconstruction compared with hybrid iterative reconstruction in routinely upper abdominal CT study
A. De Vito, D. Ippolito, C.R.G.L. Talei Franzesi, L. Riva, S. Drago, S. Sironi; Monza/IT

**B-0707**
**10:54**
Contrast dose variability depending on morphometric values: a retrospective analysis on patients undergoing multi-phase abdominal CT
M. Zanardo, F.M. Doniselli, A. Esseridou, S. Trittella, G. Di Leo, F. Sardanelli; Milan/IT, 2San Donato Milanese/IT

**B-0708**
**11:02**
Material suppressed iodine using dual-energy spectral CT: feasibility and influencing factors
H. Zhao; Zhengzhou/CN

**B-0709**
**11:10**
Feasibility of material suppressed iodine using dual-energy spectral CT with optimised adaptive statistical iterative reconstruction (ASIR) in abdominal CT
H. Zhao; Zhengzhou/CN

**B-0710**
**11:18**
Fast abdominal imaging with high parallel-imaging factors: comparative study of a 60-channel receiver coil with the standard coil setup
A. Othman, J. Weiss, J. Taron, K. Nikolaou, M. Notohamiprodjo; Tübingen/DE

**B-0711**
**11:26**
Assessment of bolus tracking for the acquisition of a single dual-energy iodine map as a quantitative imaging biomarker replacing abdominal CT perfusion
**B-0712** 11:34
Image quality comparison of low-dose contrast-enhanced abdominal CT with different protocols: reduced tube voltage or reduced tube current?
S. Ying1, F. Chen1, J. Yao1, G. Yang1, G. Lei1, Y. Jiang2; Hangzhou/CN, 1Shanghai/CN

**B-0713** 11:42
Spleen stiffness: an index marker of oesophageal varices in patients with liver cirrhosis
N. Saiwand1, D. Aditi1, K. Meera1, K. Sudhakar1, K. Ajairamcharan1, M. Ipsit2; 1
F.K. Wacker, J.M. Sohns, B.C. Meyer, C. von Falck; Hannover/DE

**B-0714** 11:50
Focal splenic lesion: to remove or not to remove?
S. Jang1, J. Kim1, B. Hur2, I. Joo1, S. Ahn1, M. Kim2, J. Han1; Seoul/KR, 1Gyeonggi-do/KR

**B-0715** 10:39
4D-flow MRI in patients with Fontan circulation for evaluation of pulmonary artery blood distribution
A. Curta, A. Lehner, U. Walter, R. Dalla-Pozza, M. Fischer, N. Haas, H. Krammer; Munich/DE

**B-0716** 10:47
Optimising image quality in CT pulmonary angiography using low contrast media volume and automated tube voltage selection
B.M.F. Hendriks, N.G. Eijsvoogel, B. Horehledova, M. Kok, B. Martens, L.F. Carati, J.E. Wildberger, M. Chen2; 1
A. Wressnegger1, C. Schestak1, H. Prosch1, H. Ringl1, G. Apfaltrer2, X. Liu, L. Zhang; Shenyang/CN, 1Hangzhou/CN

**B-0717** 10:55
Virtual monoenergetic imaging and iodine perfusion maps improve diagnostic accuracy of dual-energy CT pulmonary angiography with suboptimal contrast attenuation

**B-0718** 11:03
Validation and error quantification of pulmonary artery 4D-flow MRI in a digital broadband 3T-MR setup
C. Berlin, T.H. Oechtering, M. Sieren, D. Droemann, J. Barkhausen, A. Frydrychowicz; Lübeck/DE

**B-0719** 11:11
Comparison of unenhanced and contrast-enhanced MRI in the detection of pulmonary AV-malformations in patients with hereditary haemorrhagic telangiectasia
P. Jagoda, J. Stroeder, A. Massmann, A. Buecker, G. Schneider; Homburg/DE

**B-0720** 11:19
C-arm computed tomography (C-CT) in patients with chronic thromboembolic pulmonary hypertension and a positive V/Q SPECT/CT: evaluation of additive diagnostic information

**B-0721** 11:27
Model-based iterative reconstruction on low-dose CT pulmonary angiography: diagnostic image quality and radiation dose saving compared with hybrid iterative reconstruction CTPA
A. De Vito, D. Ippolito, C.R.G.L. Talei Franzesi, L. Riva, E.B. Orsini, S. Sironi; Monza/IT

**B-0722** 11:35
Analysing pulmonary artery haemodynamics with 4D-flow MRI: comparison to 2D phase contrast MRI in patients with pulmonary hypertension and healthy volunteers
M. Sieren, C. Berlin, T. Oechtering, P. Hunold, D. Droemann, J. Barkhausen, A. Frydrychowicz; Lübeck/DE

**B-0723** 11:43
Feasibility of a low dose and low contrast media protocol for CT pulmonary angiography
S. Suntharalingam, C. Mikat, Y. Erfanian, K. Nassenstein; Essen/DE

**B-0724** 11:51
E. Karavaeva1, J. Finn2; Moscow/RU, 1Los Angeles, CA/US

**B-0725** 10:30
Lung image quality of a prototype ultra-high resolution CT scanner: comparison to current clinical standard
P. Rogalla1, A. Sirajuddin1, S. Kandel1, J. Kavanagh1, M. Prokop3, A. Blum4; 1Biel/CH

**B-0726** 10:38
Prototype ultrahigh-resolution CT for chest imaging: initial human experience
S. Shanbhag1, J.L. Schuzer2, C. Steveson3, S. Rollison1, M.S. Stagliano1; 1Bethesda, MD/US, 1Vernon Hills, IL/US, 1Otawara/JP

**B-0727** 10:46
Overscanning in chest CT: comparison of incidence among five Swiss hospitals and its impact on radiation dose
F.R. Schwartz1, B. Stieltjes1, Z. Szucs-Farkas2, A. Euler3; 1Basle/CH, 2Biel/CH

**B-0728** 10:54
Radiation dose reduction using orthogonal tomogram associated with toposgram-based automatic tube voltage and current modulation for lung CT scanning
X. Liu, L. Zhang; Shenyang/CN

**B-0729** 11:02
Impact on image quality and radiation dose of a novel spectral filtration 150 kV tin-filtered chest CT protocol in patients after lung transplantation
A. Wressnegger1, C. Schestak1, H. Prosch1, H. Ringl, G. Apfaltrer2, P. Apfaltrer2; Vienna/AT, 1Graz/AT
**B-0730** 11:10
Sub-millisievert (mSv) third-generation dual-source chest CT with advanced modeled iterative reconstruction: image quality and lesion conspicuity
F. Sodagari, H. Savas, R. Agrawal, T.H. Grant, V. Yaghmai; Chicago, IL/US

**B-0731** 11:18
Influence of reconstruction methods for lung densitometry among model-based and hybrid type IR and FBP methods on ADCT from standard to low-dose levels at QIBA phantom study
E. Suehiro1, T. Sekitani1, W. Tani1, N. Negi1, F. Fujisawa1, N. Sugihara2, K. Fujii2, T. Yoshikawa2, Y. Ohno1; Kobe/JP, 1Otawara/JP

**B-0732** 11:26
Influence of scan methods to lung density measurement accuracy using ADCT from standard- to low-dose CT levels at QIBA phantom study
N. Negi1, T. Sekitani1, E. Suehiro1, W. Tani1, Y. Fujisawa1, N. Sugihara2, K. Fujii2, T. Yoshikawa2, Y. Ohno1; Kobe/JP, 1Otawara/JP

**SS 1007**
**Male urogenital system II**

Moderators:
M. Basta Nikolic; Novi Sad/RS
A. Fraser; Munich/DE

**B-0733** 11:34
Effects of the ASiR-V algorithm on objective and subjective image quality in chest MDCT
D.C. Rothzinger, D. Racine, K. Alfudhili, N. Keller, F.R. Verdin, C. Beigelman-Aubry, F. Becce; Lausanne/CH

**B-0734** 11:42
Comparison of the diagnostic performance of ASIR-V ultra-low-dose and standard low-dose CT protocols for basic chest CT findings
M. Ludwig1, J. Cohen1, E. Reymond1, B. Ycart2; 1La Tronche, 2Saint-Martin-d'Hères/FR

**B-0735** 11:50
Optimal low-dose chest CT parameters for monitoring interstitial lung disease: a systematic simulation study
S. Ley1, L. Fidler1, H. Schenk1, M. Durand2, T. Marras3, N. Paul4, S. Shapera5, S. Mittoo2; 1Munich/DE, 2Toronto, ON/CA, 3Piemaritzburg/ZA

**B-0736** 10:30
**B-0737** 11:38
Diffusivity and diffusion anisotropy for diagnosis of prostate cancer: a systematic investigation of quantification strategies

**B-0741** 11:10
High yield of DWI-based MR-guided targeted prostate biopsy with predominantly intermediate to high risk cancer
S. Heijmink1, P. de Kock2, J. de Jong, H. van der Poel, R.G.H. Beets-Tan; Amsterdam/NL

**B-0742** 11:18
Comparison of image quality and signal-to-noise ratio between four different diffusion-weighted sequences for MRI of the prostate
D. Stocker, A. Manolilu, A. Becker, B.K. Barth, D. Nanz, M. Klarhöfer, O.F. Donati; Zurich/CH

**B-0743** 11:26
Correlation between ADC and Gleason score in the evaluation of peripheral zone prostate cancer
G. Michelin1, L. Panebianco, A. Mancini, A. Pace, C. Giarneramo, C. Marscecano, I. Capretti, R. Manetta, C. Masciocchio; L'Aquila/IT

**B-0744** 11:34
Prostate MRI: relationship between apparent diffusion coefficient (ADC) and pathological Gleason score (pGSS) in prostate cancer
S. Cavanna, A. De Libero, C. Arrese, C. Saviolo, C. Lario, M. Petracchini, S. Cirillo; Turin/IT

**B-0745** 11:42
Diagnostic value of high-field MRI for Peyronie's disease
H. Wang, J. Guan, Y. Guo; Guangzhou/CN

**B-0746** 11:50
“One-stop” evaluation of obstructive azoospermia: combined application of loop and body coil MR imaging
H. Wang, J. Guan, J. Lin, Y. Guo; Guangzhou/CN

**B-0740** 11:02
Comparison between different DWI protocols using high b values with or without perfusion fraction in differentiating prostate cancer
E.L. Inding1, M.D. Grompone, M. Del Monte, D. Fierro, C. Catalano, V. Panebianco; Rome/IT

**B-0747** 10:39
Is it possible to predict tumour burden of peritoneal carcinomatosis from ovarian cancer with PET/MRI?
M. Alemayehu, B. Jonsdottir, A. Bergman, H. Ahlström, K. Stålberg; Uppsala/SE

**B-0748** 10:47
Comparison of integrated “F-FDG PET/MRI and MRI alone for pretherapeutic tumour staging of patients with primary cervical cancer
J. Grueisen, M. Al-bayati, L.M. Sawicki, J. Kirchner, V. Ruhlmann, M. Forsting1, A. Wetter1, L. Umutlu1; 1Essen/DE, 2Düsseldorf/DE

**K-17** 10:30
Keynote lecture
G. Cook; London/UK

**B-0748** 10:47
Comparison of integrated “F-FDG PET/MRI and MRI alone for pre-therapeutic tumour staging of patients with primary cervical cancer
J. Grueisen1, M. Al-bayati, L.M. Sawicki, J. Kirchner, V. Ruhlmann1, M. Forsting, A. Wetter1, L. Umutlu1; 1Essen/DE, 2Düsseldorf/DE

**B-0739** 10:54
Prediction of extracapsular extension in prostate cancer using qualitative and quantitative multiparametric MRI
J. Kim, C. Kim, M.-R. Kwon, R. Kim, J. Yim, W. Kim; Seoul/KR

**SS 1007b**
**Hybrid imaging in oncology**

Moderators:
G. Cook; London/UK
B.D. Klumpp; Tübingen/DE

**B-0738** 10:46
Diagnostic test accuracy meta-analysis of diffusion and T2 weighted-imaging for prostate cancer detection: which b-value is most accurate?

**B-0739** 10:54
Prediction of extracapsular extension in prostate cancer using qualitative and quantitative multiparametric MRI
J. Kim, C. Kim, M.-R. Kwon, R. Kim, J. Yim, W. Kim; Seoul/KR
**Scientific Sessions**

**B-0749** 10:55  
Evaluation of a fast $^{68}$Ga-DOTATOC PET/MRI protocol for whole-body staging of neuroendocrine tumours: a comparison with $^{68}$Ga-DOTATOC PET/CT  

**B-0750** 11:03  
Comparing the diagnostic performance of integrated $^{18}$F-FDG PET/MRI and MRI for the identification of local recurrences of soft tissue sarcomas  
Y. Erfanian, J. Grueneisen, J. Kirschner, L. Podleska, T. Poeppel, K. Herrmann, L. Umutlu; Essen/DE, Düsseldorf/DE

**B-0751** 11:11  
Diagnostic value of bi-disciplinary PET/MRI reading for the assessment of malignancies  
F. Celebi, B. Unalan, N.C. Balci; Istanbul/TR

**B-0752** 11:19  
Assessment of PET/MR, including DWI, for diagnosing skeletal muscle metastases  

**B-0753** 11:27  
Simultaneous $^{11}$C choline PET and multiparametric MRI in high-risk prostate cancer patients: interim report  
L.-J. Wang, J.-R. Tseng, S.-P. Pang; Taiwan/TW

**B-0754** 11:35  
Comparison of PET-CT MR (3.0T) with $^{68}$Ga-PSMA for evaluation of prostate cancer patients with biochemical recurrence  
M. Garcia, O. Alonso, E. Henry; Montevideo/UY

**B-0755** 11:43  
Evaluation of $^{18}$F-FDG PET and MR datasets in integrated PET/MRI: a comparison of different MR sequences for whole-body restaging of breast cancer patients  
J. Grueneisen, A. Wetter, L.M. Sawicki, S. Kinner, V. Ruhlmann, M. Forsting, L. Umutlu; Essen/DE, Düsseldorf/DE

**B-0756** 11:51  
The diagnostic value of hybrid PET/MRI in the assessment of gastrointestinal tumours  
F. Celebi, B. Unalan, N.C. Balci; Istanbul/TR

**B-0759** 10:55  
Dynamic contrast-enhanced MRI of the TMJs in patients with juvenile idiopathic arthritis  
P.A. Caruso; Boston, MA/US

**B-0760** 11:03  
CT findings in patients with zygomatic complex fractures and trismus  
P.A. Caruso; Boston, MA/US

**B-0761** 11:11  
Cephalometric evaluation of soft tissue changes in the upper and lower lips and chin after gap arthroplasty for the correction of temporomandibular joint bony ankylosis  
A.M.K.E. Ibrahim; Cairo/EG

**B-0762** 11:19  
The capabilities of ultrasound in the diagnosis of foreign bodies in the maxillofacial region  
Y. Shumina; Moscow/RU

**B-0763** 11:27  
Lateral cephalometric analysis for treatment planning in orthodontics based on MRI compared with radiographs: a feasibility study in children and adolescents  

**B-0764** 11:35  
Assessment of SRCMT of nasal and paranasal sinus by ADC value  
K. Xu, J. Cheng; Zhengzhou/CN

**B-0765** 11:43  
Imaging features of myoepithelial carcinoma in the nasopharynx and paranasal sinus  
C. Zhang, J.-L. Cheng; Zhengzhou/CN

**B-0766** 11:51  
Inflammatory pseudotumour (IPT) of the skull base. MR and CT findings  
A. Lo Casto, P. Purpura, D. Campanino, E. Caramia, P. Fonio, G. Gandini; Turin/IT

### 10:30 - 12:00  
Room E1

**Breast**

**SS 1002**  
Multimodality breast imaging  
Moderators: M.B.I. Lobbes; Maastricht/NL, M. Sklair-Levy; Tel Aviv/IL

**B-0767** 10:30  
Preoperative digital breast tomosynthesis added to conventional imaging: can we reduce the re-excision rate in patients with breast carcinoma?  
A. Milan, G. Mariscotti, M. Durando, P. Campanino, E. Caramia, P. Fonio, G. Gandini; Turin/IT

**B-0768** 10:38  
Preoperative staging in women with known breast cancers: comparison between digital breast tomosynthesis and magnetic resonance imaging  
F. Galati, F. Marzocca, E. Miglio, M. Luciani, F. Pediconi, C. Catalano; Rome/IT

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**SS 1008**  
Skull base and face

**K-15** 10:30  
Keynote lecture  
D. Farina; Brescia/IT

**B-0757** 10:39  
US-sialography in diagnostics ductal system of major salivary gland  
Y. Vasil’eva; Moscow/RU

**B-0758** 10:47  
Key anatomical features of Vidian canal on skull base CT  
M.E. Adin, C.A. Özmen, N. Aygün; Diyarbakir/TR, Baltimore, MD/US
**B-0769** 10:46
Impact of an image fusion technique, a coordinated US and MRI system, on tissue sampling for conventional B-mode-occult, MRI-detected breast lesions: a prospective multicenter study

**B-0770** 10:54
Digital breast tomosynthesis plus mammography, magnetic resonance imaging plus mammography and mammography alone: a comparison of diagnostic performance in symptomatic women
W. Tang, W. Peng; Shanghai/CN

**B-0771** 11:02
Breast MRI for detecting and characterising papillary lesions: comparison with conventional digital ductography and histological findings
M. Moschetta, M. Telegrafo, C. De Leo, T. Intronata, L. Coi, V. Ranieri, A. Cirilli, A. Stablel Ianora, G. Anglelli; Bari/IT

**B-0772** 11:10
Does the immunohistochemical pattern of breast cancer influence the detection by mammography, US or tomosynthesis?

**B-0773** 11:18
Radiological and epidemiological features of breast cancer in women previously exposed to chest and mantle radiation therapy: single center experience
F. Cartia, A. Primolevo, C. Ferranti, G. Scaperrotta; Milan/IT

**B-0774** 11:26
MRI features, FDG PET/CT and clinical characteristics of triple negative breast cancer: comparison with non-triple negative breast cancer
T. Kang, K. Kim, Y. Kim, J. Seo, C. Hwang, Y. Cho, M. Lee; Daejeon/KR

**B-0775** 11:34
Correlation of diffusion-weighted imaging with apparent diffusion coefficient value, the standardised uptake values of PET/CT with prognostic factors for breast cancer
T. Kang, K. Kim, Y. Kim, J. Seo, Y. Cho, C. Hwang, M. Lee; Daejeon/KR

**B-0776** 11:42
The role of fusion between breast MRI and 18F-FDG PET in staging of breast cancer

**B-0777** 11:50
Sonographic and MRI evaluation of complex cystic lesions of the breast: imaging findings in malignancy
P. Gupta, M.B. Popnil, N. Sharma, D. Arse; New Delhi/IN

**B-0778** 11:54
Diffusion-weighted imaging for predicting and monitoring primary central nervous system lymphoma treatment response
J.B. Wen, W.X.Z. Xu, D.Y. Geng; Shanghai/CN

**B-0779** 12:02
Tumour recurrence vs treatment effects in glioma: a comparative study of three dimensional pseudo-continuous arterial spin labelling and dynamic susceptibility contrast imaging
Q. Xu1, K. Xu2, J. Wu2, J. Qu2; ‘Xuzhou/CN, ’Shanghai/CN

**B-0780** 12:10
Necrosis in tumour bed—radiation necrosis vs tumour necrosis: is there any role of dynamic contrast-enhanced perfusion MRI? First step - clinical feasibility study
F. Mubarak; Karachi/PK

**B-0781** 12:18
Prediction of survival in patients affected by Glioblastoma multiforme evaluated with perfusion MRI: a histogram analysis
A. Di Napoli, L. Pasquini, A. Roman, A. Boellis, A. Bozzao; Rome/IT

**B-0782** 12:26
Contrast-enhanced MRI vs contrast-enhanced ultrasound: a comparison in glioblastoma surgery using intra-operative fusion imaging
F. Prada1, V. Vitale1, M. Del Bene1, C. Boffano1, L.M. Sconfienza1, G. Mauri1, L. Solbiati1, G. Sakas1, F. DiMeco1; ’Milan/IT, ’Lecco/IT, ’Rozzano/IT, ’Darmstadt/DE

**B-0783** 12:34
Could new reconstruction CT techniques challenge MRI for the detection of brain metastasis in the context of initial lung cancer staging?

**B-0784** 12:42
Exact differentiation of tumoural borders in patients with glioma by MRS and diffusion magnetic resonance imaging

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**SS 1011a**
**Brain tumours: imaging techniques**

**Moderators:**
M. Herman; Olomouc/CZ
C.M. Perez Fernandez; Berlin/DE

**B-0777** 10:30
Incidence of tumour progression and treatment-induced pseudoprogression in high-grade gliomas, a systematic review and meta-analysis.
A.W. Abbasi, H.E. Westerlaan, G.A. Holtman, K.M.A. Aden, P.J. van Laar, A. van der Hoorn; Groningen/NL

**B-0779** 10:38
MR perfusion perilesional oedema difference between glioblastoma and metastasis
F. Aparici, A. Perez Girbes, M. Mazon, J. Carreres, J. Garcia; Valencia/ES

**B-0780** 10:46
Diffusion tensor imaging metrics as a tool for the grading of cerebral gliomas with histopathological correlation
H.A.M.M. Abdel Daim, A.M. Elnekiedy, M. Elsheikh, Y. Eladawy, R. Darweesh; Alexandria/EG

**B-0781** 10:54
Diffusion-weighted imaging for predicting and monitoring primary central nervous system lymphoma treatment response
J.B. Wen, W.X.Z. Xu, D.Y. Geng; Shanghai/CN
**B-0788 11:50**
Radiographic response of tectal gliomas following proton radiotherapy
P.A. Caruso; Boston, MA/US

10:30 - 12:00 Room F1

**Molecular Imaging**

**SS 1006**
Clinical molecular imaging
Moderators:
J. Grimm; New York, NY/US
I. Mendichovszky; Cambridge/UK

**K-14 10:30**
Keynote lecture
M.R. Makowski; Berlin/DE

**B-0789 10:39**
Ultra-fast 18F-FDG PET/MRI compared to 18F-FDG PET/CT and CT in whole-body staging of females with recurrent pelvic malignancies
J. Kirchner1, L.M. Sawicki1, S. Suntharalingam1, J. Grüneisen2, V. Ruhlmann1, C. Deuschl1, K. Herrmann2, G. Antoch1, L. Umutlu2, 'Düsseldorf/DE, 'Essen/DE

**B-0790 10:47**
Characterisation of complicated and recurrent urological infections using molecular imaging of the chemokine receptor CXCR4 in combination with diffusion-weighted MRI
K. Hueper1, F. Gueler1, J.H. Bräsen1, H.-J. Wester2, T.L. Ross1, H. Haller1, F. Wacker1, F. Bengel1, T. Derlin1; 'Hannover/DE, 'Garchingen/DE

**B-0791 10:55**
PET/MR radiogenomics of invasive ductal breast cancer: an exploratory study
O.A. Catalano1, U. Mahmood1, A. Soricelli2, M. Salvatore2, C. Catana1, B.R. Rosen1; 'Boston, MA/US, 'Naples/IT

**B-0792 11:03**
PET imaging of chemokine receptor CXCR4 in patients with primary breast carcinoma
T. Vag, A. Rossmann, S. Metz, J. Ettl, M. Niemeyer, H. Wester, M. Schwaiger; Munich/DE

**B-0793 11:11**
Does bone scan add any value to whole body FDG-PET/CT in staging and restaging breast carcinoma?
M.M. Abouzied, H. Al-Refai, M. AlQahtani, A. Elsaadany, A. Almuhideb, A. Fathala, Z. Khan, A. Alsugair, A. Abu-zaid; Riyadh/SA

**B-0794 11:19**
Correlation of apparent diffusion coefficient value on diffusion-weighted imaging and SUV values on PSMA PETCT in patients with biopsy-proven prostate cancer

**B-0795 11:27**
Diagnostic accuracy of integrated 68-Ga-PSMA PET/MRI in suspected recurrent prostate cancer
S. Lütje1, J. Cohnen1, J. Grüneisen1, L.M. Sawicki1, T. Pöppel1, L. Umutlu1, A. Wetter1; 'Essen/DE, 'Düsseldorf/DE

**B-0796 11:35**
Detection efficacy of hybrid 68Ga-PSMA ligand PET/CT in prostate cancer patients with biochemical recurrence after primary radiation therapy defined by Phoenix criteria
F. Einspieler1, I. Rauscher, C. Düwel, M. Krönke, C. Rischpler, G. Habl, M. Schwaiger, T. Maurer, M. Eiber; Munich/DE

**B-0797 11:43**
Improved detection of transosseous meningiomas using 68Ga-DOTATATE PET-CT compared to MRI
W.G. Kunz1, L. Jungblut1, P.M. Kazmierczak1, A. Rominger1, N.L. Albert1, M.F. Reiser1, C.C. Cyran1; Munich/DE

**B-0798 11:51**
Development of the helmet-neck PET prototype for high sensitivity brain imaging
H. Tashima1, E. Yoshida1, Y. Iwao1, H. Wakizaka1, Y. Takado1, C. Seki1, T. Suhara1, T. Yamashita2, T. Yamaya1; Chiba/JP, 'Tokyo/JP

10:30 - 12:00 Room F2

**Emergency Imaging**

**SS 1017**
CT viritopsy and other „hot“ topics
Moderators:
F.H. Berger; Toronto, ON/CA
F. Macri; Nîmes/FR

**K-18 10:30**
Keynote lecture
F.H. Berger; Toronto, ON/CA

**B-0799 10:39**
Errors in out of hours radiology reports due to telephone interruptions
G.P. Tarr, R. Mitchell; Auckland/NZ

**B-0800 10:47**
Calculation of body weight by means of CT using dose modulation
D. Gascho, L. Ganzoni, M.J. Thali, T.D. Ruder; Zurich/CH

**B-0801 10:55**
The role of ultrasound screening in combat surgical trauma
E. Konjukhova, I. Aseeva, V. Trojan; Moscow/RU

**B-0802 11:03**
MR perfusion to identify candidates more suitable to endovascular recanalisation therapy than iv-tPA in MCA occlusion
T. Mori; Y. Tanno, S. Kasakura, K. Yoshioka, N. Nakai; Kamakura/JP

**B-0803 11:11**
Current imaging practice for potentially thrombolysable ischaemic strokes in NHS Lothian with the introduction of a thrombectomy service
D.A.J. Smith, G.J. McNeill; Edinburgh/UK

**B-0804 11:19**
Discrepancies between preliminary resident and finalised consultant reviewed CT brain reports
A.H. Rajaram; Bangalore/IN

**B-0805 11:27**
Validity of head CT examinations in the emergency department
L. Skrulle, A. Tarasova, D. Sosars, A. Lice, M. Radzina; Riga/LV

**B-0806 11:35**
Syncope, vertigo and seizure: what is the utility of imaging in the emergency department?
K. Ozturk, C. Bilgin, E. Ozturk, M. Parlak; Bursa/TR

**B-0807 11:43**
The role of radiology in body identification and in determination of the cause of death in shipwrecked refugee casualties
G. Lo Re1, A. Argò1, S. Zerbo1, S. Salerno1, D. Mazzarelli2, M. Midiri1, C. Cattaneo2, R. Lagalla2; Palermo/IT, 'Milan/IT
B-0808 11:51
Thoraco-abdominal injuries of manual and device-assisted resuscitation on postmortem CT
A.R. Bavat, D.G.H. Bosboom, W.M. Prokop, M. Brouwer, W.M. Klein; Nijmegen/NL

10:30 - 12:00 Room D

Musculoskeletal

SS 1010
Shoulder and wrist
Moderators:
P. Omoumi; Lausanne/CH
C.W.A. Pfirrmann; Lausanne/CH

B-0809 10:30
Subtendinous extensor carpi ulnaris (ECU) bone marrow edema as a predictor of peripheral triangular fibrocartilage tears and ECU tendon pathology
M.T. Nevalainen1, A.C. Zoga2, W.B. Morrison2, J.B. Roedl2; 1tears and ECU tendon pathology

B-0810 10:58
The posterior radiocapitellar angle is related to the severity of degenerative cartilage damage of the wrist in patients with scaphoid nonunion
C.M. Phan, A. Miquel, C. Pradel, C. Quach, Y. Menu, M.D. Crema; Paris/FR

10:46
Diffusion tensor imaging in carpal tunnel syndrome (CTS): is there any correlation with ultrasound?
M.M. Abd Ellah, C. Kremser, W. Jaschke, E. Gizewski, A.S. Klauser; Innsbruck/AT

B-0811 10:54
Comparison of T2 BLADE PD and isotropic three-dimensional fast spin echo cube (3D T2 SPACE) sequences with conventional protocols in wrist lesions using 3T MRI
H. Soroush, H. Naghibi, M. Shakiba, F. Faeghi, H. Hashemi; Tehran/IR

B-0812 11:02
Injuries of the finger in rock climber
F. Schellhammer1, T. Schwarz2, A. Boberg1, K.-A. Riel1, A. Vantorrre1, 1Cologne/DE, 2Gelndhausen/DE, 3Frankfurt a. Main/DE, 4Gross-Gerau/DE

B-0813 11:10
Impact of delimitation on the healing of rotator cuff injury after a tension band arthroscopic repair
C. Dekimpe, O. Andreani, F. Torre, M. Schramm, N. Amoretti, P. Bolleau; Nice/FR

B-0814 11:18
Combined quantitative MR imaging assessment of the rotator cuff integrity at 3.0T by multi-echo Dixon-based fat quantification and diffusion tensor imaging
Q. M. Hamie, L. Issler, E. Ulbrich, D. Nanz, N. A. Farshad-Amacker, R. Guggenberger; Zurich/CH

B-0815 11:26
Preoperative MR imaging characteristics of full-thickness rotator cuff tendon tears do not correlate with changes in clinical outcome scores following repair
P.C. Thurlow, R. Kijowski; Madison, WI/US

B-0816 11:34
Associating MRI findings of adhesive capsulitis with the clinical orthopedic exam
C. K. Ho, E.S. Gould, M. Huang, M. Badalamente, J. Yang, D. Yin; Stony Brook, NY/US

B-0817 11:42
Glenoid surface measurements by means of 3D MRI: comparison between healthy volunteers and first time dislocators
G. Foti, E. Demozzi, P. Avanzi, G. Carbognin; Negram/IT

SS 1011
Professional issues in radiography
Moderators:

B-0818 11:50
Added value of combined acromiohumeral distance and critical shoulder angle measurements on conventional radiographs for the prediction of rotator cuff pathology
Q.M. Hamie, V. Grunder, T. Finkenstädt, M. Marcon, N.A. Farshad-Amacker, R. Guggenberger; Zurich/CH

B-0819 11:02
The radiologist and the radiographer: how do they compare in image quality judgement?
R.G.L. Decoster, R. Toomey, M.-L. Bult; Dublin/IE

B-0820 11:18
Radiographers knowledge about infection control measures during radiological examinations

B-0821 11:26
Humour: what do they think? On opinions of students and professional radiographers
E. Cordier1, S. Lantheaume2, L. Motak3; 1C Grenoble-Granges/FR, 2Grenoble-Granges/FR, 3Aix-en-Provence/FR

B-0822 11:34
Computer-assisted diagnostics and the importance of optimised integration into the clinical setting
T. Butcher1, C. Gonçalves1, S. Shah1, S.P. Kelavkar1, M. Johnson, P. Harman2, P. Guyler1, A. Kuhn1, I. Grunwald; 1Southend-on-Sea/UK, 2Worcester, MA/US

B-0823 11:46
Patient perceptions of radiation therapist communication skills

B-0824 11:54
Evidence-based practice in radiology: the radiographer perspective
C. Crofton, S. Foley; Dublin/IE

B-0825 12:00
The posterior radiocapitellar angle is related to the severity of degenerative cartilage damage of the wrist in patients with scaphoid nonunion
C. Crofton, S. Foley; Dublin/IE

B-0826 12:08
Combined quantitative MR imaging assessment of the rotator cuff integrity at 3.0T by multi-echo Dixon-based fat quantification and diffusion tensor imaging
Q. M. Hamie, L. Issler, E. Ulbrich, D. Nanz, N. A. Farshad-Amacker, R. Guggenberger; Zurich/CH

B-0827 12:16
Assessment of image quality criteria from digital radiography

B-0828 12:24
Comparing digital radiography with CR and standard film: a study to assess activity and impact
C. Costa1, A.F. Abrantes1, L.P.V. Ribeiro1, K.B. Azevedo1, R.P.P. Almeida1, 1Evora/PT
B-0829
11:42
The implementation of a radiology hospital inpatient turnaround team (HITT) to reduce radiology waiting times
C. Roche, G. Naughton, T. Fallon, T. Glavey, S. Ruddy, S. McNulty; Galway/IE

B-0830
11:50
Infection control for x-ray cassettes in a radiology department

10:30 - 12:00 Room M 1

Cardiac

SS 1003
Myocardial ischaemia and perfusion imaging I
Moderators: PT. Klimeczek; Krakow/PL
M. Pirnat; Maribor/SI

B-0831
10:30
Diagnostic performance of stress Echo, SPECT, PET, stress CMR, CTCA, CTP and FFCT for the assessment of CAD vs invasive FFR: a meta-analysis
G. Pontone1, A. Guaricci2, M. Verdecchia3, D. Andreini1, M. Guglielmo1, M.J. Willemink1, T. Leiner1; 1

B-0832
10:38
Diagnostic accuracy of rapid on-site fractional flow reserve CT
P. Maurovich-Horvat1, M. Kolossvary1, J. Karady1, P.A. Ball2, S. Kelly3, D. Fitzsimons2, C. Celeng1, B. Merkely1, P.M. Donnelly2; 1

B-0833
10:46
Non-invasive assessment of coronary stenoses by CT myocardial perfusion imaging during pharmacologic coronary vasodilatation
R. Bougharrou1, B. Mansouri; Algiers/DZ

B-0834
10:54
Prognostic value of coronary CT angiography-derived fractional reserve flow of non-culprit lesions in patients with acute coronary syndrome

B-0835
11:02
Improved on-site FFR-CT accuracy by coronary tree standardisation
H. Nickisch1, M. Freiman2, S. Prevrhal1, M. Vembar3, P. Donnelly4, P. Maurovich-Horvat5, L. Goshen2, H. Schmitt1; 1

B-0836
11:10
Non-invasive on-site estimation of fractional flow reserve: initial experience using coronary CTA-derived patient-specific lumped parameter models
R.W. van Hamersvelt1, M. Voskuil1, P. Maurovich-Horvat1, P.A. de Jong1, M.J. Willemin1, T. Leiner1; Utrecht/NL, 2Budapest/HU

B-0837
11:18
Stress-rest CMR for the assessment of myocardial perfusion reserve index modification after coronary sinus stent implantation
A. Palmisano1, A. Esposito, A. Botta, F. Giannini, A. Colombo, P. De Cobelli, A. Del Maschio; Milan/IT

10:30 - 12:00 Room M 3

Computer Applications

SS 1005
Radioprotection and dose management
Moderators: A. Alberich-Bayarri; Valencia/ES
R. Kikinis; Boston, MA/US

B-0840
11:42
Coronary CT angiography with computational fractional flow reserve for therapeutic decision making

B-0841
11:50
Splenic switch-off: a reliable sign of understress by Adenosin?

B-0842
10:50
Implementation of size specific dose estimates (SSDE) into an automated institutional CT dose monitoring system: feasibility and initial results
N. Heinzler, C. Thomas, O. Bethge, P. Kröpil, G. Antoch, J. Boos; Erlangen/DE

B-0843
10:38
How to reduce the overdose in conventional x-rays using a centralised electronic system in paediatric patients
E. Fraile1, C. Benito1, P. Fraga2, J. Azpeitia3, J. Albillos4, E. Dominguez5, J. Galobardes6; 1Sébastien de los Reyes/ES, 2Coslada/ES, 3Madrid/ES, 4Arganda del Rey/ES, 5Parla/ES

B-0844
10:46
Optimising cardiac CTA procedures: a practical multi-step approach using a dose management software
T. De Bondt1, R. Salgado1, M. Faure1, P. Van Herck1, F. Zanca2, B. Shivalkar1, P. Parizel1; Antwerp/BE, 2Buc/FR

B-0845
10:54
Potential dose reduction in abdominal computed tomography using a model-based iterative reconstruction algorithm
K. Katara1, J. Nilsson Althén1, O. Smedby1, A. Persson1, H. Söker1, M. Sandborg1, Linköping/SE, 2Stockholm/SE

B-0846
11:02
Determination of iterative reconstruction dose reduction potentials in CTA with a novel image quality assessment method based on forced-choice comparisons
S. Ellman1, F. Kammerer1, M. Brand1, T. Allmendinger1, M.S. May1, M. Uder1, M. Leil1, M. Kramer1; Erlangen/DE, 2Forchheim/DE, Erlangen/DE, 3Nürnberg/DE
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<th>Session</th>
<th>Time</th>
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<tr>
<td>B-0848</td>
<td>11:18</td>
<td>Improved image quality of low-dose CT combining with iterative model reconstruction algorithm for response assessment in patients after treatment of malignant tumour</td>
<td>X. Xin1, J. Shen1, S. Yang1, S. Liu1, M. Wang1, A. Hu1, Y. Jiang2, Z. Sheng2, Q. Han2; Nanjing/ CN, Shanghai/ CN</td>
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<td>B-0849</td>
<td>11:26</td>
<td>Reduction of iodinated contrast dose and increase quality of practice on CTPA with a programme for data recording and dose personalisation</td>
<td>M. Perez-Pena, E. Diaz, J. Vazquez, I. Gutierrez, S. Shehadeh, C. Quispe, C. Huerta, H. Bernardo, R. Diaz; Mieres/ ES</td>
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<td>B-0850</td>
<td>11:34</td>
<td>Comparison of radiation dosage and image quality: digital breast tomosynthesis (DBT) vs full-field digital mammography (FFDM)</td>
<td>Y. Choi1, O. Woo1, H. Shin1, G. Choi1, K. Cho1, B. Seo1; Seoul/ KR, Ansan/ KR</td>
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<td>B-0851</td>
<td>11:42</td>
<td>Effect of QuantaStream denoising on image quality and diagnostic accuracy of low-dose CT in patients with suspected appendicitis</td>
<td>M. Kolb1, C. Storz2, J. Kim1, D. Ketelsen1, F. Bamberg1, K. Nikolaou1, A.E. Othman1; Tubingen/ DE, Seoul/ KR</td>
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10:30 - 12:00 Room M 5

**Neuro**

**SS 1011b Vascular disorders**

Moderators:
P. Due-Tønnessen; Oslo/NO
I.Q. Grunwald; Southend-on-Sea/UK

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<tr>
<td>B-0853</td>
<td>10:30</td>
<td>A new brick in the wall? Use of vessel wall magnetic resonance imaging in the evaluation of intracranial vasculopathies</td>
<td>Reis Lima, M. Longo, R. Menegatti, J. dos Santos Muller, F. Aesse, B. Bressan Valentini, L. Vedolin; Porto Alegre/BR</td>
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<tr>
<td>B-0854</td>
<td>10:38</td>
<td>Diagnostic performance of different perfusion algorithms for the detection of cerebral vasospasm</td>
<td>S. Ataf1, C. Brockmann1, O. Nikoubashman1, M. Müller1, M. Brockmann2, K. Nikolaou2, M. Wiesmann1, A. Othman2; Aachen/ DE, Mainz/ DE, Tübingen/ DE</td>
</tr>
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</table>
Abdominal Viscera

**SS 1401**
**Pancreas and bile ducts: imaging assessment**

**Moderators:**
- M. Bonatti; Bolzano/IT
- B.I. Choi; Seoul/KR

**B-0864** 10:30
Definition of age dependent reference values for diameter of the common bile duct and pancreatic duct on MRCP from a population based cohort study


**B-0865** 10:38
CT texture analysis of downstaged ductal adenocarcinoma after chemotherapy in predicting treatment response

M. D’Onofrio, V. Ciaravino, N. Cardobi, R. De Robertis, R. Pozzi-Mucelli; Verona/IT

**B-0866** 10:46
Acute or subacute DVT - role of real time elastography for determining the age of thrombi

A. Aslan1, E. Ayaz1, H. Barutca1, C. Kocaslan1, M. Aslan1, I. Inan2, S. Sahin1, A. Yikilmaz2; Istanbul/TR, 3Varese/TR

**B-0867** 11:02
Vector flow imaging evaluation of stenotic and functioning haemodialytic accesses

M. Raciti1, I. Fiorina1, A. Goddi1, F. Calliada1; 1Pavia/IT, 2Varese/IT

**B-0868** 11:10
Impact of MR elastography in patients with biliary obstruction

D. Kim, Y. Jeong, M.-S. Park, M. Kim; Seoul/KR

**B-0869** 11:18
Validation of feasibility of MRI for measurement of depth of tumour invasion in distal bile duct cancer

J. Lee, N. Han, J. Kim, M. Kim, B. Park, D. Sung, K. Sim, S. Cho; Seoul/KR

**B-0870** 11:26
CT differentiation of benign and malignant gallbladder wall thickening

H. Yang1, J. Lee1, S. Lee1, J. Park2; 1Seoul/KR, 2Busan/KR

**B-0871** 11:34
Bile leaksages after hepatic surgery and orthotopic liver transplantation: value of Gd-EOB-DTPA-enhanced MR cholangiography

F. Pacciardi, R. Cervelli, P. Boraschi, F. Donati, S. Salemi, R. Gigoni, M. Della Pina, F. Falaschi, D. Caramella; Pisa/IT

**B-0872** 11:42
Diagnostic value of Gd-EOB-DTPA-enhanced MR cholangiography in non-invasive detection of postoperative bile leakage

G.G. Leal, J. Crosta, M. Centurion, M. Diaz Fusi, D. Sanchez, F. Abramzon; Buenos Aires/AR

**B-0873** 11:50
An investigation into the use and outcomes of percutaneous transhepatic cholangiography (PTC)

M. Renton, A. Ganeshan; Birmingham/UK

**B-0874** 11:58
Time of flight MR venography - an important tool for evaluation of lower limb venous abnormalities

M.M. Kulkarin, A. Patankar; Mumbai/IN

Vascular

**SS 1415**
**Assessing venous and lymphatic diseases**

**Moderators:**
- M.A. Aschauer; Graz/AT
- C. Floridi; Varese/IT

**B-0875** 10:30
Feasibility of high-resolution MR lymphangiography in planning lymphaticovenous anastomosis treatment: a single-centre experience

F. Gentili, F.G. Mazzei, P. Gennaro, D. Notaro, A. Fausto, M.A. Mazzei, L. Volterrani; Siena/IT

**B-0876** 10:38
Vector flow imaging evaluation of stenotic and functioning haemodialytic accesses

M. Raciti1, I. Fiorina1, A. Goddi1, F. Calliada1; 1Pavia/IT, 2Varese/TR

**B-0877** 10:46
Acute or subacute DVT - role of real time elastography for determining the age of thrombi

A. Aslan1, E. Ayaz1, H. Barutca1, C. Kocaslan1, M. Aslan1, I. Inan2, S. Sahin1, A. Yikilmaz2; Istanbul/TR, 3Varese/TR

**B-0878** 10:54
Venous thromboembolism in radiation oncology: retrospective trial

M. Cherkashin, N. Berezina, A. Serov, N. Vorobyov; St. Petersburg/RU

**B-0879** 11:02
Anatomy of the collateral venous drainage in late pregnancy in different positions

S.A. Mirjalili, G.P. Tarr, G. Williams, P. Stone; Auckland/NZ

**B-0880** 11:10
Role of MRI in detecting lower limb incompetent perforator veins

B.K. Soni1, H. Sahni1, A. N1; 1Bangalore/IN, 1Jorhat/IN

**B-0881** 11:18
Recent diagnostic opportunities in ultrasound diagnostics of lower extremities deep veins thrombosis

A. Demidova, A. Zubarev, N. Krivosheeva, I. Rychkova; Moscow/RU

**B-0882** 11:26
MR-venography in the diagnosis of post-thrombotic iliac vein obstruction and extravascular compression

V. Shebryakov, Y. Stoyko, M. Yashkin, G. Karmazanovsky, D. Lutarevich; Moscow/RU

**B-0883** 11:34
Arterialisation of venous thrombosis as an indicator of tumoural vascular spread

G.G. Leal, J. Crosta, M. Centurion, M. Diaz Fusi, D. Sanchez, F. Abramzon; Buenos Aires/AR

**B-0884** 11:42
Time of flight MR venography - an important tool for evaluation of lower limb venous abnormalities

M.M. Kulkarin, A. Patankar; Mumbai/IN

**B-0885** 11:50
May-Thurner syndrome: no pain, no gain

P. Armelin; Campinas/BR
Interventional Radiology

SS 1409 Portal interventions

Moderators:
R. Golferri; Bologna/IT
M. Krokidis; Cambridge/UK

B-0886 10:30
Psosas muscle density predicts survival of cirrhotic patients undergoing transjugular intrahepatic portosystemic shunt
M. Shoreibah, S. Kim, S. Moawad, A. Abouarab, K. Mahmoud, B. Jackson, M.O. Massoud, S. Saddekni, A.M.K. Abdel Aal; Birmingham, AL/US

B-0887 10:38
5 years of portal vein embolisation prior to major hepatectomy
J.H. Liu, P. Luz, H. Gouveia, H. Martin, I. Faria, R. Souza, H. de Souza; Rio de Janeiro/BR

B-0888 10:46
Transjugular intrahepatic shunt-stent (TIPSS) placement using C-arm cone-beam CT (CBCT) real-time 3-D-guidance—initial clinical experience

B-0890 11:02
Worsening of sarcopenia after transjugular intrahepatic portosystemic shunt
A.M.K. Abdel Aal, S. Kim, S. Moawad, B. Jackson, A. Abouarab, K. Mahmoud, N. Ghaleb, M.O. Massoud; Birmingham, AL/US

B-0891 11:10
Transjugular intrahepatic portosystemic shunt prior to abdominal surgery: outcomes in cirrhotic patients

B-0892 11:18
Correlation between post-systemic pressure gradient and changes in platelet count following transjugular intrahepatic portosystemic shunt

B-0893 11:26
Use of C-arm cone-beam CT for intraprocedural image fusion and 3D guidance in portal vein embolisation

B-0894 11:34
Portal vein malignant thrombus recanalisation by endoportal RFA with metal stent placement (VesOpen procedure): rationale, technique and application
M. Mizandari, T. Azrumelashvili, N. Habib; ’Tbilisi/GE, ’London/UK

B-0895 11:42
Spontaneous portal systemshunts embolisation in cirrhotic patients with recurrent hepatic encephalopathy: more than ten years of experience

B-0896 11:50
Safety of catheter embolisation of pulmonary AVMs in Osler patients: evaluation of peri-interventional complications on pre- and post-interventional MRI
G. Schneider, P. Raczeleck, L. Fenzel, A. Bäucker, A. Massmann; Homburg/DE

Genitourinary

SS 1407 Male urogenital system - prostate cancer: diagnosis and intervention

Moderators:
M. de Rooij; Nijmegen/NL
J.C. Vilanova; Girona/ES

K-19 10:30
Keynote lecture
A.R. Padhani; London/UK

B-0897 10:39
Automated computer-based analysis of all multiparametric MRI data (T2w, DWI and dynamic data) in prostate cancer diagnostics: a useful tool to detect clinically relevant PCA?

B-0898 10:47
Target performance of MRI-ultrasound fusion guided prostate biopsy in a cohort of patients with suspected prostate cancer
M. Zadovy; J.-L. Febr, C. Moeckel, S. Hailenmarian, J. Froehlich, M.A. Patak; ’Zurich/CH, ’Aarau/CH

B-0899 10:55
Improvement of biopsy accuracy (target in target) with WATSON elementary CAD system in the detection rate of prostate cancer (csPCa): histopathological correlation
R. Campo, V. Salvo, M. Del Monte, V. Panebianco, C. Catalano; Rome/IT

B-0900 11:03
Correlation between PI-RAD score and fusion MR-TRUS biopsies (FMR-TB) in the detection of prostate cancer: a monocentric experience
L. Panebianco, G. Michelini, A. Mancini, A. Pace, C. Ganneromo, C. Marsecano, I. Capretti, R. Manetta, C. Masciocchi; L’Aquila/IT

B-0901 11:11
Sensitivity and negative predictive value of multiparametric MRI utilising PI-RADsvs2: a validation study using MRI/transrectal ultrasound (TRUS) fusion biopsy
M. Nguyentat, A. Ushinsky, C. Green, C. Lall, T.B. Nguyen, R. Houshyar; Orange, CA/US

B-0902 11:19
The role of semi-quantitative dynamic contrast-enhanced MR imaging in characterisation of prostate cancer
Y. Yeo, S. Kim, Y. Nam, Taegu/KR

B-0903 11:27
Searching for prostate cancer by fully automated magnetic resonance imaging classification: deep learning vs non-deep learning
L. Wang; Wuhan/CN

B-0904 11:35
Detection of MRI index lesion with transrectal ultrasound-MRI fusion-guided prostate biopsies: is it correspondent with histopathology?
M. Del Monte, V. Salvo, M. Grompone, E. Indino, V. Panebianco, C. Catalano; Rome/IT
Detection of potentially malignant lesions of the prostate gland with targeted biopsy using a computer-assisted diagnostic tool based on multiparametric MRI
E. Alberioli, C. Cicero, B. De Concilio, A. Casarin, S. Canestrini, G. Zeccoli, A. Celia, L. Genesio, A. Gurrise; Bassano del Grappa/IT

Peripheral prostatic cancer detection in a biopsy-naive patient population: a biparametric MR study
G. Rusconi, A. Stanziolone, S. Coccozza, N. Longo, A. Brunetti, M. I bmibracio; Naples/IT

Could DWI MRI help?
B.-0912
11:02
Towards volumetric thresholds in RECIST 1.1: therapeutic response assessment in hepatic metastases

Tumour response criteria after first line combined therapy (Bevacizumab + Chemotherapy) in unresectable liver metastases of colorectal cancer: RECIST 1.1 vs Choi in short-term follow-up
E. Raimondi, M. Bassi, G. De Paoli Barbato, S. Gamanji, M. Tilli, R. Rizzati, M. Giganti, G. Bena; Ferrara/IT

The diagnostic performance of gadofosveset-enhanced axillary MRI for nodal (re-)staging in breast cancer patients: final results of a validation study

Benefits and risks of preoperative axillary staging in a low-risk screening population
M. Wallis, F. Kilburn-Toppin, K. Taylor, S. Taylor-Phillips; Cambridge/UK, Coventry/UK

Dynamic contrast-enhanced magnetic resonance imaging and diffusion-weighted imaging for the prediction of axillary lymph node metastasis in early breast cancer

Are MR morphological and dimensional lymph node features predictive of axillary metastasis in breast cancer?
F. De Narda, A. Lanza, V. Giannarelli, L. Caputo, G. Laccetti, A. Boccabella, M. Giuffrida; Catania/IT

Differentiating between benign and malignant axillary lymph node metastases in breast cancer patients using sono-elastography and diffusion-weighted MRI
Y.M. Abdulla, M. Abdel Latif, M. Shady; Mansoura/EG

Role of IVIM MRI: predicting axillary lymph node metastases in breast malignancies
R. Balaji; Chennai/IN

Axillary assessment in breast cancer: imaging features to improve detection of metastasis
L. Mepaxa, R. Aggarwal, A. Khan, L. Jones, T. Suaris; London/UK

Are MR morphological and dimensional lymph node features predictive of axillary metastasis in breast cancer?
F. De Narda, A. Lanza, V. Giannarelli, L. Caputo, G. Laccetti, A. Boccabella, M. Giuffrida; Catania/IT
**B-0926** 11:26
Predicting axillary lymph node metastasis in breast cancer with multimodality imaging
J. Cho, J. Moon, S. Koh, H. Hwang, S. Park; Anyang si/KR

**B-0927** 11:34
Whole-body MRI DWIBS vs FDG-PET/CT in assessment of breast cancer patients
M.M.A. Rezk, M. Maher, Y. Labib, N. Abdelshafi, E. Elfayoumy, M. Gomaa, N. Abdeirazek, H. Pathy, M. Kotb; Cairo/EG

**B-0928** 11:42
The research of radiological methods reliability
G. Letautaite; Vilnius/LT

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### SS 1411

**The ageing brain: cognition and dementia**

**Moderators:**
- L. Hermoye; Brussels/BE
- A. Negaard; Lørenskog/NO

**B-0929** 10:30
Patterns of aging in functional connectivity: the Rotterdam study

**B-0930** 10:38
The neural substrate of cognition: the Rotterdam study

**B-0931** 10:46
Hippocampal subregions provide information beyond gross hippocampal volume for cognitive function and risk of dementia
T.E. Evans¹, H.H.H. Adams², S. Licher¹, F.J. Wolters¹, A. van der Lugt¹, M. Ikram¹, M.W. Vernooij¹, M. Koster²; Rotterdam/NL; ¹London/UK

**B-0932** 10:54
Acupoint-specific effect of acupuncture in Alzheimer’s disease: a functional MRI study
Y. Shang¹, Y. Bian¹, Z. Wang¹, Z. Zhao¹, M. Zhang¹, J. Lu¹, K. Li¹; Beijing/CN; ¹Hefei/China

**B-0933** 11:02
Application of multi-echo T2 relaxation technique in Alzheimer’s dementia and Mild Cognitive Impairment
E. Kavroulakis, G. Kalaitzakis, P. Simos, I. Zaganas, T.G. Maris, E. Papadaki; Iraklion/GR

**B-0934** 11:10
Characterising brain iron deposition in patients with subcortical vascular mild cognitive impairment using QSM: a potential biomarker
Y. Sun, Y. Zhou, Y. Wang, X. Han, W. Ding, Y. Zhang, Q. Xu, J. Xu; Shanghai/CN

**B-0935** 11:18
Diffusion tensor imaging for evaluating changes in the microstructural integrity of white matter in patients with mild cognitive impairment
A.A. Ojeda, P. Acevedo, M.B. Nallino, N. Lori; Rosario/AR

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### SS 1402b

**Breast cancer risk estimation**

**Moderators:**
- D. Badiltescu; Bucharest/RO
- A. Van Hoyweghen; Edegem/BE

**B-0940** 10:30
New insights in the risk of breast cancer recurrences in BRCA1, BRCA2 and CHEK2 patients
H. Ghunaim¹, C. Anthierens², A. Laenen², J. Soens², P. Neven², K. Punie², A. Smeets², H. Wildiers², C. Van Ongeval²; ¹Medina/SA, ²Leuven/BE

**B-0941** 10:38
Enhanced breast cancer screening for increased risk women with a family history: is it worthwhile?
L. Davies¹, G. Stevens¹, D. Bailey¹, M. Lewis¹, A. Murray², K. Gower-Thomas¹; ¹Swansea/UK, ²Cardiff/UK, ³Pontypridd/UK

**B-0942** 10:46
Rim sign and histogram analysis of apparent diffusion coefficient value on diffusion-weighted MRI in triple-negative breast cancer: comparison with ER-positive subtype
Y. Choi, S. Kim, B. Kang, K. Lee; Seoul/KR

**B-0943** 10:54
Significance of parametric diffusion tensor imaging correlation with immunochemistry of pathology
T.-H. Chang, H.-H. Hsu; Taipei/TW

**B-0944** 11:02
Utility of 18F-FDG PET/CT and MRI imaging findings for predicting the clinicopathologic subtypes of triple negative breast cancer
K. Kubota¹, T. Fujikoa, A. Toriihara, Y. Saida, U. Tateishi; Tokyo/JP

**B-0945** 11:10
Does MRI background enhancement correlate with breast cancer risk? A systematic review and meta-analysis
B. Bennani-Baiti¹, P.A.T. Baltzer; Vienna/AT
<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
<th>Details</th>
</tr>
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<tbody>
<tr>
<td>B-0946</td>
<td>11:18</td>
<td>Correlation between background parenchymal enhancement (BPE) and whole breast vascularisation of the breast at contrast-enhanced MRI</td>
<td>C.G. Monaco, N. Berger, G. Lo Bue, L.A. Carbonaro, F. Sardanelli; Milan/IT, Zurich/CH, San Donato Milanese/IT</td>
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<tr>
<td>B-0949</td>
<td>11:42</td>
<td>3D quantitative ultrasound analysis of breast carcinoma can non-invasively detect important pathological prognostic factors</td>
<td>A.S.S. Meel-van den Abeelen, G. Weijers, J.C.M. van Zelst, J.M. Thijsen, R.M. Mann, C.L. de Korte; Nijmegen/NL</td>
</tr>
<tr>
<td>B-0951</td>
<td>10:30 - 12:00 Room D</td>
<td>Musculoskeletal SS 1410 Spine</td>
<td>Moderators: I. Boric; Zabok/HR N. Farshad-Amacker; Zurich/CH</td>
</tr>
<tr>
<td>B-0952</td>
<td>10:38</td>
<td>Can listhesis on upright radiographs predict the Schizas grade of lumbar spinal canal stenosis assessed on MRI?</td>
<td>T. Finkenstaedt1, N. Bolog2, J. Burgstaller1, F. Del Grande1, F. Del Grande1, N. Ulrich1, J. Steurer1, G. Andreisek1, S. Winklhofer1; Zurich/CH, Lugano/CH</td>
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<tr>
<td>B-0953</td>
<td>10:46</td>
<td>Intravoxel incoherent motion (IVIM) analysis of vertebral bone marrow changes after radiotherapy exposure in experimental and interventional procedures</td>
<td>M. Yeom1, S.-J. Hong2, C. Kang2, K.-S. Ahn2, B. Kim3; Seoul/KR, Gyeonggi-do/KR</td>
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<tr>
<td>B-0954</td>
<td>10:54</td>
<td>Evaluation of sclerosis in modic changes of the spine using susceptibility-weighted magnetic resonance imaging</td>
<td>S. M. Böker1, Y.Y. Bender, L. Adams, M. Wagner, E.M. Fallenberg, B. Hamm, M. Makowski; Berlin/DE</td>
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<tr>
<td>B-0955</td>
<td>11:02</td>
<td>Facet joint effusion on supine MRI in patients with lumbar spinal stenosis: correlation with listhesis on upright radiographs</td>
<td>N.V. Bolog1, T. Finkenstaedt1, G. Andreisek1, J. Burgstaller1, J. Steurer1, F. Del Grande1, A.F. Mannion1, S. Winklhofer1; Zurich/CH, Lugano/CH</td>
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<tr>
<td>B-0956</td>
<td>11:10</td>
<td>Feasibility of ADC value in lumbar disc degeneration at 1.5T</td>
<td>C. Kim; Sungnam-si/KR</td>
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<tr>
<td>B-0957</td>
<td>11:18</td>
<td>Role of fractional anisotropy (FA) in diffusion tensor imaging (DTI) for assessing degenerative lumbar disc disease: a preliminary study in 75 patients</td>
<td>M. Perri1, R. Balzano1, R. Izzo2, G. Guglielmi1, T. Popolizio1; San Giovanni Rotondo/IT, Naples/IT</td>
</tr>
<tr>
<td>B-0958</td>
<td>11:26</td>
<td>Lumbar plexus neuropathy in diabetic patients: an MRI evaluation study</td>
<td>F.I. Rozali1, N. Mohd. Ramli1, K. Rahmat1, F. Fadzil1, N. Sulaiman2, N. Shahrizaila1, F.N. Zulkilpally1; Kuala Lumpur/MY</td>
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<tr>
<td>B-0959</td>
<td>11:34</td>
<td>Dual-layer spectral CT: reduction of metallic artefacts from posterior spinal fusions</td>
<td>J. Dangelmaier1, B.J. Schweiger1, M. Renz1, A. Sauter1, I. Riederer1, D. Münzel1, A. Fingerle1, E.J. Rummeny1, P.B. Noël1; Munich/DE</td>
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<tr>
<td>B-0960</td>
<td>11:42</td>
<td>Value of dedicated iterative metal artefact reduction algorithms in CT following spinal instrumentation</td>
<td>J. Aissa1, C. Thomas1, L. Sawicki1, J. Caspers1, P. Kröpil1, G. Antoch1, J. Boos1; Düsseldorf/DE</td>
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<tr>
<td>B-0961</td>
<td>10:30 - 12:00 Room G</td>
<td>Physics in Medical Imaging SS 1413 Advances in medical imaging methodology</td>
<td>Moderators: M. Costagli1, Pisa/IT J.N. Vassileva1, Vienna/AT</td>
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<tr>
<td>B-0962</td>
<td>10:30</td>
<td>Fat quantification in MRI and MRS - an in vitro validation</td>
<td>N.P. Linder1, T. Rakete1, A. Schaudinn1, T. Kahn1, H. Busse1; Oberschleißheim/DE</td>
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<tr>
<td>B-0963</td>
<td>10:38</td>
<td>Estimation and correction of susceptibility-related distortions in MRI</td>
<td>A. Seimenis1, E.P. Pappas2, A. Moutsatsos2, E. Georgiou2, P. Karaiskos2; Alexandroupoli/GR, Athens/GR</td>
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<tr>
<td>B-0964</td>
<td>10:46</td>
<td>X-ray dark-field imaging to monitor the development of acute lung injury in mice</td>
<td>K. Hellbach1, F. Meinel1, T. Conlon2, A. Yaroshenko3, S. Auweter1, T. Köhler4, J. Mohr5, M.F. Reiser1, F. Pfeiffer3; Oberschleißheim/DE, Garching/DE</td>
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**B-0966** 11:02
Channel data recycling in CEUS imaging
G. McLaughlin, D. Napolitano, R. Steins, J. Baun; Mountain View, CA/US

**B-0967** 11:10
Conventional ultrasound speed of 1540 m/s is inappropriate for examinations of obese patients at second trimester of pregnancy
B. Chauveau, C. Auclair, A. Legrand, H. Laurichesse, R. Mangione, L. Gerbaud, F. Vendittelli, L. Boyer, D. Lémery; Clermont-Ferrand/FR, Bordeaux/FR

**B-0968** 11:18
A platform to investigate photon counting detectors for dedicated spectral breast CT imaging
M. Tornai, D. Coccarelli, J. Greenberg, M. Gehm; Durham, NC/US

**B-0969** 11:26
High-pitch emergency CT of the abdomen in obese patients in third generation dual-source CT: a radiation dose pilot study
R. Forbrig, F. Schwarz, M. Ingrisch, R. Stahl, M.F. Reiser, C. Trumm; Munich/DE, Augsburg/DE

**B-0970** 11:34
Automatic tube voltage selection on a 320-slice CT-scan: a strategy to reduce the iodine load in routine contrast-enhanced CT - a retrospective and a phantom study
P. Leyendecker, A. Labani, V. Noblet, M. Riou, A. Lallement, K. Haioun; Hvidovre/DK, 2

**B-0971** 11:42
Feasibility of very low volume of low iodine concentration contrast media and 80-kVp protocol at CT angiography of renal arteries
Y. Liu, D. Cody, W. Stefan, J. Rong; Houston, TX/US

**B-0972** 11:50
CT protocol management: from the perspective of a large-scale cancer institution
X. Liu, D. Cody, W. Stefan, J. Rong; Houston, TX/US

**B-0976** 11:03
The impact of innovative technological change on employee motivation: a case study of radiographers working in the public healthcare in Malta
D. Chetcuti; Msida/MT

**B-0977** 11:11
Small group facilitation: reflections of inexperienced tutors
L. Robinson, C. Mercier, J. Coward, S. Labouchere, P. Tavakol; Palermo/IT, Palmi/IT

**B-0978** 11:19
Can motion capture technologies enhance radiography skills development?
M. Hardy, U. Ugali, K. Fenemore, A. Al-Dahoud, Z. Sayed; Bradford/UK

**B-0979** 11:27
An evaluation of the educational requirements to practise radiography in the European Union
J.G. Couto, C. Hughes, S. McFadden, P. McClure, P. Bezzina; Msida/MT, Newtownabbey/UK

**B-0980** 11:35
Subsequent publication of orally presented original studies within five years presented at the European Congress of Radiology 2010

**B-0981** 11:43
A tool to supervise the radiographer clinical placement

**B-0982** 11:51
E-learning tool in students ultrasound education: increase stable perception of organic structures
B. Kraus, H.T. Zipko, M. Schratter, W. Wadsak, M. Kundi; Vienna/AU

**B-0983** 10:30 - 12:00 Room K
Radiographers

**SS 1414**
Radiography education
Moderators:
D. Akata; Ankara/TR
P. Cosson; Teeside/UK

**K-20** 10:30
Keynote lecture
K. Knapp; Exeter/UK

**B-0973** 10:39
Do radiographers find evidence-based practice (EBP) a suitable tool for developing guidelines or protocols in imaging departments?
L. Hammerstrøm; Oslo/NO

**B-0974** 10:47
Radiographer and elderly people in x-ray examinations: is there a need for radiographers’ further education?
A. Hernek, L. Karhumaa, E. Riippa, H. Kiutu; Oulu/FI, Pori/FI, Ravaniemi/FI

**B-0975** 10:55
Effect of training and experience on quality of radio stereometric analysis (RSA) examinations
O. Muharemovic, A. Troelsen, M.G. Thomsen, H.R. Siebner, K.K. Gosvig; Hvidovre/DK, Herlev/DK

**B-0977** 11:11
Small group facilitation: reflections of inexperienced tutors
L. Robinson, C. Mercier, J. Coward, S. Labouchere, P. Tavakol; Palermo/IT, Palmi/IT

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E-learning tool in students ultrasound education: increase stable perception of organic structures
B. Kraus, H.T. Zipko, M. Schratter, W. Wadsak, M. Kundi; Vienna/AU

**SS 1403a**
Myocardial ischaemia and perfusion imaging II
Moderators:
R. Maksimović; Belgrade/RS
E. Pershina; Moscow/RU

**B-0983** 10:30
Adenosine and adenosine triphosphate (ATP) have a similar stress effect in patients undergoing stress/rest perfusion cardiac magnetic resonance examinations
P. Bartolomé Leal, A. Quilez Larragan, A. García Baizán, M. Millor; Pamplona/ES

**B-0984** 10:38
Role of T1 mapping on the evaluation of cardiac perfusion during adenosine stress CMR in CAD patients

**B-0985** 10:46
Value of transmural attenuation gradient of stress CCTA for diagnosis of haemodynamically significant coronary artery stenosis - comparison with stress perfusion CMR
J. Lee, H. Yong, H.-Y. Kim, E.-Y. Kang; Seoul/KR
B-0986 10:54
A multiple regression analysis of determinants of myocardial perfusion as measured by CT
T. Rienmüller1, V.N. Makarenko2, O.L. Bockeria3, I.E. Rychina2, V. Bereznitsky1, C. Baumgartner1, L.A. Bockeria2, P. Ourednicek3, R. Rienmüller1; 1Graz/AT, 2Moscow/RU, 3Brno/CZ

B-0987 11:02
Fractal analysis of the tissue region in perfusion imaging to characterise the pathological imaging of perfusion defects - application in chronic myocardial ischaemia
F. Michallek, M. Dewey; Berlin/DE

B-0988 11:10
Iodine quantification using dual energy CT in first generation dual layer CT and third generation dual source CT
G. Pelgrim1, R.W. Van Hamersvelt2, M.J. Willemink2, M. Oudkerk3, T. Leiner1; 1Groningen/NL, 2Utrecht/NL, 3Brno/CZ

B-0989 11:18
Pixel-wise quantification of myocardial blood flow from dynamic contrast-enhanced magnetic resonance imaging: the impact of deconvolution method
C. Kräuter, U. Reiter, C. Reiter, A. Schmidt, M. Fuchsjäger, R. Stollberger, G. Reiter; Graz/AT

B-0990 11:26
Quantitative assessment of salvaged myocardial zone and intramyocardial haemorrhage by 7T MRI
Y. Zhang1, L. Yang2, F. Gao3; 1Beijing/CN, 2Guizhou/CN, 3Sichuan/CN

B-0991 11:34
Identification of the best CMR technique for quantitative assessment of myocardial salvaging using a systematic comparison
J. Kirilberg1, V. Gupta2, H. Haraldsson3, A. Sigfridsson3, S.I. Sarvari1, T. Ebbers1, J. Engvall1; "Linköping/SE, "San Francisco, CA/US, 1Stockholm/SE, 2Oslo/NO

B-0992 11:42
How to assess haemodynamic aspect of not-evaluable plaques by cardiac C7? Use of CCO and role of stress CMR

B-0993 11:50
Myocardial texture analysis for the detection of ischaemic heart disease on routine non-contrast cardiac MRI sequences
P. Talacczyk, J. Weir-McCall, S. Waugh, P. Guntur Ramkumar, G. Houston, Dundee/UK

B-0995 10:38
Mechanical thrombectomy for acute ischaemic stroke: what about children, should we include them?

B-0996 10:46
Feasibility of T1-weighted dynamic contrast-enhanced MR imaging in paediatric neuroradiology in a 1.5T MRI
B. Rochedano, J. P. Cottier, L. Morales, C. Sembely-Taveau, J. Buraschi, H. Daurel, D. Sirinelli, B. Morel; Tours/FR

B-0997 10:54
Gadolinium deposition in paediatric brain: findings after multiple exposures to gadobenate dimeglumine
G. Schneider, P. Raczeck, A. Bükker; Homburg/DE

B-0998 11:02
Arterial spin labelling performance in rhombencephalitis diagnosis in children: a study over the last year at Necker Hospital in Paris
C. Cosmina Dana; Paris/FR

B-0999 11:10
Robustness of kurtosis acquisition via multi-slice EPI: a test-retest study in children
A. Napolitano1, C. Carducci1, L. Filograna1, V. Cannata1, T. Beck2, G. Colafati1; 1Rome/IT, 2Erlangen/DE

B-1000 11:18
Role of proton MR spectroscopy of the brain in neonatal hyperbilirubinemia
R.H. Hashem, I. El Hawary, W. Shaarawy, M. Elsayed; Cairo/EG

B-1001 11:26
SMI of the neonatal brain: assessment of feasibility and morphological features

B-1002 11:34
Malformations of cortical development associated with corpus callosum dysgenesis (CCD): diagnostic value of foetal MRI in prenatal counseling
A. Antonelli1, S. Bernardo, E. Marchionni, V. Vinci, M. Saldari, A. Pizzuti, C. Catalano, L. Manganaro; Rome/IT

B-1003 11:42
Real-time virtual sonography: a new integrated approach for the evaluation of foetal CNS pathologies
S. Bernardo, A. Antonelli, M. Saldari, V. Vinci, C. Catalano, L. Manganaro; Rome/IT

B-1004 11:50
Can fetal MRI predict the need for neonatal emergency procedures in cases of head and neck congenital masses?
M. Saldari, A. Antonelli, V. Vinci, C. Catalano, L. Manganaro; Rome/IT
SS 1403b
Transcatheter aortic valve implantation (TAVI), valves and stents

Moderators:
E. Blondiaux; Paris/FR
O. Duvernoy; Uppsala/SE

B-1005 10:30
Correlation of manual and semi-automated evaluation of aortic root in TAVI candidates
B. Horehedova1, C. Mihl1, C. Schwemmer1, B.M.F. Hendriks1, N. Eisvoogel1, B.L.J.H. Kietelaer1, J.E. Wildberger1, M. Das1, *Maastricht/NL, Forchheim/DE

B-1006 10:38
Califications of the aortic arch: angio-CT quantification and correlation with cerebrovascular events in patients undergoing TAVI
M. Musa, M.G. Belgrano, J. De Grootd, A. De Luca, M.A. Cova, Triest/IT

B-1007 10:46
Diagnostic accuracy of third generation Dual Source CT with FLASH protocol for the detection of significant coronary artery stenosis in patients candidates for TAVI procedure

B-1008 10:54
Reduction of metal artifacts after transcatheter aortic valve implantation in cardiac CT: value of iterative metal artifact reduction
R. Qi; Hangzhou/CN

B-1009 11:02
Comparison of aortic root dimensions by multimodal measurement before transcatheter aortic valve implantation
R. Qi; Hangzhou/CN

B-1010 11:10
Pressure recovery determination by cine MRI is feasible and leads to significant re-classification of aortic stenosis severity

B-1011 11:18
Impact of pulmonary valve replacement (PVR) and right ventricular (RV) remodelling on global and regional left ventricular (LV) mechanics in repaired tetralogy of Fallot (rTOF)
L. D’Errico1, R. Wald1, K. Hanneman1, C. Silversides1, M. Farkouh1, B.J. Wintersperger1, Toronto, ON/CA

B-1012 11:26
Mitril valve prolapse: diagnostic value of MRI
S. Fradella1, G. Grazzini1, M. Brandani1, L. Calisti1, V. Miele1, S. Colagrande1, Florence/IT

B-1013 11:34
Assessment of anatomic substrates for electrical instability in mitral valve prolapse (MVP) patients: a cardiac magnetic resonance (CMR) study
D. Palumbo1, M. Cava1, A. Esposito1, S. Ravel1, G. La Canna1, A. Del Maschio1, F. De Cobelli1, *Milan/IT, *Alessandria/IT

B-1014 11:42
Coronary stent image subtraction using monochromatic CCTA derived from a dual-layer spectral CT
W. Yang, L. Qin, F. Yan, Y. Jiang, Q. Han; Shanghai/CN

B-1015 11:50
Image quality study of monochromatic coronary stent imaging with a dual-layer spectral CT: initial experience of optimal mono-energy exploration
W. Yang, F. Yan, L. Qin, Y. Jiang, Q. Han; Shanghai/CN

14:00 - 15:30 Room M 1

SS 1503
Coronary angiography

Moderators:
C.K. Atasoy; Ankara/TR
N. Galea; Rome/IT

B-1017 14:08
The ratio of coronary artery diameters predicts left main diameter and coronary dominance
M. Kolossváry1, B. Szilveszter1, K. Júlia1, M. Károly1, A. Bartkyowszki1, A. Panajotu1, B. Merkely1, P. Maurovich-Horvat1, Budapest/HU

B-1018 14:16
Diagnostic accuracy of coronary CT angiography performed in 100 consecutive patients with coronary stents using a novel whole organ high-definition CT scanner
D. Andreini1, G. Pontone1, S. Mushtaq1, A. Annon1, A. Formenti1, M. Mancini1, C. Fiorentini1, A. Bartorelli1, M. Pepi1, Milan/IT

B-1019 14:24
Standardized description of coronary artery disease by means of CAD-RADS: a better method?
G. Tabacco1, G. Finetto1, M. Poletti1, M. Vettori1, R. Malagò1, R. Pozzi-Mucelli1, Verona/IT

B-1020 14:32
Diagnosticefficacy of coronary artery three-dimensional steady-state free precession magnetic resonance angiography in comparison with invasive coronaryangiography for detection of coronary artery disease
A. Mohammadzadeh1, F. Faeghi1, N. Sahraee1, H. Pouraliakbar1, R. Kiani1, M. Mohammadzadeh1, P. Entezari1, A. Borhani1, V. Mohammadzadeh1, S. Kadivar1, Tehran/IR, Rasht/IR

B-1021 14:40
Monochromatic imaging improving accuracy of coronary stenosis with heavy calcification compared with conventional imaging and invasive coronary angiography
Y. Yi1, R.-Z. Wu1, S. Yan1, X.-M. Zhao1, S.-H. Yu1, M. Wang1, Y. Wang1, Z.-Y. Jin1, Y.-N. Wang1, Beijing/CN

B-1022 14:48
Cardiac allograft vasculopathy assessment with coronary computed tomography in heart transplanted patients
M. Károly1, M. Kolossváry1, A. Bartkyowszki1, I. Kocsma1, B. Szilveszter1, A. Jermendy1, J. Karady1, B. Merkely1, P. Maurovich-Horvat1, Budapest/HU

B-1023 14:56
Predictors of clinical significance of moderate coronary stenosis in multiple lesions of culprit arteries in 256 multi-detector coronary CT angiography one-beat acquisition
J.-L. Sablayrolles1, P. Guyon1, L. Macron1, J. Feignoux1, I. Timofeeva1, Saint-Denis/FR
B-1024 15:04
CT angiography for the diagnosis and subcategorisation of unroofed coronary sinus syndrome
A. Zhu¹, Z. Pei¹, D. Ruping¹, M. Wei guo², L. Bin¹, J. Shiliang¹; ¹Beijing/CN, ²New Haven, CT/US

B-1025 15:12
Accuracy of CT for selecting revascularisation method based on mortality predictions: combined with the SYNTAX II score
S. Lee, B. Choi, Y. Suh, K. Han; Seoul/KR

B-1026 15:20
Prognostic implications of coronary CT angiography-derived quantitative markers for the prediction of major adverse cardiac events
C. Tesche, F. Plank, C.N. De Cecco, T.M. Duguay, M.H. Albrecht, A. Varga-Szemes; ¹New Haven, CT/US

14:00 - 15:30 Room M 2
Paediatric

SS 1512
Paediatric musculoskeletal and oncological imaging
Moderators:
R.A.J. Niesselstein; Utrecht/NL
L.-S. Ordning Müller; Oslo/NO

B-1027 14:00
Wrist angle measurements: are they applicable to the paediatric population in the trauma setting?
E.A. Joyce, T. Farrell, J. McMorrow, A. Snow; Dublin/IE

B-1028 14:08
Pertinence of the micro-dose biplanar radiographs in children’s pangonometry
C. Titiau, H. Lerisson, E. Amzallag-Bellanger, A. Cebulski-Delebarre, L. Deruyter, E. Nectoux, F. Avni, B. Herbaux, N. Boutry; Lille/FR

B-1029 14:16
Conventional radiography in juvenile idiopathic arthritis: joined recommendations from the Societies for rheumatology, radiology, paediatric radiology
P. Marteau, C. Adamsbaum¹, L. Rossi-Semerano², M. De Bandt², I. Lermelle³, C. Deslandre⁴, T. Tran¹, A. Lohe², E. Solau-Gervais¹, C. Sordet¹, P. Pillet¹, B. Bader-Meunier¹, J. Wipff², B. Bader-Meunier², J. Wipff², C. Gaujoux-Viala³, S. Breton², V. Devauchelle-Pensec⁵; ¹Brest, FR, ²Paris/FR, ³Fort-de-France/FR, ⁴Nancy/FR, ⁵Nîmes/FR, ⁶Belfort, FR, ⁷Poitiers/FR, ⁸Strasbourg/FR, ⁹Bordeaux/FR

B-1030 14:24
Femoral torsion assessment with MRI in children and adolescents: should we use the bony or cartilaginous contours?
A.B. Rosskooph, C.A. Agha, L.E. Ramseier, C.W.A. Pfirrmann, F.M. Buck; Zurich/CH

B-1031 14:32
Human long bone development in intrauterine growth restriction: in vivo analysis of the distal femoral epimetaphysis on prenatal MR imaging
U. Nemec, S. Nemec, P. Brugger, D. Prayer; Vienna/AT

B-1032 14:40
Role of MRI to assess skeletal age in paediatric celiac disease
S. Bernard, E. Toro, M. Martino, A. Laghi; Rome/IT

B-1033 14:48
MRI T2* mapping for bone marrow iron overload assessment in patients with beta-thalassemia
E. Nazarova, G. Tereshchenko, A. Gvozdev, D. Ibragimova; Moscow/RU

B-1034 14:56
Diffusion-weighted MRI and FDG-PET in children with mediastinal lymphoma: does the apparent diffusion coefficient (ADC) discriminate between benign and malignant masses?
M.A. Stoffels, J. Herrmann, G. Groth, C. Berliner, S. Klutmann, G. Adam, M. Regier; Hamburg/DE

14:00 - 15:30 Room M 3
Neuro

SS 1511
Brain infection and trauma
Moderators:
M. Garbajs; Lubljana/SI
P.A. Caruso; Boston, MA/US

B-1035 14:00
Clinical impact of delayed enhancement in brain MRI for patients with AIDS

B-1036 14:08
Conventional brain MRI data as an indicator to perform a HIV test

B-1037 14:16
Role of diffusion-weighted imaging and magnetic resonance imaging in differentiation of intracranial abscess and neoplasms with necrosis
A.A. Jain, N. Bahri, H. Parekh, S. Chudasama; Jamnagar/IN

B-1038 14:24
Can new interferon-free therapy lead to white matter tracts recovery in HCV-infected patients?

B-1039 14:32
Diffusion kurtosis imaging in diffuse axonal injury: a novel diagnostic approach

B-1040 14:40
The effect of early MRI in the management of children with traumatic brain injury admitted to the PICU
P.A. Caruso; Boston, MA/US
B-1043 14:48
Sonographic texture analysis for neonatal white matter injury: focused on change according to follow-up cranial ultrasonography

B-1044 14:56
The value of susceptibility-weighted imaging and T2-weighted gradient echo in imaging in assessment of mild traumatic brain injury
A. Brakus, M. Karan, J. Ostojic, S. Stojanovic, P. Vulekovic, S. Pena Karan, K. Petrovic; Novi Sad/RS

B-1045 15:04
Limbic encephalitis, diagnostic pitfall in MR-imaging

B-1046 15:12
Imaging features of neurocysticercosis, a radiologic-clinical correlation
M. Campos1, S. Rivadeneira2, D. Páez3, R. Salinas1; 1Quito/EC, 2Buenos Aires/AR, 3Murcia/ES

B-1047 15:20
Brain MRI characteristics of anti-N-methyl-D-aspartate receptor encephalitis
T. Zhang; Beijing/CN
Abdominal Viscera

**SS 1801**

**Technical innovations in liver imaging**

Moderators:
C. Matos; Lisbon/PT
M. Ronot; Clichy/FR

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**K-21** 10:30

**Keynote lecture**

H. Ringl; Vienna/AT

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**B-1048** 10:09

Clinical feasibility of multiple arterial phases in free-breathing at gadoxetic acid-enhanced liver MRI


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**B-1049** 10:47

Virtual monochromatic image of detector-based spectral CT: improved image quality as compared with that obtained with conventional CT

H.-J. Kang, J. Lee, S. Lee, H. Yang, R. Kim, J. Nam, J. Han; Seoul/KR

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**B-1050** 10:55

Respiratory motion artefacts during arterial phase imaging with gadoxetic acid: how can we minimise this drawback?


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**B-1051** 11:03

Free-breathing undersampled radial VIBE as a salvage strategy for liver dynamics in patients unable to suspend respiration

B. Kaltenbach, A. Roman, T.J. Vogl, Z. Zangos; Frankfurt a. Main/DE

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**B-1052** 11:11

Accuracy of new real-time shear wave elastography for assessing liver fibrosis in chronic viral hepatitis patients

J. Han, S. Yeom, I. Choi, S. Lee, H. Chung, S. Cha, S. Suh, Y. Jung, H. Yim; Ansan-si, Gyeonggi-do/KR

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**B-1053** 11:19

Diffusion-weighted MRI in liver fibrosis staging: added value of normalised ADC using spleen and renal cortex as reference organs

T.F.T. Ali, M.A. El-Hariri; Zagazig/EG

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**B-1054** 11:27

Evaluation of virtual monoenergetic images computed by new dual-layer CT in assessing hypervascularised liver lesions

N. Große Hokamp, A. Höink, T. Persieghel, D. Maintz, S. Haneder; Greifswald/DE

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**B-1055** 11:36

Comparison between the conventional Couinaud method vs a semiautomatic software (Syngo.CT. liver analysis, Siemens) in the precise localisation of liver metastases

P. Bartolomé, A. Quille, I. Gonzalez de la Huerba, A. García Bairón, I. Gonzalez, I. Vivas; Pamplona/ES

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**B-1056** 11:43

Volumetric iodine-uptake measurement for early assessment of therapy response after microwave ablation in rabbit model with intrahepatic VX2 tumour

L. Zhang, X. Liu, B. Feng; Shenyang/CN

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**B-1057** 11:51

Differentiation of malignant thrombus from bland thrombus of the portal vein in patients with cirrhosis: application of intravoxel incoherent motion diffusion-weighted MR imaging

J. Choi, E.-S. Cho, J. Kim, Y. Choi; Seoul/KR

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**B-1058** 10:30

Voxel-wise bone and plaque subtracted datasets calculated from dynamic lower limb CT angiography - image quality compared to conventional datasets

Y. Ragab, K. Alhusseiny, A. Almarakby; Cairo/EG

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**B-1060** 10:46

Popliteal artery aneurysm (PAA) surveillance: a 5-year retrospective cohort study

H. Shiward, E. Taylor, J. Scott; Leeds/UK

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**B-1061** 10:54

Image quality assessment of lower extremity quiescent-interval single-shot (QISS) MR angiography: comparison with CT angiography


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**B-1062** 11:02

Reference values of vessel diameters and stenosis prevalence of the lower limb arteries using MR angiography - a population-based approach


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**B-1063** 11:10

CT angiography in peripheral artery disease - feasibility of low-contrast media volume protocol

B. Horehledova, C. Mihl, R. Brans, N.G. Eijsvoogel, B.M.F. Hendriks, J.E. Wildberger, M. Das; Maastricht/NL

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**B-1064** 11:18

Multipath curved planar reformations of peripheral CT angiography: higher diagnostic accuracy and time-savings for vascular radiologists and radiology residents


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**B-1065** 11:26

Lower limb angiography: utilising dynamic datasets to optimise contrast and radiation dose

H. Haubenreisser, M. Meyer, N. Vogler, S. Sudaraki, S.O. Schönberg, T. Henzler; Mannheim/DE
B-1066 11:34
Low dose whole aorta angio CT in the evaluation of Takayasu vasculitis: a prospective study analysing anatomical classification and identification of disease activity criteria
A. Habouchi, A. Habba, C. Aimeur, M. Tabouche, D. Hakem, N. Slimani, A. Berrah, B. Mansouri; Algiers/DZ

B-1067 11:42
Abdominal large vessel vasculitis: diagnostic value of T1 3D mVISTA-MRI
S. Maurus1, N.N. Sommer1, H. Koopman2, E. Coppenrath3, J. Bock1, T. Saam1, K.M. Treitl1; 1Vienna/Austria, 2Rotterdam/Netherlands, 3Munich/DE

B-1068 11:50
Fibromuscular dysplasia of renal arteries: comparison of computed tomography angiography with digital subtraction angiography
E. Charpentier1, F. Thony1, E. Mousseaux1, P.-F. PLOUN1, L. Boyer2, A. Azarine2; 1Paris/FR, 2Grenoble/FR, 3Clermont-Ferrand/FR

10:30 - 12:00 Room Z

Interventional Radiology

SS 1809
Vascular interventions
Moderators:
P.R. Dondelinger; Liège/BE
P.M. Kitrou; Patras/GR

K-24 10:30
Keynote lecture
E. Brountzos; Athens/GR

B-1069 10:39
Preoperative splenic artery embolisation in patients who underwent splenectomy for hypersplenism
M. Zaitoun1, S.B. Elsayed1, A.A. Elsammak1, T. Rushdy1, Zagazig/EG

B-1070 10:47
Percutaneous endovascular aortic repair (PEVAR) in the radiological suite: a paradigm shift?
R. Thomas, T. Kowald, B. Schmuck, O. Eldergash, M. Book, V. Dikov, P. Dohmen, A. Chavan; Oldenburg/DE

B-1071 10:55
Endovascular aneurysmal repair in octogenarians: is it justified?
V.M. Vishwanath1, J. Soares1, A. Burasee2, S. Latif3, R. Pathak4; 1Manchester/UK, 2Birmingham/UK, 3Dudley/UK

B-1072 11:03
Importance of angiosome-targeted vascular bed identification using DSA and MR techniques for endovascular treatment in patients with critical limb ischaemia
A. Chahal1, S. Sharma, P. Jagia, A. Dhar; New Delhi/IN

B-1073 11:11
Single-centre experience of endovascular treatment of visceral artery aneurysms (VAAs) and pseudoaneurysms with Viabahn stent graft in 30 patients
M. Colombo1, M. Venturini, P. Marra, M. Alparone, F. De Cobelli, A. Del Maschio; Milan/IT

B-1074 11:19
Clinical outcome of transarterial embolisation for postgastrectomy arterial bleeding

B-1075 11:27
Stent graft implantation in visceral arteries in acute life-threatening haemorrhage after upper abdominal surgery: a single center experience
B.M. Schaarschmidt; C. Buchbender, J. Boos, P. Kröpil, F. Kröpil, R.S. Lanzmann, G. Fürst, G. Antoch, C. Thomas; Düsseldorf/DE

B-1076 11:35
Imipenem/cilastatin sodium (IPM/CS) as a temporary embolic agent for non-tumoural acute abdominal haemorrhage: our promising experience
J. Valcarcel1, J. Joudanin, D. León, E. Alba, E. Escalante, Q. Ordi, A. Sotomayor, P. Naval; Barcelona/ES

B-1077 11:43
Dual contrast agent-based spectral photon-counting computed tomography for detection of endoleaks following EVAR
J. Damgolsme1, D. Bar-Ness1, D. Münzel1, H. Daerr1, F. Pfeiffer1, R. Proka1, E.J. Rummeny1, P. Douek1, P.B. Noël1; 1Munich/DE, 2Bonn/FR, 3Hamburg/DE, 4Garching/DE

B-1078 11:51
Neointimal coverage in polymer coated stents with and without antiproliferating agent
W. Hundt, M. Burbelko, D. Jones, M. Kalinowski; Marburg/DE

10:30 - 12:00 Room O

Chest

SS 1804
Are we ready for routine application of MRI of the lung?
Moderators:
P. Ciet; Rotterdam/NL
X. Montet; Geneva/CH

K-23 10:30
Keynote lecture
H.-U. Kauczor; Heidelberg/DE

B-1079 10:39
Pulmonary nodules: diagnostic accuracy of MRI
O. Solyanik1, K. Heibach1, M. Bonert, D. Bondesson, T. Gaaß, H. Thäns, M.F. Reiser, J. Dinkel; Munich/DE

B-1080 10:47
Lung cancer screening with MRI compared to low-dose CT: initial results after one year of screening
M. Meier-Schroers1, R. Homsi1, D. Dabir1, D. Kütting1, A. Feißt1, J. Gieseke2, O. Solyanik3, K. Hellbach, M. Bonert, D. Bondesson, T. Gaaß, S.N. Nagel, D. Kim, T. Penzkofer, I.G. Steffen, B. Hamm, S. Wyschkon; Munich/DE

B-1081 10:55
MRI detection of pulmonary nodules: comparison between true FISP and contrast-enhanced VIBE
S.B. Barlas1, O.L. Ulusoy, S. Server, A. Öz, B. Koyuncu Sökmen, N. İnan2, N.C. Balcı3; 1Istanbul/TR, 2Süleymanpaşa/TR, 3Bursa/IR

B-1082 11:03
Non-contrast MR imaging of the lung: differentiation of infective and malignant lesions
S.N. Nagel, D. Kim, T. Penzkofer, I.G. Steffen, B. Hamm, S. Wyschkon, S. Schwartz, T. Elgeti; Munich/DE

B-1083 11:11
Assessment of contrast-enhancement in the lung parenchyma using 3D ultra-fast steady-state free precession MRI
G. Sommer, O. Pusteria, M. Wiese, F. Santini, D. Lardinois, J. Bremerich, G. Bauman, O. Bieri; Basel/CH
B-1084 11:19
Self-gated non-contrast-enhanced functional lung (SENCEFUL) MRI for quantitative ventilation assessment in patients with cystic fibrosis

B-1085 11:27
SENCEFUL MRI for detection of lung perfusion deficits in CF patients
A.S. Kunz, A.M. Weng, C. Wirth, C. Kestler, S. Segger, H. Hebestreit, H. Kostler, T.A. Bley, S. Veldhoen; Würzburg/DE

B-1086 11:35
Non-contrast enhanced ventilation and perfusion magnetic resonance imaging in early cystic fibrosis lung disease

B-1087 11:43
MR imaging of airway mucus contrasts as a tool to diagnose allergic bronchopulmonary aspergillosis in cystic fibrosis
G. Dournes, J. Refait, A. Rispal, F. Laurent; Bordeaux/FR

B-1088 11:51
MR pulmonary angiography: can it be used as an alternative to CT angiography in diagnosis of major pulmonary thrombosis
A.M. Osman, E.H. Abdeldayem, N.M. Osman; Basle/CH

B-1089 10:30 - 12:00 Room N
Genitourinary

SS 1807
Female urogenital system - uterus: imaging and intervention

Moderators:
M.-F. Bellin; Le Kremlin-Bicêtre/FR
M. Horta; Lisbon/PT

B-1089 10:30
Comprehensiveness of EHSRGE/ESGE classification of female genital tract anomalies: systematic review of cases by MRI
P. Yadav; Pune/IN

B-1090 10:38
Evaluation of Mayer-Rokitansky-Küster-Hauser syndrome with magnetic resonance imaging: variable findings of uterine remnants, ovaries and related clinical settings
Y. Wang, J. Lu, L. Zhu, B. Jiang; Beijing/CN

B-1091 10:46
3D and 2D ultrasound-based foetal weight estimation a single center experience
M.F. Farghaly Amin, L.A. Mohamed; Minya/EG

B-1092 10:46
Automated tube potential selection in cancer staging on a third-generation dual-source CT: comparison to second generation dual-source CT
M. Beeres, C. Park, C. Frellesen, J.L. Wichmann, J.E. Scholtz, M. Albrecht, A.M. Bucher, B. Bodele, T.J. Vogl; Frankfurt a.M./DE

B-1093 10:54
MRI evaluation of invasive placentation in high-risk patients: accuracy and reproducibility in comparison with the reference standard
F. Monelli, F. Fiocchi, G. Besutti, A. Pecchi, E. Petrella, E. Bertucci, F. Fachinetti, P. Torricelli; Modena/IT

B-1094 11:02
Quantitative and qualitative analysis of DWI of gestational trophoblastic disease: can it predict progression of molar pregnancy to persistent disease?
F. Hosseini; Shiraz/IR

B-1095 11:10
The added value of DWI for appreciating the degree of placental invasion of the myometrum: do the results depend on observer's experience?
D. Costachescu, D. Malita; Timișoara/RO

B-1096 11:18
Contribution of diffusion-weighted MRI to conventional MRI in ovarian torsion: a prospective study for the detection of haemorrhagic infarction
O. Ozdemir, Y. Metin, N. Orhan Metin, M. Kadioğlu, E. Zengin, Ö. Sahin; Rize/TR

B-1097 11:26
Endometriosis as an underestimated foe: can MRI help?
W.R.A. Abdel Hamid, Y. Abbas; Cairo/EG

B-1098 11:34
Rectal and vaginal opacification MRI in the diagnosis of deep pelvic endometriosis
C. Saracin, D. Malita, F. Birasasteau, D. Costachescu; Timișoara/RO

B-1099 11:42
Uro colon CT in the diagnosis of pelvic deep infiltrating endometriosis
S. Zanardi, F. Coppola, D. Papadopoulos, D. Valerio, A. Di Vincenzo, L. Zannoni, R. Serachiodi, R. Golferi; Bologna/IT

10:30 - 12:00 Studio 2017
Oncologic Imaging

SS 1816
Improving imaging of metastatic disease: what’s new?

Moderators:
R.G.H. Beets-Tan; Amsterdam/NL
K.N. De Paepe; Leuven/BE

B-1100 10:30
Radiogenomics: evaluation of CT imaging features of melanoma metastases compared with genomic expression
E. Khodak, M. Lotem, J. DiPoco, S. Goldberg, J. Sosna; Jerusalem/IL

B-1101 10:38
Reduced dose CT for staging in patients with melanoma: evaluation of radiation dose and diagnostic confidence in comparison to standard dose dual-energy CT
D. Zinszer, A. Othman, T. Eigentler, C. Garbe, K. Nikolaou, B.D. Klumpp; Tübingen/DE

B-1102 10:46
Automated tube potential selection in cancer staging on a third-generation dual-source CT: comparison to second generation dual-source CT
M. Beeres, C. Park, C. Frellesen, J.L. Wichmann, J.E. Scholtz, M. Albrecht, A.M. Bucher, B. Bodele, T.J. Vogl; Frankfurt a.M./DE

B-1103 10:54
Radiation dose reduction with venous-arterial MDCT in breast cancer patients
A. Melito, I. Burovik; St. Petersburg/RU

B-1104 11:02
Added value of the virtual non-calcium technique for the detection of bone metastases with computed tomography in breast cancer patients
L.J. Claey, J. Alexiou, J. Moreau, S.-L. Chao, M. Lemort; Brussels/BE
B-1105 11:10
Diffusion whole-body MRI (DWB) in the management of metastatic breast cancer patients
F. Zuppi, P. Pricolo, P.E. Summers, M. Iorlida, M.A. Colleoni, M. Bellomi, G. Petralia, Milan/IT

B-1106 11:18
Oncological staging of 30 pregnant patients with diffusion whole-body MRI (DWB)

B-1107 11:26
Whole-body MRI as the method of choice during oncologic follow-up at 3T: outcome after 400 examinations
A. Malich, D. Wiech, A. Kott; Nordhausen/DE

B-1108 11:34
Assessment of informativity between static scintigraphy and full-body magnetic resonance imaging examinations in children with metastatic bone disease at Riga, Latvia
J. Baronenko, L. Štelce, I. Apine; Riga/LV

B-1109 11:42
Diffusion-weighted MRI of solid bone tumours of the spine: the diagnostic value of the apparent diffusion coefficient
G. Pozzi, C. Messina, G. Cannella, J. Almolla, A. Zerbi, L.M. Sconfienza; Milan/IT

B-1110 11:50
Added diagnostic value of complementary gadobetate acid-enhanced MRI to 18F-DOPA-PET/CT for liver staging in medullary thyroid carcinoma
P.M. Kazmierczak, A. Römerg, M. Brendel, W. Kunz, R. Stahl, J. Sargsyan-Bergmann, C. Spitzweg, M.F. Reiser, C.C. Cyran; Munich/DE

Physics in Medical Imaging

SS 1813
Physics-based approaches to imaging, diffusion and motion

Moderators:
I. Seimenis; Alexandropolis/GR
M.J. Willemin; Utrecht/NL

B-1111 10:30
Motion vector field upsampling for precise respiratory motion compensation with cone-beam CT of the thorax region
S. Sauppe1, C.M. Rank1, M. Brehm2, P. Paysan1, D. Seghers1, M. Kachelrieß1; 1Heidelberg/DE, 1Baden-Dättwil/CH

B-1112 10:38
Inflow effect correction in fast gradient-echo dynamic contrast-enhanced imaging in vitro and in vivo
F. Bidault1, H. Wang1, B. Asselain1, K. Rachidi1, D. Rodriguez1, X. Maître2, N. Lassau2; Villejuif/FR, 2Orsay/FR

B-1113 10:46
Reanimating patients using motion transfer: a cardiorespiratory motion ground truth based on clinical CT patient data
J. Mayer, S. Sauppe, C.M. Rank, M. Kachelrieß; Heidelberg/DE

B-1114 10:54
Diffusion coefficient and perfusion fraction parameters correlate with gestational age in normal human in vivo placenta: a preliminary study
A. Antonelli, M. Guerrerri, A. Di Paolo, S. Bernardo, S. Capuani, C. Catalano, L. Manganaro; Rome/IT

SS 1802a
Breast MRI: diffusion-weighted imaging

Moderators:
J. Camps Herrera; Valencia/ES
R.M. Mann; Nijmegen/NL

B-1115 11:02
Detection rates of simulated microcalcifications in FFDM, Synthetic-2D and DBT using an anthropomorphic phantom model
K. Krug1, S. Peters1, M. Hellmich1, M. Püsken1, O. Grinstein1, L. Stahlhut1, A. Stock1, J. Kemper1, D. Maintz2; 1Cologne/DE, 2Wennisgen/DE, 2Düsseldorf/DE

B-1116 11:10
Model observer approach applied to an innovative method for ADC assessment in mammography: comparison with CDAM evaluation including psychometric correction
R. Villa1, N. Paruccini1, N. Oberhofer2, C. Spadavecchia1, A. Bagli1, A. Crespi1; 1Monza/IT, 2Bolzano/IT

B-1117 11:18
Radiation dose comparison between photon counting and selenium mammography technology
R. Salvador Tarrason, K. Piccotti, X. Salvador Izquierdo, M. Vallespi, N. Riquel; Barcelona/ES

B-1118 11:26
Dose data in mammography: what a dose management software can tell us?
C. Heilmaier, E. Kummer, N. Zuber, D. Weishaupt; Zurich/CH

B-1119 11:34
Performance characterisation of digital breast tomosynthesis systems: the need for a standardisation
M. Chevalier, M. Castillo-García, A. Rodríguez-Ruiz, D. Garcia-Pinto; Madrid/ES

B-1120 11:42
Adjustment of x-ray measuring instruments for a new x-ray beam quality for mammography
R. Klausz, F. Mattana, Y. Popova, A. Guerin, F. Jeunehomme Patoureaux; Buc/FR

B-1121 11:50
Evaluation of the effectiveness of a new x-ray beam quality in digital mammography
M. Rouxel, R. Klausz, Y. Le Meur, H. Souchay, R. Shi, F. Jeunehomme Patoureaux; Buc/FR

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B-1124 10:56
Correlation of diffusion-weighted apparent diffusion coefficient values with prognostic factors of invasive breast cancer
B. Ubeda, S. Vizcaya, J.L. Browne, F. Terrel; Barcelona/ES

B-1125 11:03
Is DWI a stand-alone or complimentary parameter to DCE-MRI of the breast for cancer detection?

B-1126 11:11
Synthetic biomarkers using IVIM and non-Gaussian diffusion MRI: diagnostic performance and comparison with BI-RADS categories in differentiation of malignant/benign breast tumours

B-1127 11:19
Is the necrosis/wall ADC ratio useful for the differentiation of benign and malignant breast lesions?

B-1128 11:27
Discrimination of malignant and benign breast masses using automatic segmentation and region of interest-based features extracted from MRI
X. Jiang, F. Xie, L.-Z. Liu, Y.-X. Peng, H.-M. Cai, L. Li; Guangzhou/CN

B-1129 11:35
Comparison between mono-exponential Gaussian diffusion and non-Gaussian kurtosis model for breast lesions evaluation
A. Christou, A. Ghiatas, D. Priovolos, K. Veliou, H. Bougias; Doncaster/UK, Athens/GR, Ioannina/GR

B-1130 11:43
Your choice: not all sequences for diffusion-weighted imaging (DWI) of the breast yield the same results
F. Leon, R. Woitek, P. Clauser, P. Kapetas, K. Preiderl, T.H. Helbich, P.A.T. Baltzer; Monza/IT, Vienna/AUT

B-1131 11:51
Comparison of conventional imaging plus DWI and conventional imaging plus DCE-MRI in planning the surgical treatment of patients with breast cancer
L. Vassallo, E. Rachetta, G. Cappello, V. Doronzio, D. Regge, L. Martinich; Avola/IT, Candia/IT

10:30 - 12:00 Room E2
Neuro

SS 1811a
Spine and peripheral nerves
Moderators:
D. Maric; Banja Luka/BA
G. Pellicano; Florence/IT

B-1132 10:30
Diffusion tensor imaging and fiber tracking biomarkers of intramedullary tumours of spinal cord for predictive resectability scoring-observational comparative study of 48 cases
R.S.V. Vadapalli, L. Chittem, V. Mudumba, A. Vadapalli, S. Bhattacharya; Hyderabad/IN

B-1133 10:38
Role of phase sensitive inversion recovery sequence compared to STIR and T2W TSE in detection of cervical cord multiple sclerosis lesions
Z. Abidi; Qaem Shahr/IR

B-1134 10:46
Causes of spinal haemorrhage in a level one trauma centre
R. Riscos, E. Bonfante, J.A. Mora, C. Sitton; Houston, TX/US

B-1135 10:54
Effects of appropriateness of cauda equina imaging on clinical risks, workload and costs
S. Gargalas, S. Karia; Oxford/UK

B-1136 11:02
Quantitative MRI-based three-dimensional volumetry of dorsal sac and vertebral bodies improves diagnosis of dural ectasia in Marfan syndrome

B-1137 11:10
Diagnostic value of 3D FIESTA sequence in imaging of lumbar radiculopathy
F. Abubacker Sulaiman; Chennai/IN

B-1138 11:18
Diffusion tensor imaging of the arm nerves: tractography and quantitative analysis
V. Durante, R. Gasparotti; Brescia/IT

B-1139 11:26
Ultrasound findings and anatomical correlations in periferal nerves damage neurosurgery
V. Dekan, A. Gaivoronsky, E. Zhurbin, A. Grischchenkov; St. Petersburg/RU

B-1140 11:34
Value of high resolution ultrasound in carpal tunnel syndrome diagnosis
S.P. Ivanoski, M. Bozinoska Smiceska, V. Vaseilyska Nikodinovska; Ohrid/MK, Skopje/MK

B-1141 11:42
Diffusion tensor imaging in cervical and dorsolumbar spinal cord injury
M.K. Poonia, M.M. D’souza, A. Choudhary; Delhi/IN

B-1142 11:50
Evaluation of neurovascular compression in trigeminal neuralgia using 3D-DRIVE MRI and correlation with surgical microvascular decompression
M.M.A.H. ElShafey, H.A.M.M. Abdel Daiem, A.H. Farhoud; Alexandria/EG
B-1144 10:38
Digital breast tomosynthesis vs digital mammography - early performance measures in a population-based screening program
S. Hofvind1, T. Hova2, Å.S. Holen1, J.L. Albertsen3, H. Bjørndal2, S.H.B. Brändal1, L. Romundstad1, E. Vigeland1, P. Skaane1; 1Oslo/NO, 2Tromsø/NO, 3Tønsberg/NO

B-1145 10:46
The risk of progression of atypia into invasive breast cancer among women attending the Norwegian Breast Cancer Screening Programme
M. Lilleborg1, S. Sæbuødegård2, E. Scanlon2, B. Kelly2; 1Oslo/NO, 2Salford/UK

B-1146 10:54
Grade, size, invasive status and breast density of screen detected and interval cancers in breast screening in the UK
L.M. Warren1, L. Wilkinson2, M.G. Wallis3, R. McAvinuey1, R.M. Given-Wilson1, A.S. Holen1, J.L. Albertsen3, H. Bjørndal2, S.H.B. Brändal1, L. Romundstad1, E. Vigeland1, P. Skaane1; 1Oslo/NO, 2Tromsø/NO, 3Tønsberg/NO

B-1147 11:02
Frequency and characteristics of additionally detected ipsilateral breast lesions following recall at screening mammography
J.L.R. Lameijer1, M.M. Mourits2, J. Nederend1, A.C. Voogd3, L.E.M. Duijm2; 1Eindhoven/NL, 2London/UK, 3Cambridge/UK

B-1148 11:10
Breast compression and radiation dose in mammographic screening
G.G. Waade1, A. Sanderud, N. Moshina1, S. Sæbuødegård1, S. Hofvind2; 1Oslo/NO, 2Salford/UK

B-1149 11:18
Breast compression variability in the Norwegian Breast Cancer Screening Programme
G.G. Waade1, P. Hogg2, N. Moshina1, S. Sæbuødegård1, S. Hofvind2; 1Oslo/NO, 2Salford/UK

B-1150 11:26
Breast arterial calcification on screening mammography can predict clinically significant coronary artery disease (CAD) in the BreastCheck screening cohort
E. Scanlon1, B. Kelly1; 1Dublin/IE

B-1152 11:34
Comparison of recall and breast cancer rates for spontaneous and organised screening mammograms performed in the same department
N. Vovvoda1, L.A. Carbonaro2, C.G. Monaco3, F. Sardanelli2, K. Kocazeli1, TR, 1San Donato Milanese/IT, 2Milan/IT

B-1153 11:42
The value of routine screening mammography in women aged 35 to 39 years in a symptomatic breast unit
A. Buckley1, N. Healy, S. O’Keeffe2; 1Dublin/IE

B-1155 10:38
Modic 1 signal evolution after intradiscal glucocorticoid injection (vs sham-procedure) for patients with chronic low back pain
A. Buison1, N.-E. Regnard, C. Nguyen, S. Poiraudreau, J.-L. Drape, A. Feydy; 1Paris/FR

B-1156 10:46
Predictive value of MR-arthrography of the shoulder for pain relief after glenohumeral corticosteroid injection
B. Fritz1, F. Del Grande2, R. Sutter2, C.K. Peterson3, C.W.A. Pfirrmann1, 1Zürich/CH, 2Lugano/CH

B-1157 10:54
Clinical and radiological outcome of platelet-rich plasma (PRP) vs stromal vascular fraction (SVF) to treat Achilles tendinopathy: randomised controlled trial
C. Messina1, C. Maccario, L. De Girolamo, A. Corazza, F.G. Usuelli, L.M. Sconfienza; 1Milan/IT

B-1158 11:02
Validity of T2 mapping sequences at 3T for the assessment of knee cartilage repair after treatment with platelet rich plasma (PRP)
F. Bruno1, S. Quarchioni, S. Mariani, F. Arrigoni, L. Patriarca, L. Zugaro, A. Barile, C. Masciocchi; 1L’Aquila/IT

B-1159 11:10
Ultrasound-guided percutaneous treatment of plantar fasciitis: 5-year follow-up of three different approaches
V. Buscargno1, D. Orlandi2, E. Silvestri1, M. Moscatelli1, M. Catapano1, L.M. Sconfienza1, Milan/IT, Genoa/IT

B-1160 11:18
Soft tissue sarcoma diagnosis by imaging-guided core-needle biopsy: yield and limitations
P. Naval Baudin1, J. Narvaez, M. Huete, J. Hernandez-Gañan, J. Sardiñas, X. Sanjuan; 1Barcelona/ES

B-1161 11:26
Benign bone tumours other than osteoid osteoma percutaneous ablation
J. Martel1, F. Ruiz-Santiago2, Á. Bueno1, L. Guzmán1; 1Alcorcon/ES, 2Granada/ES

B-1162 11:34
Diagnostic findings (MRI and CT) in long term follow-up of osteoid osteomas treated with RFA and MRgFUS: a pictorial review with clinical correlation
F. Arrigoni1, S. Mariani, L. Zugaro, A. Barile, C. Masciocchi; 1L’Aquila/IT

B-1163 11:42
The safety and short-term efficacy of MR-guided focused ultrasound surgery for bone metastases-induced pain palliation
H. Xiong1, J. Zhang1; 1Shanghai/CN

B-1164 11:50
Effect of MRI-guided high intensity focused ultrasound on local control of bone metastases
A. Bazzocchi1, A. Napoli1, R. Scipione1, C. Marrocchio1, G. Guglielmi2, C. Catalano1, U. Albisinni1, 1Bologna/IT, 2Rome/IT, 3Foggia/IT

Musculoskeletal

SS 1810a
Musculoskeletal interventions
Moderators:
J.M. Cambronero Gómez; Girona/ES
A.B. Roskopf; Zurich/CH

B-1154 10:30
Balloon sacroplasty (BSP), radiofrequency sacroplasty (RFS), vertebroplasty (VSP) and cement sacroplasty (CSP) for the treatment of insufficiency fractures
R. Andresen1, S. Radmer1, J.R. Andresen1, H.C. Schöber1, Heide/DE, 1Berlin/DE, 2Vienna/AT, 3Rostock/DE
SS 1810b

**Hip and foot**

**Moderators:**
C. Czerny; Vienna/AT
R. Sutter; Zurich/CH

**B-1165 10:30**
More than half of the patients with hip pain due to FAI present an abnormal femoral torsion
T.D. Lerch, I.A. Todorski, F. Schmaranzer, S.D. Steppacher, K.A. Siebenrock, S.F. Werlen, M. Tannast; Berne/CH

**B-1166 10:38**
Pelvic inclination is not different in Pincer FAI due to acetabular retroversion compared to hip dysplasia
I.A. Todorski, T.D. Lerch, F. Schmaranzer, K.A. Siebenrock, S.D. Steppacher, M. Tannast; Berne/CH

**B-1167 10:46**
Is acetabular labrum size and tear pattern associated with femoral retrotorsion or increased femoral torsion in patients with FAI?
I.A. Todorski, T.D. Lerch, F. Schmaranzer, K.A. Siebenrock, S.D. Steppacher, M. Tannast; Berne/CH

**B-1168 10:54**
MR hip arthrography: diagnostic performance of 3D-SSFP vs 2D TSE protocol
M. Kraus, U. Grosse, M. Notohamiprodjo, K. Nikolaou; Tübingen/DE

**B-1169 11:02**
MRI hindfoot characteristics of genetic haemochromatosis: a case control study
A. Elstob, V. Ejindu, C.W. Heron, P.D.W. Kiely; London/UK

**B-1170 11:10**
Talonavicular ligament: anatomy and stability

**B-1171 11:18**
Ligament evaluation of the hind and midfoot: better depiction by using dixon method in ankle MRI
E. Park, S. Kim, E. Koh, E. Jung; Jeonju/KR

**B-1172 11:26**
High incidence of periprosthetic cystic lesions around CCI evolution ankle implant
S. Somodi; Hvidovre/DK

**B-1173 11:34**
Follow-up study with sonoelastography after open surgery repair on Achilles tendon in professional athletes and ballet dancers in comparison to non-sport related persons
V. Gazhonova, P. Pereyarchenko, V. Abeichev; Moscow/RU

**B-1175 11:42**
MRI study of planter plate and associated lesions
B.C.S. Rabelo1, R. Nobre Rodrigues1, J. Mendes Torres2, A. Abuhid Lopes2, E. Salgado Ribeiro1, M. Santana Firme1, L. Gavio2, Itauhu/BR, 2Belo Horizonte/BR

**SS 1814**

**Topics in general and paediatric imaging**

**Moderators:**
B.T. Andersson; Lund/SE
D. Prayer; Vienna/AT

**B-1178 10:30**
Using programmable LED lighting to create a personalised ambience in the radiology environment
M.U. Knopp1, M.M. Knopp2, K. Brinzel3, C. Wright4, M.V. Knopp5; Malibu, CA/US, 4Atlanta, GA/US, 5Columbus, OH/US

**B-1179 10:38**
Optimisation of fluoroscopic imaging of the Codman Hakim adjustable cerebrospinal fluid shunt valve
A. Brennes; H. Kubosch, B. Ween; Oslo/NO

**B-1180 10:46**
The radiopaque anatomical side markers: have we forgot how to use them?
E. Saukko; J. Svegin, E. Svedström; Turku/FI

**B-1181 10:54**
Radiation dose to newborns in a neonatal intensive care unit

**B-1182 11:02**
Are radiographers prepared to meet children with special needs when seen for a radiographic examination?
B. Björkman; Jönköping/SE

**B-1183 11:10**
Optimisation full-spine curvature radiography in paediatrics - impact of acquisition parameters
C.S. Reis1, V. Harsaker2, A. Bregman3, B. Cordeiro4, T. Daniels5, M. Johannessen2, S. Vestli2, M. Widmer4, A. England1, P. Hogg5; 1Perth/AU, 2Oslo/NO, 3Groningen/NL, 4Lausanne/CH, 5Lisbon/PT, 6Bloemfontein/ZA, 7Salford/UK

**B-1184 11:18**
Benefit-risk communication in paediatric imaging: an assessment of current practice among local referrers and practitioners
J.L. Portelli1, J.P. McNulty2, P. Bezzina1, L. Rainford2; 1Msida/MT, 2Dublin/IE

**B-1186 11:26**
Mobile radiography services in nursing homes: a systematic review of residents and societal outcomes
E. Kjelle1, K.B. Lysdahl2; 1Kongsberg/NO, 2Oslo/NO
B-1188 10:38
Left ventricular interstitial fibrosis drives left atrial enlargement and impairment in arterial hypertension: novel insights from T1 mapping

B-1189 10:46
Evaluation of myocardial fibrosis in patients affected by diabetes mellitus type II and its correlation to left ventricular functional impairment
N. Galea, F. Ciolina, R. Ammendola, E. Giannetta, M. Francone, I. Carbone, C. Catalano; Rome/IT

B-1190 10:54
Myocardial tissue characterisation by CMR in subjects with prediabetes, diabetes and normal controls with preserved ejection fraction from the general population

B-1191 11:02
T1 relaxation-times, epicardial fat volume and left ventricular contractility in obese individuals with normal systolic left ventricular function: a cardiac magnetic resonance study
R. Homsi, D. Kuetting, A. Sprinkart, S. Fischer, J. Luetkens, M. Meier-Schroers, D. Dabir, H. Schild, D. Thomas; Bonn/DE

B-1192 11:10
Role of late gadolinium enhancement, myocardium native T1 value and texture analysis in patients affected by dilated cardiomyopathy: clinical score and outcome correlation
A. Scavuzzo, E. Faietti, D. Farina, E. Gavazzi, C. Foletti, I. Zorza; Brescia/IT

B-1193 11:18
Cardiovascular magnetic resonance in cardiomyopathies with viral genome incorporated in cardiac tissue
A. Michalek, M. Lanckoronski, A. Pawlak, M.I. Furmanek, R.J. Gil, A. Nasierowska, M. Przybylski, J. Walecki; Warsaw/PL

B-1194 11:26
Myocardial T1 mapping and extracellular volume fraction (ECV) comparing MOLLI and SMART1Map sequences in 3T-MRI
L. Panebianco, V. Vellucci, L. Patriarca, E. Cannizzaro, P. Palumbo, R. Masi, E. Di Cesare, C. Masciocchi; L’Aquila/IT

B-1195 11:34
MRI atrial fibrosis after cryoablation in patients with atrial fibrillation: a prospective feasibility study and its relation to endovascular procedure
E. Caramia, R. Faletti, L.J. Pavan, D. Tore, M. Matta, M. Anselmino, P. Fonio, F. Gaita, G. Gandini; Turin/IT

B-1196 11:42
Acute myocardial tissue characterisation using magnetic resonance native T1 mapping at 3.0 T
A. Clemente, F. Avoglieri, A. Di Giambattista, N. Martini, A. Barison, D. Della Latta, D. Chiappino; Massa/IT, Pisa/IT

B-1197 11:50
Native T1 mapping comparison of mean and median assessment reveal reduced T1 in normal anterior and anterolateral segments compared to the rest of the myocardium
**B-1207** 11:42
Frequency & analysis of non-clinical errors made in radiology reports using the national integrated medical imaging system (NIMIS) voice recognition dictation software
R.E. Motyer, S. Liddy, W.C. Torreggiani, O. Buckley; Dublin/IE

**B-1208** 11:50
Evaluation of a patient safety tool: the preferred reading of the radiology report - has it been useful?
P. Fragas, C. Benito, L. Garcia del Salto, J. De Miguel, A. Marco, E. Fraile; Madrid/ES

**B-1209** 10:30
Improvement of image quality in dual layer unenhanced head CT using virtual monoenergetic image reconstructions
V. Neuhaus, N. Abdullayev, N. Große Hokamp, C. Kabbasch, A. Mpotsaris, D. Maintz, J. Borggrefe; Cologne/DE

**B-1210** 10:38
Improved image quality of low-dose brain CT using knowledge-based iterative reconstruction technique: effect on the noise reduction and low-contrast detectability
Y. Lee, H. Seo; Ansan/KR

**B-1211** 10:46
Detection of vessel occlusion in acute stroke is facilitated by color-coded 4D-CTA
M. Mei, S. Pegge, M. Prokop, B. van Ginneken, F.J.A. Meijer, R. Manniesing; Nijmegen/NL

**B-1212** 10:54
Robust segmentation of the cranial cavity in non-contrast CT and CT perfusion of the brain
A. Patel, F.J.A. Meijer, M. Prokop, B. van Ginneken, R. Manniesing; Nijmegen/NL

**B-1213** 11:02
Parameters based on blood flow velocity obtained from 3D cine PC-MR on cerebral intracranial aneurysms: comparative study with computational fluid dynamics

**B-1214** 11:10
Comparison of spoiled gradient recalled acquisition and spin echo magnetic resonance images in detection of pituitary ACTH secreting adenoma
R. Koidzinski, E. Frankowska, M. Żabicka, M. Kania-Pudlo, A. Sciuk, K. Tomczykiewicz, G. Ziełinski; Warsaw/PL, Houston/TX, US

**B-1215** 11:18
Different consistency of pituitary adenomas evaluated with dynamic contrast MRI acquisition
A. Di Napoli, L. Pascuini, A. Boellis, A. Romano, A. Bozzao; Rome/IT

**B-1216** 11:26
MRI tractography comparing diffusion tensor and kurtosis tensor imaging
J. Leote, R.G. Nunes, R. Loução, L. Cerqueira, H.A. Ferreira; Lisbon/PT

**B-1217** 11:34
Accuracy of SWI sequences compared to T2*-weighted gradient echo sequences in the detection of cerebral cavernous malformation
G. Sparacin, A. Anastasi, C. Speciale, F. Bencivinni, A. Banco, M. Midiri; Palermo/IT

**B-1218** 11:42
Evaluation of the communication between arachnoid cysts and neighbouring cerebrospinal fluid spaces by T2W 3D-SPACE with variant flip-angle technique at 3T
O. Algin; Ankara/TR

**B-1219** 11:50
Determination of intra-axial brain tumours cellularity through the analysis of T2 relaxation time of brain tumours before surgery using MATLAB software
J. Abdolmohammadi; Baharan/IR

**SS 1811b**
Technical developments in CT and MRI improving image quality and lesion analysis
Moderators: M. Palm; Maastricht/NL, R. Riascos; Houston, TX/US

**B-1209** 10:30
Improvement of image quality in dual layer unenhanced head CT using virtual monoenergetic image reconstructions
V. Neuhaus, N. Abdullayev, N. Große Hokamp, C. Kabbasch, A. Mpotsaris, D. Maintz, J. Borggrefe; Cologne/DE

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**B-1212** 10:54
Robust segmentation of the cranial cavity in non-contrast CT and CT perfusion of the brain
A. Patel, F.J.A. Meijer, M. Prokop, B. van Ginneken, R. Manniesing; Nijmegen/NL

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**B-1216** 11:26
MRI tractography comparing diffusion tensor and kurtosis tensor imaging
J. Leote, R.G. Nunes, R. Loução, L. Cerqueira, H.A. Ferreira; Lisbon/PT

**B-1217** 11:34
Accuracy of SWI sequences compared to T2*-weighted gradient echo sequences in the detection of cerebral cavernous malformation
G. Sparacin, A. Anastasi, C. Speciale, F. Bencivinni, A. Banco, M. Midiri; Palermo/IT

**B-1218** 11:42
Evaluation of the communication between arachnoid cysts and neighbouring cerebrospinal fluid spaces by T2W 3D-SPACE with variant flip-angle technique at 3T
O. Algin; Ankara/TR

**B-1219** 11:50
Determination of intra-axial brain tumours cellularity through the analysis of T2 relaxation time of brain tumours before surgery using MATLAB software
J. Abdolmohammadi; Baharan/IR

**K-26** 14:00
Keynote lecture
S. Romano; Naples/IT

**B-1220** 14:09
Perfusion CT: a novel quantitative and qualitative imaging biomarker in gastric cancer
J. Kruk-Bachonko; Lublin/PL

**B-1221** 14:17
CT volume for primary gastric lesions in predicting pathologic response to neoadjuvant chemotherapy in locally advanced gastric cancer
I. Shrainer; Moscow/RU

**B-1222** 14:25
Tumour volume at MDCT association with lymphatic invasion and N categories in resectable gastric adenocarcinoma: study in large surgical specimens
H. Li, X.-l. Chen; Chengdu/CN

**B-1223** 14:33
Application of spectral CT in differential diagnosis of the gastric cancer and the high-risk gastric stromal tumours
X.-W. Wang; Zhengzhou/CN

**B-1224** 14:41
CT imaging features of internal hernia: post Roux-en-Y gastric Bypass - our experience in an Indian tertiary care setup
K. Sikund, G. Aggarwal, B. Aggarwal; New Delhi/IN

**B-1225** 14:49
MRI assessment of delayed gastric emptying and motility in Parkinson's disease: a feasibility study
J. Cho; Seongnam/KR
**B-1226 14:57**

Gastric remnant volume on radiology as a predictor of weight loss after laparoscopic sleeve gastrectomy for morbid obesity

A. Bertesso, I. Zotta, G. Barbiero, M. Zuliani, A.C. Frigo, L. Prevedello, M. Fioletta, F. Pomer; Padua/IT

**B-1227 15:05**

Intestinal type ampullary adenocarcinoma vs duodenal adenocarcinoma: role of ampullary MDCT in preoperative differentiation

Z. Kovacevic, A. Ivanovic, D. Masulovic; Belgrade/RS

**B-1228 15:13**

Radiological management after bariatric surgery

P. Venetucci1, A.G.ucci1, A. Macca1, F. Venetucci1, M. Quarantelli3, P. Tiefenboeck1, O. Kolokythas2, J.M. Froehlich2; 1Winterthur/CH, 2Mercato San Severino/IT, 3Portici/IT

**B-1229 15:21**

A MRI-guided high-intensity focused ultrasound-triggered wax-coated capsule for temporally and spatially supertargeted drug release

S. Matoori1, M. Roveri1, A. Romagna1, O. Voznyuk Wuerthinger1, A. Brunetti1; 1Naples/IT, 2Mercato San Severino/IT, 3Portici/IT

**B-1230 14:09**

Focal autoimmune pancreatitis vs pancreatic adenocarcinoma in the pancreatic head: MRI-MRCP findings

R. Negrelli, E. Boninsegna, G.A. Zamboni, T. Cuno, S. Mehrabi, R. Manfredi, R. Pozzi-Mucelli1, I. Mercato San Severino, S. Di Stasio; 1Naples/IT, 2Venerelli/IT, 3Bologna/IT, 4Rome/IT

**B-1231 14:17**

Diagnostic performance of apparent diffusion coefficient in acute pancreatitis; correlation with revised Atlanta and Japanese severity score

R.M. El Kady, S.H. Bakr, H.I. Megally, W.A. Abbas; Assiut/EG

**B-1232 14:25**

Characterisation of patients with abdominal pain and signs of acute pancreatitis on CT without threefold increase of normal serum lipase levels

M. Avanevoss, A. Loser, J.M. Weinrich, G. Adam, J. Yamamura, M. Karul; Hamburg/DE

**B-1233 14:33**

Paraduodenal pancreatitis: MRI features and differential diagnosis with pancreatic adenocarcinoma

E. Boninsegna1, R. Negrelli, G. Zamboni, G. Tedesco1, R. Manfredi, R. Pozzi-Mucelli1; Verona/IT, 2Rome/IT

**B-1234 14:41**

Comparative evaluation of CT and MRI in non-invasive detection of infection in fluid collections of acute pancreatitis

N.A. Dikshit; Chandigarh/IN

**B-1235 14:49**

MRI for detailed assessment of pancreatic morphology and function in chronic pancreatitis

J. Frekker, A. Madzak, S. Olesen1, I. Haldorsen, A. Drewes1; 1Aalborg/DK, 2Bergen/NO

**B-1236 14:57**

Comparison of radiological scoring systems, clinical scores, neutrophil-lymphocyte ratio and serum C-reactive protein level for severity and mortality in acute pancreatitis

N. Gezer, G. Bengi, A. Baran, E. Turgan, O. Topalak, O. Dicle; Izmir/TR

**B-1237 15:05**

Detection of inflammation in primary sclerosing cholangitis using gadolinium-based contrast enhancement index (CEI)

S. Keller, J. Weinrich, C. Schramm, G. Adam, J. Yamamura; Hamburg/DE

**B-1238 15:13**

Image monitoring of hepatic oxygenation and Kupffer activity during neoplastic changes induced with obstructive cholangitis and N-nitrosodimethylamine in a mouse model

J. Kim, S. Lee, J. Lee, H. Eun, J. Han; Seoul/KR

**B-1239 15:21**

Contrast-enhanced CT of abdomen in acute pancreatitis: can we predict the development of necrosis simply by CT number measurements?

N. Gezer, A. Baran, O. Topalak, O. Dicle; Izmir/TR

**B-1240 14:00**

Liver fat storage in patients with NAFLD: differences between metabolic syndrome and genetic aetiology

M. Di Martino, A. Capalbo, K. Koryukova, S. De Vizio, C. Catalano; Rome/IT

**B-1241 14:08**

Simultaneous dual-energy CT based monochromatic imaging and US with normalised local variance analysis for quantification of hepatic steatosis: correlation with pathology

P. Rogalla, G. Guenette, A. Rattansingh, M. Roest, K. Mao, B. Hoppel; Toronto, Ontario, ON/CA

**B-1242 14:16**

The performance of multi-echo chemical shift magnetic resonance imaging for the evaluation of liver steatosis: a meta-analysis

Y. Ou, J. Chen, B. Song; Chengdu/CN

**B-1243 14:24**

Magnetic resonance spectroscopy for differentiation between non-alcoholic steatohepatitis and simple hepatic steatosis


**B-1244 14:32**

Staging steatosis using quantitative ultrasound, validation with pathohistology

**B-1245** 14:40
Attenuation coefficient measurement (ACM) as a newest mode for ultrasound quantitative hepatic steatosis assessment
O. Dynyk, N. Kobyliak, O. Fedusenko; Kyiv/UA

**B-1246** 14:48
Accuracy of automated liver contouring, fat fraction and R2* measurement on T1-weighted q-Dixon magnetic resonance images
D. Stocker1, K. Schawkat1, M. Bashir1, S. Kannengiesser1, C.S. Reiner1; *Zürich/CH,* *Durham, NC/US,* *Erlangen/DE*

**B-1247** 14:56
Liver iron measurement by R2* in comparison to R2 and biosusceptometry
J. Yamamura, S. Keller, B. Schönagel, E. Tahir, P. Nielsen, R. Große, G. Adam, R. Fischer; Hamburg/DE

**B-1248** 15:04
Non-invasive staging of liver fibrosis in patients with chronic viral hepatitis: performance of a shear wave measurement method
G. Ferrailoli, L. Maiocchi, R. Lissandrin, A. De Silvestri, C. Tinelli, C. Filice; Pavia/IT

**B-1249** 15:12
Diagnostic performance of 2D-shear wave elastography using comb-push techniques for liver fibrosis evaluation: a prospective study

**B-1250** 15:20
Early changes of liver stiffness assessed using shear wave elastography after novel direct antiviral therapy in chronic hepatitis C virus induced liver fibrosis

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**Vascular**

**SS 1915**

**Aortic imaging**

Moderators:
M. Cejna; Feldkirch/AT
M.T. Furmanek; Warsaw/PL

**B-1259** 14:00
Hypertension following aortic coarctation repair: is the ‘selfish brain’ to blame?

**B-1251** 14:08
Aortic wall thickness is associated with high serum concentrations of the thyroid-stimulating hormone: a cross-sectional population-based study
C. Klausenitz1, T. Ittermann1, R. Lorbear1, M. Dörr1, A. Quadrate1, T. Schneider1, H. Völzke1, B. Mensel1; *Greifswald/DE,* *Munich/DE*

**B-1252** 14:16
Dynamic 3D angiography in patients with aortic dissection as risk factor for chronic aortic expansion
M. Trojan1, M. Müller-Eschner1, D. Koteles1, S. Partovi1, C. Karmonik1, H. von Tengg-Koblingk1, D. Böckler1, H.-U. Kauczon1, F. Rengier1; *Heidelberg/DE,* *Cleveland, OH/US,* *Houston, TX/US,* *Berne/CH*

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**B-1253** 14:24
Morphological and functional CFD-based analysis for predicting abdominal aortic evolution

**B-1254** 14:32
Aortic arch plaque characterisation by computed tomography angiography in acute ischaemic stroke: fast technique for high quality vessel analysis
C. Parra-Fariñas, J. Juega, M. Ribó Jacobí, A. Tomassello Weitz, P. Coscojuela Santaliestra, C. Vert Soler, E. Almázán Mesa, J. Pagola, Á. Rovira; Barcelona/ES

**B-1255** 14:40
Automated tube voltage selection with adapted contrast media injection protocols in CT angiography of the thoraco-abdominal aorta
N. Elfiyoomi, B.M.F. Hendriks, M. Kok, C. Mini, B. Horehedova, G.H. Schurink, B.M.E. Mees, J.E. Wildberger, M. Das; Maastricht/NL

**B-1256** 14:48
Increased aortic wall shear stress and wall shear stress gradient in patients with an anatomically shaped sinus prosthesis using 4D flow-MRI
V. Schultz, T. Oechtering1, M. Sieren1, M. Scharfschwerdt1, A. Hennewith2, M. Hüllebrand3, H.-H. Sievers1, J. Barkhausen1, A. Frydrychowicz3; Lübeck/DE, *Bremen/DE*

**B-1258** 14:56
70kV automated tube potential selection at third-generation high-pitch dual-source CTA of the whole aorta: comparison to a standard protocol
A.M. Bucher, A. Zierden, J.E. Scholtz, M.H. Albrecht, B. Kaltenbach, M. Kaup, B. Bodelle, T.J. Vogl, M. Beeres; Frankfurt a. Main/DE

**B-1260** 15:04
Diagnostic accuracy of free-breathing contrast-enhanced T1 sequences in comparison with breath-hold sequences, in the assessment of the aorta, having CT angiography as reference
C.R.G.L. Talei Franzesi, D. Ippolito, S. Drago, S. Lombardi, E.B. Orsini, S. Sironi, Monza/IT

**B-1261** 15:12
The benefits of the evaluation of endoleaks with CT angiography using multiphase technique and high temporal resolution with iterative reconstruction
P. Armelin; Campinas/BR

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**Interventional Radiology**

**SS 1909**

**Musculoskeletal interventions**

Moderators:
G. Velonakis; Athens/GR
N.N.

**B-1262** 14:00
Percutaneous discectomy in lumbar radiculalgia: an international multi-centric study about 77 patients (6 months follow-up)
G. Gallo1, O. Andreani2, F. Torre2, N. Amoretti2; *Napoli,* *Cleveland, OH/US,* *Menton/FR,* *Nice/FR*

**B-1263** 14:08
CT-guided pulsed radio frequency treatment of the lumbar dorsal root ganglion (DRG) in patients with acute and sub-acute radicular low back pain
A. Napoli, R. Scipione, M. Anzidei, C. Marrocchio, H.-P. Erasmus, C. Catalano; *Rome/IT*
**B-1264** 14:16
Vertebral augmentation with the Spine Jack device in non-acute (>1 month) vertebral compression fracture
J. Chiras, E. Cormier, F. Clarençon; Paris/FR

**B-1265** 14:24
Percutaneous screw fixation for complex pelvic fractures: a key role for the interventional radiologist
O. Andreani, A. Rudel, G. Gallo, F. Torre, N. Amoretti; ‘Nice/FR, ‘Menton/FR

**B-1266** 14:32
Hamstring tendinopathy: pre-procedural MRI correlation with clinical outcome in therapeutic image-guided injection
D.J. Bowden, C.A. Byrne, A. Alkhayat, E. Kavanagh, J.G. Cronin, J.G. Murray, C.A. Ridge; Dublin/IE

**B-1267** 14:40
Non-invasive MR-guided focused ultrasound (MRgFUS) therapy is associated with bone integrity restoration in patients with osteoid osteoma
R. Scipione, A. Napoli, M. Anzidei, C. Marrocchio, H.-P. Erasmus, C. Catalano; ‘Rome/IT

**B-1268** 14:48
Middle- and long-time follow-up of percutaneous computed tomography and fluoroscopy-guided injection of bone cement in treatment of subchondral cysts

**B-1269** 14:56
Percutaneous image-guided screw fixation of bone lesions in cancer patients: double-centre analysis of outcomes including local evolution of the treated focus

**B-1270** 15:04
Trans-isthmic screw fixation with CT and fluoroscopy guidance: precision of the procedure
E. Cervantes, O. Andréani, N. Amoretti; ‘Nice/FR

**B-1271** 15:12
MRI-guided high-intensity focused ultrasound: a new first-line technique in the treatment of osteoid osteoma
A. Napoli, A. Bazzocchi, R. Scipione, M. Anzidei, S. Dababou, C. Catalano; ‘Rome/IT, ‘Bologna/IT

**B-1272** 15:20
US-guided injection of triamcinolone in Morton neuroma (MN) is safe and can avoid the need of surgical treatment: retrospective review of 307 procedures

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**B-1273** 14:09
Diffusion-weighted imaging planning percutaneous lung biopsies
C.E. Zurstrassen, M. Guimaraes, A. Bitencourt, P. Barbosa, M.F. Arruda, C. Tyng, J. Italo, M. Amoedo, R. Chojniak; Sao Paulo/BR

**B-1274** 14:17
Metabolic guidance in CT-guided lung biopsies: Does 18F-FDG PET/CT increase the rate of successful biopsies and diagnostic yield?

**B-1275** 14:25
Lung lesions motion in the z-axis during CT-guided lung biopsy is greater in the lower lung and after intravenous sedation

**B-1276** 14:33
CT-guided lung biopsy in the lateral decubitus position: effect on the incidence of pneumothorax and haemoptysis
O. Drumm, E. Joyce, T. Gleeson, E. McCarthy, J.F. Meaney, R. McDermott, P. Beddy; Dublin/IE

**B-1277** 14:41
CT-guided percutaneous transthoracic core biopsy (PTCB) of deep thoracic lesions using pure virtual navigation guidance (PVNG) with magnetic-tracking system: preliminary experiences
G. Bizzarri, A. Bianchini, D. Valle, L. Di Vito, L. Velari, S. De Nuntis, A. Dell’Era; Alzano Laziale/IT

**B-1278** 14:49
Risk factors for complications of CT-guided percutaneous transthoracic needle biopsy: utility of SIR classification of complications

**B-1279** 14:57
Patient selection prior to lung volume reduction: impact of FEV1 and emphysema score
F. Doellinger, R.-H. Huebner, D. Theilig, Berlin/DE

**B-1280** 15:05
How to calculate an interlobar emphysema heterogeneity index in the context of lobar lung volume reduction therapy

**B-1281** 15:13
Evaluation of three iterative metal artefact reduction algorithms in post-surgical chest computed tomography
J. Aissa, J. Boos, L. Sawicki, N. Heinzler, P. Kröpil, G. Antoch, C. Thomas, B.M. Schaarschmidt; Düsseldorf/DE

**B-1282** 15:21
USG-guided thoracocentesis using pigtail catheter with or without pleurodesis in the palliation of recurrent/refractory malignant pleural effusions
A.K. Madayambath, S. Thulka, A.S. Bhalla, S. Bhatnagar, S. Mishra, M. Jana; New Delhi/IN

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**SS 1904**
Chest imaging and intervention
Moderators:
P. Dalal; London/UK
E.J. Stern; Seattle, WA/US

**K-28** 14:00
Keynote lecture
R. Schernthaner; Vienna/AT
SS 1907  
Female urogenital system: imaging and intervention  

Moderators:  
R. Forstner; Salzburg/AT  
G. Tardaguila de la Fuente; Vigo/ES  

K-29  14:00  
Keynote lecture  
R. Forstner; Salzburg/AT  

B-1283  14:09  
Dynamic MR of the pelvic floor: impact of the PCL on the grading of pelvic floor descent  
S. Picchia, M. Rengo, D. Caruso, D. De Santis, A. Laghi; Latina/IT  

B-1284  14:17  
Intrauterine devices in MRI: not every IUD is safe and MR compatible  
S. Russmann; Zurich/CH  

B-1286  14:25  
CT and MR imaging of clear-cell carcinoma of the ovary  
Y. Shin, H. Joo; Incheon/KR  

B-1287  14:33  
Role of MRI in the staging of primary carcinoma cervix and its correlation with clinical FIGO/histopathological staging  
N. Mohan, A. Prahladan, V. Jiji, K. Ramachandran; Trivandrum/IN  

B-1288  14:41  
Quantitative MRI analysis of cervical cancer treated with external beam chemoradiotherapy followed by MRI-assisted HDR intracavitary brachytherapy  
A. Jacques, K. Stavrou, V. Tse, S. Natas, O.A. Westerland, A. Winship, V. Mullassery, V.J. Gof; London/UK  

B-1289  14:49  
The utility of apparent diffusion coefficient in differential diagnosis of neuroendocrine carcinoma of the uterine cervix  
C. Zhang, J.-L. Cheng; Zhengzhou/CN  

B-1290  14:57  
Assessing of depth of myometrial invasion and preoperative staging of endometrial cancer: the added value of diffusion-weighted imaging and dynamic contrast-enhanced MRI sequences  
I. Alves; M. Ramalho, T.M. Cunha; ‘Funchal/PT, ‘Lisbon/PT  

B-1291  15:05  
Collision tumour of ovary: pathological features and imaging diagnosis  
H. Wang, J. Guan, M. Liu; Guangzhou/CN  

B-1292  15:13  
Factors influencing MRgFUS efficiency for uterine fibroids treatment  
A. Hocquelet; T. Lerebour, N. Frullo, C. Salut, H. Trillaud; Bordeaux/FR  

B-1293  14:00  
Whole-body MRI with DWI in lesion detection, staging and response evaluation in FDG-avid lymphomas: comparison with 18F-FDG-PET/CT  
M. Ciliberto, L. Calandriello, L. Leccisotti, A. Giordano, A. Larici, L. Bonomo; Rome/IT  

B-1294  14:08  
Whole-body MRI, FDG-PET/CT and bone marrow biopsy, for the assessment of marrow involvement in patients with newly diagnosed lymphoma  
D. Alban, C. Patti, L. La Grutta, E. Grassedionio, A. Mulè, A. Costa, M. Midiri, R. Lagallia, M. Gala; Palermo/IT  

B-1295  14:16  
Whole-body diffusion-weighted MR and FDG-PET/CT in Hodgkin lymphoma: predictive role before treatment and early assessment after two courses of chemotherapy  
D. Alban, C. Patti, D. Matranga, L. La Grutta, E. Grassedionio, C. Ortolano, M. Midiri, R. Lagallia, M. Gala; Palermo/IT  

B-1296  14:24  
Whole body MRI with DWI as surveillance imaging for lymphoma patients  
A. Balbo Mussetto, C. Saviolo, S. Cavanna, M. Petracchini, C. Lario, A. Macera, C. Arese, T. Gaiolo, S. Cirillo; Turin/IT  

B-1297  14:32  
Comparing whole-body CT with x-ray skeletal survey for staging monoclonal plasma cell disease: results from an international, blinded reader study  

B-1298  14:40  
Prognostic relevance of focal lesions in whole-body MRI in multiple myeloma patients before and after allogeneic stem cell transplantation  

B-1299  14:48  
Whole-body MR imaging vs conventional x-ray examination in patients with plasmacell neoplasia  
A. Cassarà, A. Trisoglio, L. Sukhovei, G. Leale, S. Berardo, F. Buemi, L. De Paoli, A. Stecco, A. Carriero; Novara/IT  

B-1300  14:56  
Whole-body MRI in multiple myeloma: a retrospective study comparing ADC maps and dynamic contrast-enhanced imaging (DCE-MRI) in evaluation of post treatment response  
P. Arcuri, S. Roccia, S. Malica, A. Anola, D. Lagana, G. Fodero; Catanzaro/IT
B-1301 15:04
Apparent diffusion coefficient (ADC) values in multiple myeloma patients: a potential noninvasive marker for bone marrow involvement characterisation at staging
P.A. Bonafini1, D. Ippoliti1, A. Nasatti2, C. Talei Franzesi2, S. Sironi2; 1Desio/IT, 2Milan/IT, 3Bergamo/IT

B-1302 15:12
Comparison of normal and metastatic lymph nodes with multi-energy computed tomography
M. Femia1, S. Rizzo1, L. Preda1, D. Radice1, R. Vigorito1, P. De Marco1, D. Origi1, M. Bellomi1; 1Milan/IT, 2Pavia/IT

B-1303 15:20
Preoperative sentinel lymph node (SLN) identification and mapping using SPION-MR in patients with prostatic cancer
T.S. Paulo, A. Winter, S.S. Armin, T. Kowald, P. Goos, S. Engels, H. Gerullis, F. Wawroschek, A. Chavan; Oldenburg/DE

14:00 - 15:30 Room L 8
Head and Neck

SS 1908
Parathyroid and thyroid imaging: how to improve diagnosis?
Moderators:
J. Frühwald-Pallamar; Vienna/AT

B-1304 14:00
Parathyroids: frequently overlooked or over-reported glands?
E. Scapin, A. Mereu, L. Saba; Monserrato/IT

B-1305 14:08
Diagnostic value of shear wave elastography for parathyroid lesions and comparison with cervical lymph nodes
A.V. Polat, M. Ozturk, B. Akyuz, C. Celenk, C. Polat; Samsun/TR

B-1306 14:16
The 5-tiered categorisation system based on the 2015 ATA guidelines for classifying a small thyroid nodule on ultrasound: comparison with the modified 4-tiered categorisation system
J. Lee, K. Han, E.-K. Kim, H. Moon, J. Yoon, V.Y. Park, J. Kwak; Seoul/KR

B-1307 14:24
Efficacy of ultrasound elastography in diagnosing thyroid lesions and correlation with FNAC or biopsy
P. Dhayalan, D.S. Phanakkar, K. Chokka, H. Rao; Pondicherry/IN

B-1308 14:32
Acoustic radiation force impulse imaging in the differentiation of benign and malignant thyroid nodules
N.N. Pandey, G. Pradhan, A. Manchanda, A. Garg; New Delhi/IN

B-1309 14:40
Distinguishing benign from malignant thyroid nodules: utility of superb microvascular imaging and ultrasound elastography

B-1310 14:48
Diagnostic performance of computer-assisted diagnosis in evaluating thyroid masses on ultrasonography
M. Seong, E. Ko, B.-K. Han, J. Shin, S. Hahn, J. Bae, J. Lee, S. Yang, J. Kim; Seoul/KR

B-1311 14:56
Sonographic assessment for predictors of malignancy in Thy3a nodules
N.M. Hughes, A. Nae, J. Barry, L. Feeley, P. Sheehan; Cork/IE

B-1312 15:04
Role of ultrasound in predicting tumour invasiveness for follicular variant of papillary thyroid carcinomas

B-1313 15:12
Importance of thyroid microcalcifications in the absence of identifiable nodules
C. Whittle, E. Horvath, M. Garcia, C. Carrasco, J. Slater; Santiago/CL

B-1314 15:20
Utility of uptake rate in the thyroid bed measured by 131I tracer study before 131I radioactive iodine therapy for papillary thyroid carcinoma to predict treatment outcome

14:00 - 15:30 Room E2
Neuro

SS 1911a
Degenerative diseases of the brain
Moderators:
S. Shams; Stockholm/SE

B-1315 14:09
Hypointensity of the primary motor cortex in SWAN images at 3T in patients with amyotrophic lateral sclerosis
G. Donatelli, A. Retico, E. Caldarazzo Ienco, P. Cecchi, M. Costagli, L. Biagi, G. Siciliano, M. Tosetti, M. Cosottini; Pisa/IT

B-1316 14:17
Retinal neurodegeneration is associated with structural MRI markers of cerebral neurodegeneration
U. Mutlu, M.A. Ikram, P. Bonnemaijer, L.G.M. Vernooij, M. Cremers, W.J. Niessen; Rotterdam/NL

B-1317 14:25
Dorsolateral putaminal hypointensity on diffusion-weighted imaging in differentiating Parkinsonism-predominant multiple system atrophy from Parkinson’s disease
K. Zheng, L. Ma; Beijing/CN

B-1318 14:33
The optimisation of magnetic resonance imaging pulse sequences in order to better detection of multiple sclerosis plaques
J. Abdolmohammadi; Baharan/IR

B-1319 14:41
Longitudinal diffusion tensor imaging in early stage Parkinson’s disease
T. Minett1, L. Su1, E. Mak1, R.A. Lawson1, A. Yarnall1, G.W. Duncan1, R.A. Barker1, D. Burn2, J.T. O’Brien1; 1Cambridge/UK, 2Newcastle upon Tyne/UK, 3Edinburgh/UK

B-1320 14:49
Evolution of brain lesions in patients with antiphospholipid syndrome: a longitudinal MRI study
P. Syrckova, R. Jäger; London/UK
**B-1321** 14:57
**Associations among cognitive functions, plasma DNA, and white matter integrity in patients with early-onset Parkinson’s disease**

**B-1322** 15:05
The morphometric parameters in MRI for differentiation progressive supranuclear Palsy from Parkinson’s disease, multiple system atrophy and controls
E. Aydin¹, C. Eraslan¹, A. Acerer², E. Akyuz², Z. Colakoglu¹, C. Calli¹, O. Kittis¹, İzmir/TR, *Aydin/TR

**B-1323** 15:13
Combined R2* maps generated by IDEAL-IQ and cerebral blood flow by 3D-ASL as markers of cognitive deficit in Parkinson’s disease
R.-H. Yan, X. Wei, J. Wang, Q. Wang; Guangzhou/CN

**B-1324** 15:21
White matter volume loss in amyotrophic lateral sclerosis: a metanalysis of voxel-based morphometry studies
G. Chen, B. Zhou, X. Huang, Q. Gong; Chengdu/CN

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<th>14:00 - 15:30</th>
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<td><strong>Breast</strong></td>
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**SS 1902a**
**Assessment of the effect of neoadjuvant therapy**

**Moderators:**
F. Thibault; Paris/FR  
R.M. Trimble; Milan/IT

**B-1325** 14:00
Volume-based histogram analysis of breast cancer (BC) before neoadjuvant chemotherapy (NAC): could MRI features predict tumour response?
C. Losio, A. Della Corte, M. Panzeri, A. Del Maschio, F. De Cobelli; Milan/IT

**B-1326** 14:08
MR imaging after neoadjuvant therapy in subtypes of locally advanced breast cancer - correlation with predictive pathologic models of response

**B-1327** 14:16
The relationship between tumour response to neo-adjuvant chemotherapy and response patterns seen on breast MRI
B. Goorts, K. Dreuning, J. Houwers, L. Kooreman, M. Moosdorff, T. van Nijnatten, E. Boerma, M. Smidt, M.B.I. Lobbes; Maastricht/NL

**B-1328** 14:24
Results of diffusion-weighted and dynamic contrast-enhanced MRI as biomarkers for evaluation of breast cancer response to neo-adjuvant chemotherapy
O.S. Shliapkina, E.A. Mershina, Y.N. Nenakhova, V.E. Sinitsyn, V.K. Lyadov; Moscow/RU

**B-1329** 14:32
Texture and geometrical analysis in breast MRI: prediction of response to neo-adjuvant chemotherapy (NAC)
M. Panzeri, C. Losio¹, P. Panizza, F. Gallivanone², A. Del Maschio², F. De Cobelli²; Milan/IT, Segrate/IT

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**B-1330** 14:40
Background parenchymal enhancement: correlation with pathological response after NACT and tumour biological subtypes
L. Ballesio, S. Gigli, C. Boldrini, C. Catalano; Rome/IT

**B-1331** 14:48
Predictive factor affecting residual metastatic axillary lymph node disease in patient with negative axillary imaging after neoadjuvant chemotherapy for breast cancer
N. Jun, W. Kim; Daegu/KR

**B-1332** 14:56
Impact of image fusion technique for the localisation of the achieved clinically complete response (cCR) lesions in breast conserving surgery after neoadjuvant chemotherapy
S. Nakano, K. Fujii, T. Ando, T. Ishiguchi; Nagakute/JP

**B-1333** 15:04
Early evaluation of pathological response to neoadjuvant chemotherapy in breast cancer using quantitative 1H-MRS
M. Signorini, L. Camera, I. Baglio, G. Meliádo, C. Cavedon, S. Montemezzi, Verona/IT

**B-1334** 15:12
Comparative evaluation of MR spectroscopy choline signal-to-noise ratio (SNR) with ki-67 as a prognostic indicator
S.B. Grover, P. Jain, S. Suman, S. Jain, A. Mandal; New Delhi/IN

**B-1335** 15:20
Assessment of response to neo-adjuvant chemotherapy in breast carcinoma using shear wave elastography
V. Ramalingam, S. Hari, S.B. Paul, S. Thukar, S. Vyas, A. Gogia, S.V.S. Deo, V. Seenu, S. Mathur, V. Sreenivas; New Delhi/IN

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<th>14:00 - 15:30</th>
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<td><strong>Musculoskeletal</strong></td>
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**SS 1910a**
**Performance optimisation in musculoskeletal imaging**

**Moderators:**
D. Berritto; Acerra/IT  
J. Hodler; Zurich/CH

**B-1336** 14:00
High prevalence of vitamin D insufficiency among radiologists: are we a profession at risk?
C.A. Anton, B. Fritz, S. Bensler, A.B. Rosskopf, L. Margaroli, C.W.A. Pfirrmann, Zurich/CH

**B-1337** 14:08
Comparison study of growth plate fusion using MRI vs plain radiographs for age determination
A.A. Jain, N. Bahri, H. Parekh, S. Chudasama; Jamnagar/IN

**B-1338** 14:16
Computer-aided bone age assessment of the wrist and carpal bones in comparison to Greulich and Pyle atlas method

**B-1339** 14:24
Can initial radiographs prevent useless dual-energy CT for urate crystal detection in work-up of gouty arthritis?
T. Finkenstaedt, S. Kupfer, S. Winkhofer, S. Tok, A. Becker, H. Alkadhi; Zurich/CH
B-1341 14:32
ETD score: a pre-surgical prognostic evaluation in acetabular labrum's pathology on magnetic resonance arthrography
S. Magnani1, S. Sdao2, M. Brioschi1, E. Nocerino1, C. Messina1, S. Rapisarda1, A. Aliprandi1, F. Sardanelli1; 1Milan/IT, 2San Donato Milanese/IT

B-1342 14:40
Errors within the musculoskeletal system: anatomical based checklist derived from discrepancy meeting database
S.C. Chan1, J.R. Weir-McCall1, P.M. Yeap2, R.D. White2, M.J. Budak3, G. Duncan3, B. Oliver4, I.A. Zealley4; 1Dundee/UK, 2Leeds/UK, 3Cardiff/UK

B-1343 14:48
Ampleness of pertinent patient history on MRI spine referral forms
A.H. Rajaram; Bangalore/IN

B-1344 14:56
Consultation in radiology: reducing unnecessary radiological examinations
S. Stabarski Dobravec, Z. Kumš; Ljubljana/SI

B-1345 15:04
Structured reporting of dual-energy x-ray absorptiometry exams for osteoporosis evaluation: a time-saving approach to creating high-quality reports

B-1346 15:12
Structured reporting for x-ray examinations of the shoulder: is there an advantage over free text reports?

14:00 - 15:30 Room G
Musculoskeletal

SS 1910b
Knee

Moderators:
M. Shahabpour; Brussels/BE
E.J. Ulbrich; Zurich/CH

B-1347 14:00
Middle patellar tendon to posterior cruciate ligament (PCL): a new index for tibial tubercle position in patients with patellar instability (PI)
G. Pozzi1, I. Merli1, J. Almolla1, R. Mesquita2, L.M. Sconfienza1; 1Milan/IT, 2San Donato Milanese/IT, 3Lisbon/PT

B-1348 14:08
Suprapatellar fat-pad signal alteration on MRI is associated with degeneration of the patellofemoral joint over 48 months: data from the OAI

B-1349 14:16
Contribution of SWI at 3T: detecting intraarticular haemosiderin accumulation in haemophilia patients
B. Alyuz1, A.V. Polat, M. Ozturk, K. Aslan, L. Tomak, M.B. Selcuk; Samsun/TR

B-1350 14:24
MRI evaluation of knee osteochondritis dissecans treated with a cell-free biomimetic osteochondral scaffold vs microfracture technique: a multicenter randomised experience

B-1351 14:32
Patellar malalignment: a new method on knee MRI
H. Kurtul Yildiz; E.E. Ekin; Istanbul/TR

B-1352 14:40
T2-mapping correlates with histopathological degree of meniscal degeneration

B-1353 14:48
Microstructural evaluation of the anterior cruciate ligament (ACL) with MR-diffusion tensor imaging (DTI): correlations with knee stability
I. Voicu, L. Di Clemente, R. Navarra, P. Mattei, V. Panara, A. Cotroneo, M. Caumo; Chieti/IT

B-1354 14:56
MRI characteristics of torn and untorn menisci
R. Kijowski; A. Williams, H. Rosas, F. Liu; Madison, WI/US

B-1355 15:04
Diffusion tensor imaging of the anterior cruciate ligament (ACL) with MR-diffusion tensor imaging (DTI): correlations with knee stability
I. Voicu, L. Di Clemente, R. Navarra, P. Mattei, V. Panara, A. Cotroneo, M. Caumo; Chieti/IT

B-1356 15:12
T2 relaxtion times in patients after ACL-repair with and without femoral notch sign
C. Behzadi, G.H. Welsch, A. Laqmani, F.O. Henes, G. Schoen, G. Adam, M. Regier; Hamburg/DE

B-1357 15:20
Diffusion tensor imaging of the anterior cruciate ligament graft at 3 Tesla: a feasibility and reliability study
P. Van Dyck1, E. De Smet2, M. Froeling2, P. Pulleyn2, M. Torfs1, P. Veroon1, J. Sijbers3, P.M. Parizel1, B. Jeurissen4; 1Munich/DE, 2Utrecht/NL, 3Antwerp/BE, 4Wilrijk/BE

14:00 - 15:30 Room K
Radiography practice

SS 1914

Moderators:
J.M. Saude; Porto/PT
D. Tscholakoff; Vienna/AT

B-1358 14:00
Elasticity characterisation of vastus lateralis muscle by ultrasound quasi-static elastography
R.A. Santos1, M. Valamatos2, P. Mil-Homens2, P. Armada-da-Silva2; 1Coimbra/PT, 2Lisbon/PT

B-1359 14:08
Sonographer’s ability to detect and grade pathological findings in shoulder radiograph
M.J. Pakanen, J. Haverinen, M. Heiskanen, E. Liukkonen, J. Niinimäki; Oulu/FI

B-1360 14:16
Thickness and echo-intensity characterisation of quadriceps muscle by ultrasound
R.A. Santos, F. Alves, M. Matos, A. Fidalgo, A. André; Coimbra/PT
**B-1367 14:24**  
Bioethics education for radiographers in Europe  
A. Santos; Coimbra/PT

**B-1361 14:32**  
Sonographer’s ergonomic pains, who cares  
M. Abd El Badi, F. Alkubaidan, A. Alikhall, R. Albabtain, A. Wazira, N. Butt, A. Mohammed; Riyadh/SA

**B-1362 14:40**  
Our experience with gamma knife treatment planning  
A. Fedorov, A. Lavrentyeva; St. Petersburg/RU

**B-1363 14:48**  
Radiation exposure assessment in educational setting: spine surgical programme with procedures simulated on cadavers  

**B-1364 14:56**  
Virtual autopsy: the role of CT and MRI  

**B-1365 16:04**  
Comparative study of plain radiography from three digital acquisition systems applied to works of Art  
B. Barros, M.M.C.P. Ribeiro, D.A. Ramos, M.H.P. Martins, A. Candeias; Lisbon/PT

**B-1366 15:12**  
An investigation into interface pressure (IP) and pressure ulcer (PU) risk of healthy volunteers whilst lying on medical imaging and radiotherapy tables  

**B-1368 15:20**  
Development of software for image quality assessment in cone-beam computed tomography  
M.V.L. Olivera, A.C. Santos, G. Paulo, P. Campos, J. Santos; Salvador/BR, ‘Coimbra/PT

**B-1367 14:24**  
Detection of cardiovascular disease with MRI myocardial texture changes on routine non-contrast sequences  
P. Talaczyn, J. Weir-McCall, S. Waugh, P. Guntur Ramkumar, G. Houston; Dundee/UK

**B-1373 14:32**  
On the selection of region of interest in measurement of cardiac magnetic resonance imaging T2* in patients with thalassaemia major  
S. Gholami Bardej, M. Dodangh, Z. Gholami Bardej, S. Sefidbakh, R. Jalil; Shiraz/IR

**B-1374 14:40**  
Myocardial fibrosis (MF) and its associated ventricular impairment in adults with repaired tetralogy of Fallot (rTOF): role of delayed enhancement cardiac magnetic resonance (DE-CMR)  
G. Schivazappa, R. Faletti, F. Angelino, A. Romano, M. Gatti, E. Caramia, F. Misichi, P. Fonio, G. Gandini; Turin/IT

**B-1375 14:48**  
Cardiac MRI with T1 and T2 mapping in patients with phenylketonuria (PKU)  

**B-1376 14:56**  
Myocardial T1- mapping in daily cardiac magnetic resonance study in hypertrophic cardiomyopathy  
O.Y. Dariy, S. Aleksandrova, M. Shlyappo, V. Makarenko, L. Bockeria; Moscow/RU

**B-1377 15:04**  
Diagnostic significance of MRI in patients with myocarditis  
M. Divad, R. Maksimovic, B. Banko, I. Živkovic, I. Milinkovic, P. Seferovic; Belgrad/RS

**B-1378 15:12**  
Meta-analysis on pre-ablation late gadolinium enhancement predicting post-ablation recurrence of atrial fibrillation  
K. Diao, Z. Yang, Q. Zhao, B. Hu, X. Liu; Chengdu/CN

**B-1379 15:20**  
Pulmonary reperfusion injury following right ventricular outflow tract stenting  
O.D. Garcia, J. Sandoval Jones, G. Aristizabal Villa; Mexico City/MX

**B-1380 14:09**  
Initial experience in percutaneous cryoablation for breast cancer  
C. Pucescdu; Cagliari/IT

**B-1381 14:17**  
Breast cancer cryoablation in elderly patients  

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**SS 1903**  
**Myocardial tissue characterisation and texture analysis II**  
Moderators:  
S. Bayraktaroglu; Izmir/TR  
N. Galea; Rome/IT

**B-1369 14:00**  
Fast, precise and accurate myocardium T1 mapping using a radial modified look locker NMR imaging sequence  
B. Marty, B. Coppa, P.G. Carlier, Paris/FR

**B-1370 14:08**  
The value of feature/contour-based registration in quantification of myocardial extracellular volume fraction based on T1 mapping technique  

**B-1371 14:16**  
Diffusion weighted imaging in cardiac magnetic resonance for diagnosis of acute myocarditis: could it be the missing criteria?  
L. Pavan, R. Faletti, F. Gentile, E. Caramia, M. Gatti, G. Schivazappa, A. Romano, P. Fonio, G. Gandini; Turin/IT

**B-1372 14:24**  
Breast cancer cryoablation in elderly patients  

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**SS 1902b**  
**Image-guided breast interventions and radiologic-pathologic correlation**  
Moderators:  
G. Forrai; Budapest/HU  
J. Raposo; Lisbon/PT

**K-27 14:00**  
Keynote lecture  
G. Forrai; Budapest/HU

**B-1380 14:09**  
Initial experience in percutaneous cryoablation for breast cancer  
C. Pucescdu; Cagliari/IT
Scientific Sessions

B-1382 14:25
Dosimetric and clinical detail detectability performance of a new dedicated tomosynthesis-guided prone breast biopsy system
S. Grisotto, M. Borroni, E. Mazzarella, T. Giandini, C. Tenconi, A. Primolevo, F. Cartia, C. Ferranti, G. Scaperrutta; Milan/IT

B-1383 14:33
Role of tomosynthesis-guided biopsy (3D VAB) in reducing uncertain biological potential lesions (B3) overtreatment, detected with tomosynthesis as architectural distortions
G. Romanucci1, S. Brunelli1, P. Bricolo1, L. Cugola1, A. Caneva2, F. Caumo1; 1Verona/IT, 2San Bonifacio/IT

B-1384 14:41
Outcomes of vacuum-assisted biopsy for B3 breast lesions
N. Larkman, N. Sharma, Leeds/UK

B-1385 14:49
Prospective follow-up of patients with B3 lesions over a 4-year period
N.D. Forester, N. Altaf; Leeds/UK

B-1386 14:57
Non-surgical complete excision of small suspicious breast lesions using the breast lesion excision system BLES
N.M. Abdel Razek; Cairo/EG

B-1387 15:05
Gene expression profiling of breast cancer: associations among mammographic microcalcifications, ERBB2 and immunity
S. Shin, A. Chu, S. Song, W. Han, J. Kim, W. Moon; Seoul/KR

B-1388 15:13
Triple-negative breast cancer: MR imaging findings associated with clinical-pathologic factors
K. Lee, S. Kim, B. Kang, I. Yoon; Seoul/KR

B-1389 15:21
Systematic review of breast lesions of uncertain malignant potential (B3 lesions) and their risk of malignancy
N.D. Forester, S. Lowes; Newcastle/UK

14:00 - 15:30 Room M 5

Neuro

SS 1911b
Epilepsy and brain gadolinium deposition
Moderators:
N. Bargalló; Barcelona/ES
T. Rostovtseva; St. Petersburg/RU

B-1390 14:00
Integrated FDG-PET/MRI in patients with drug resistant epilepsy
C. Deuschl1, T. Rüther2, L. Ernst1, J. Kirchner1, V. Ruhmann1, T. Pöppel1, M. Försting1, C. Elger1, L. Umutlu1; 1Essen/DE, 2Bonn/DE, 3Düsseldorf/DE

B-1391 14:08
Task specific alterations of the functional language connectome in patients with temporal lobe epilepsy

B-1392 14:16
Correlation of language lateralisation with resting state hippocampal connectivity in temporal lobe epilepsy patients
A.M. Koc1, A.Y. Oner2, H. Ozer2, M. Guryildirim3, E.T. Tali2; 1Izmir/TR, 2Ankara/TR, 3Chicago, IL/US

B-1393 14:24
Dynamic changes in internetwork functional connectivity of resting state networks in intractable mesial temporal lobe epilepsy
C. Zhang, K. Li, N. Chen, H. Yang; Beijing/CN

B-1394 14:32
Localisation of the epileptogenic neural network by the resting state fMRI in patients with temporal lobe epilepsy
O. Omelchenko, M. Makarchuk; Kiev/UA

B-1395 14:40
Disrupted fronto-hippocampal language network in patients with temporal lobe epilepsy

B-1396 14:48
Arterial spin labeling (ASL) in acute seizure
B. Law-Ye, M. Schertz, N. Pyatigorskaya, S. Belkacem, D. Dormont, D. Leclercq; Paris/FR

B-1397 14:56
Does radiation therapy increase gadolinium accumulation in the brain: quantitative analysis of T1 shortening using R1 relaxometry in glioblastoma multiforme patients
W. Lim, S. Choi; Seoul/KR

B-1398 15:04
Evaluation of gadolinium brain deposits in melanoma patients: a retrospective study
J.L. Moreno Negrete, J.C. Soler, N. Borges Ribeiro Vaz, S. Podlipnik, L. Oleaga Zufiria; Barcelona/ES

B-1399 15:12
Minimising the confounding effect of gadolinium contrast on subsequent ferumoxytol MRI in the brain
C.G. Varallyay, G. Toth, A. Horvath, L. Szidonya, E. Youngers, E.A. Neuwelt; Portland, OR/US

B-1400 15:20
Gadolinium brain retention: detection and quantification of gadolinium based contrast agents in the cerebrospinal fluid in rats
G. Jost, J. Lohrke, T. Frenzel, H. Pietsch; Berlin/DE
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<td>12:30</td>
<td>Clinical Trials in Radiology 1</td>
<td>R.M. Trimboli; G. Di Leo; D. Sacchetto; Álvarez Benito; R.M. Mann; E. Wienkel; F. Cartia; M. Lobbes; K. Pinker-Domenig; J. Veitman; K. Siegmann-Luz; C. Zuliani; I.-M. Obdeijn; C. Baileyguier; U. Aksoy Ozcan; M. Docena; F. Pediconi; S. Weigel; J. Anderson; J. Camps Herrero; M. Calabrese; C. Losio; R. Ienzi; S. Harms; M. Van Goethem; G. Forrai; F. Gilbert; T.H. Helbich; H. Nehmat; F. Sardanelli; San Donato Milanese; Turin; Nijmegen; Erlangen; Maastricht; Vienna; Almelo; Tübingen; Udine; Rotterdam; Maastricht; Villejuif; Istanbul; Sao Paolo; Rome; Münster; Perth; Alzira; Genoa; Palermo; Fayetteville; Perth; Antwerp; Budapest; Cambridge; Sydney.</td>
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<td>12:45</td>
<td>The MICRA trial: Minimally Invasive Complete Response Assessment of the breast after neoadjuvant systemic therapy</td>
<td>M.E.M. van der Noordaa; F.H. van Duijnhoven; C.E. Loo; I. de Zwart; K. van den Vijver; G. Sonke; C.C. van der Pol; A. Francken; M.-J.T.F.D. Vrancken Peeters</td>
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<td>13:00</td>
<td>The MULTIPROS study - Multiparametric MRI with subsequent randomisation to MRI/US fusion guided biopsy vs TRUS biopsy in the diagnosis of prostate cancer</td>
<td>M.J. Szewczyk-Bleda; C. Wei; S. Vinnicombe; S. Lang; G. Nabi</td>
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<td>13:15</td>
<td>Study design and inclusion ROBINSCCA trial: large-scaled population based (CT) screening trial for cardiovascular disease</td>
<td>C. van der Aalst; M. Wonder; J. Gratale; M.A. van Aerde; D. Kuijpers; H. de Koning; M. Oudkerk; Rotterdam; Groningen; Apeldoorn; The Hague</td>
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Clinical Trials in Radiology

**Thursday**
12:30 - 13:30 Room M 1

### Clinical Trials in Radiology 2

**Moderators:**
- R. Baron; Chicago, IL/US
- M. Dewey; Berlin/DE

**12:30**
**Non-invasive treatment of osteoid osteoma with MRgFUS in paediatric patients only: a retrospective multicentre study**

F. Arrigoni¹, A. Napoli², L. Zugaro², R. Scipione², A. Barile¹, C. Catalano¹, C. Masciocchi¹; ¹L’Aquila/IT, ²Rome/IT

**12:40**
**Discussant:**
L.-S. Ording Müller; Oslo/NO

**12:45**
**Iodixanol versus iopromide in contemporary coronary CT angiography: lumen opacification and effect on heart rhythm in the randomised IsoCOR trial**

M.M. Lubbers¹, A. Coenen¹, A. Niezen¹, M. Kock³, T. Galema¹, M. Kofflard³, T. Bruning¹, S. Kooij³, F. Nous¹, H. van Valen¹, M. Dijkshoorn³, R. Booij¹, R. Budde, K. Nieman¹; ¹Rotterdam/NL, ²Dordrecht/NL

**12:55**
**Discussant:**
G.A. Krombach; Giessen/DE

**13:00**
**Comparison of pretest probability with prevalence of obstructive coronary artery disease using invasive coronary angiography or computed tomography angiography**

S. Feger, M. Dewey, on behalf of the DISCHARGE consortium; Berlin/DE

**13:10**
**Discussant:**
C. Loewe; Vienna/AT

**13:15**
**Diagnostic value of novel MRI techniques for the primary staging and restaging of rectal cancer: multicentre study**

D.M.J. Lambregts¹, M. Maas¹, R. Beckers², M. van Heeswijk², B. Hupkens³, J. Houwers³, N. Peters³, R. Vliegen³, P. Kint³, J. Wijsman³, B. Mearadji³, P. Tanis¹, M. Osinga-de Jong³, E. Belgers³, R. Ooms³, F. van Dielen³, A. Daniëls-Gooszen³, H. Rutten³, L. Oudenhoven³, I. Faneyte³, M. Lahaye³, G. Beets³, F. Bakker³, R.G.H. Beets-Tan³; ¹Amsterdam/Maastricht/NL, ²Maastricht/NL, ³Heerlen/Sittard/NL, ⁴Breda/NL, ⁵Veldhoven/NL, ⁶Eindhoven/NL, ⁷Hengelo/Almelo/NL

**13:25**
**Discussant:**
U. Attenberger; Mannheim/DE
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Wu H.-M.: B–0862
Wu J.F.: B–0782
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Wurnig M.C.: B–0300, B–0466, B–0504
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Wyschekon S.: B–0332, B–1082
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Xu K.: B–0123
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Lemmerling M.M.: E3 1726a
Liu Y.: ESR/EOR/TC
Llopis E.: SS 310
Lobbes M.B.I.: SS 1002
Luciani A.: SS 1416
Lucic M.A.: SS 711, ESR/ESOR 3
Lukas C.: SS 211b
Lurje D.J.: EF 2

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Maci F.: SS 1017
Magnano G.M.: E3 1526b
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Maj E.: RC 1311
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Mann R.M.: SS 1802a
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Mechl M.: SS 614
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Mentzel H.-J.: SS 1412
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Mershina E.: SS 704
 Mizzi A.: RC 114
Montet X.: SS 1804
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Muscat K.: SS 214

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Natale L.: SS 314
Negra A.: SS 1411
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Nievelstein R.A.J.: SS 1512
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Njagulji V.: RC 1210

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Occhipinti M.: E3 1526a
Offiah A.C.: RC 512
Omouni P.: SS 1010
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Oot R.F.: SS 1511
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Oudeman J.: SS 710
Owens C.: WG 1
Oyen R.H.: RC 1307
Özbek S.S.: BS 5

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Pagonidis K.: RC 1603
Palkó A.: SS 214
Palm M.: SS 1811b
Papadaki E.: RC 814
Papakonstantinou O.: RC 1710
Papakonstantinou N.: BS 3
Parizel P.M.: EM 1, EM 2, EM 3, ESR
Pediconi F.: RC 1302
Peér S.: SS 210
Pellicanò G.: SS 1811a
Pereira P.L.: E3 1526
Perez Fernandez C.M.: SS 1011a
Pershina E.: SS 1403a
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Pulido J.M.: SS 609
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Rossi A.: RC 912
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Taina M.: SS 211a
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Thust S.: SS 711
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Tsatsoufatas I.A.: SS 613
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Tsetis D.K.: E3 526b
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Wirth S.: SS 317
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