The European Society of Radiology
A truly global affair

North America (US & CA) 8%
Europe 41%
Asia 30%
Latin America 16%
Africa 4%
Oceania 1%
MEMBERS
The largest radiological society in the world

101,154

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CHAIRPERSON’S ADDRESS

By Bernd Hamm

I am pleased to say that 2018 was a truly outstanding year for our society. We set many new records and broke some of our previous ones. I am therefore extremely proud to present to you the ESR Annual Report and invite you all to take a look.

Some of the projects and subjects most dear to my heart were the various innovations at ECR 2018. As a motto for our annual meeting in March, we chose ‘divers & united’, and I am sure that many of you fondly remember mingling with your fellow attendees from all over the world, from many different countries, and many diverse cultures. The ECR is also a multi-professional meeting, where international experts shake hands with students and medical residents, exchange ideas with medical physicists and radiographers, and share their research findings and scientific ideas within the radiological community. Diversity was also a characteristic of the programme, with something to offer for everyone, regardless of profession or specialisation. Despite the all-time low outside temperatures in Vienna, which were far below zero, we were proud to welcome a record 28,474 participants from 137 countries to Austria’s capital. And we attracted a young audience, with an average age of 42!

To ensure that our meeting remains attractive, especially for the young generation, we launched many innovations. The ‘MyT3 sessions’ are a challenging, exciting format in which early career radiologists get to present their theses in only three minutes, adapting the ECR even more to these fast-living times. The ‘Sky High Stage’ on the roof-top of the skyscraper next to the congress centre added to the dramatic set-up and also metaphorically underlined that the sky is the limit for this new generation of radiology professionals. These sessions were very popular and attendance exceeded all expectations. Therefore, this session format will be continued at ECR 2019.

Just as we increased the stress level for MyT3 contributors, we had to balance this and provide some relaxation, so we introduced ‘Coffee & Talk sessions’. Thanks to this new addition to the ECR, participants can now listen to the most important presentations while enjoying a cup of coffee or tea and discuss topics in a less formal atmosphere.

Also for the first time, the ‘Cube’ opened its doors: a theme park for interventional radiology, designed for residents before specialisation. In a building next to the congress centre, dedicated challenges, quizzes, training and much more focused on IR in emergencies and daily topics, including the aorta, peripheral vessels, oncology, and stroke. Young radiologists even had the opportunity to gain practical experience on simulators.

Additionally, we introduced the ‘Shape Your Skills’ programme, targeted at radiographers, to emphasise once again that the ECR is also the European congress of radiographers.

International cooperation is important and the scientific exchange between countries and continents is crucial in keeping our specialty up to date. In cooperation with the Chinese Society of Radiology, we now provide ECR online in Mandarin. Five hundred of the best lectures from ECR 2018 are now available at chinoradiology.org/en/chinese.aspx. Since the platform’s launch in China, we have counted more than 9,000 online viewers.

For those who cannot come to Vienna or cannot attend all the lectures they are interested in, we introduced ‘ECR online’ a couple of years ago, making all presentations available online to anyone who registers. The onsite visitors and online viewers of this year’s ECR combined add up to an incredibly high total of more than 45,000 attendees. This is way beyond what we had hoped for.

Our ever-growing society has reached the phenomenal number of 101,154 members from 163 countries, up 34% from last year. This is a spectacular success and I would like to thank each and every one of our members for becoming a part of the ESR!

Before you start diving into the details of everything that we have done this year, I would like to share some more fantastic news. As interest in online materials is growing, we also want to set the pace for our specialty in this respect and have introduced a new service this year called ‘ESR Connect’. This service provides high-quality online presentations for radiologists, derived from training courses, discussions and workshops, but also from symposia such as the recent online course on hybrid imaging hosted by the European Society for Hybrid, Molecular and Translational Imaging (ESHM*).

A similar initiative was launched for our European School of Radiology (ESOR) in order to reach an even wider audience in the future. Of course, the online courses are intended to supplement rather than replace our very successful face-to-face courses. Ultimately, we plan to offer 50% face-to-face courses and 50% online courses.

To further harmonise radiology training in Europe and introduce consistent criteria, we adopted a uniform ESR endorsement for all subspecialty certificates, in conjunction with the radiological subspecialty societies. Of course, there are many other ESR activities on which you will find information in this Annual Report.

Last but not least, as my time as chairman of the ESR Board is slowly but surely coming to an end, it is with a bittersweet feeling, that I take this opportunity to extend my sincere thanks to my colleagues on the ESR Board of Directors, the Executive Council and all Committees, Subcommittees and Working Groups for their hard work throughout the year. Your contributions and tireless efforts for our society are dearly appreciated. The ESR continues to innovate and to grow, and so does the variety of our endeavours. Everything in this Annual Report is a team effort. Thank you all!

And now, enjoy the read!

Bernd Hamm
Chairman of the ESR Board of Directors
Chapter 1
ESR Achievements
1. EUROPEAN HOUSE OF RADIOLOGY

In 2018, the ESR relocated to its new head-
quarters at Am Gestade 1, just around the
corner from our former offices in the
city centre of Vienna. Proudly labelled as the
European House of Radiology, the beautiful,
newly renovated Biedermeier building is fully
occupied from ground up by various depart-
ments of the society.

2. INDIVIDUAL AND INSTITUTIONAL MEMBERSHIP

Record membership.
The number of ESR members has been increas-
ing for the last several years. In 2018, we have crossed the 100,000-memb-
er threshold for the first time. With 101,54
members from 165 countries, the ESR further strengthened its position as the world’s larg-
est radiological society. Eight new member societies joined the ESR in 2018. In cooperation with the Royal Australian and New Zealand College of Radiologists (RANZCR), the Indian Radiological and Nuclear Medicine Society (IRAMS), the Kazakh Society of Radiology, the Radiological Society of the Emirates (RSE), the Radiological Society of the Korean Peninsula (KSR), the Egyptian Society of Radiology (ESR), and the North American federation Radiological and Diagnostic Imaging Society (RANZCR), the ESR ACHIEVEMENTS

Memorandum of Understanding
In 2018, the ESR has Memoranda of Under-
standing with 33 organisations. The ESR renewed its Memorandum of Understanding with the Asian Oceanian Society of Radiology (AOSR), the Canadian Association of Radiol-
ogy (CAR), the American Board of Medical Specialties (ABMS), the European Society for Hybrid Imaging (EUSIPH), the European Society of Molecular and Functional Imaging (EUSMFII), the European Society of Nuclear Medicine (EANM), the European Society for Hybrid Imaging (EUSIPH), the European Society of Molecular and Functional Imaging (EUSMFII), the European Society of Nuclear Medicine (EANM), the European Society of Thoracic Imaging (ESTRI), the European Academy of Radiologists (EAR), the Asian Oceanian Society of Radiology (AOSR), the Royal Austra-
lian and New Zealand College of Radiologists (RANZCR) and the Mexican Society of Radio-
logy (SMR).

3. INTERNATIONAL AND INTERPROFESSIONAL RELATIONS

International Day of Radiology (IDoR)
The International Day of Radiology (IDoR) is an initiative led by the ESR, in cooperation with the Radiological Society of North Amer-
ica (RANO) and the American College of Radiology (ACR), and supported by the Asian Oceanian Society of Radiology (AOSR), the Austra-
lian College of Radiologists (ACR), the Royal Austra-
lian and New Zealand College of Radiologists (RANZCR), the Indian Society of Radiology and Imaging (ISI), the Korean Society of Radiology (KSR), the Egyptian Society of Radiology (ESR), the European Society of Molecular and Functional Imaging (EUSMFII), the European Society of Nuclear Medicine (EANM), the European Society of Hybrid Imaging (EUSIPH), the European Society of Molecular and Functional Imaging (EUSMFII), the European Society of Nuclear Medicine (EANM), the European Society of Thoracic Imaging (ESTRI), the European Academy of Radiologists (EAR), the Asian Oceanian Society of Radiology (AOSR), the Royal Austra-
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lian and New Zealand College of Radiologists (RANZCR) and the Mexican Society of Radio-
logy (SMR).

Further Memorandum of Understanding
The following societies are in the process of renewal and will be signed by or at the ECR 2019: the American College of Radiology (ACR), the Biobanking and Biomedical Resources Research Infrastructure – European Research Infrastructure Consortium (BBMRI-ERIC), the Colombian Association of Radiology (CAR), the Ethiopian Federation of Societies for Ultra-
son in Medicine and Biology (ETHFSUMB), the Korean Society of Radiology (KSR), the Radi-
ology Society of the Caribbean (RRC), the Radiological and Diagnostic Imaging Society of Sao Paulo (SRP).

Cooperation with radiographers
Based on the Memorandum of Understanding (MoU) signed in November 2016 and the record...
participation of 2,177 radiographers from 75 countries at ECR 2018 (+9% compared to ECR 2017). The ESR and the European Federation of Radiographer Societies (EFRS) deepened their cooperation in 2018 and decided on various measures to further increase the visibility of radiographers at ECR 2019 in an effort to boost ESR as home for radiographers and radiology. The numbers of ESR members as well as the number of radiographers also joined ESR as individual members in 2018 leading to a new record 75 countries at ECR 2018 (+9% compared to ECR 2017). The ESR and EFOMP continued their partnership about quality and safety issues, including ESRoSafe Imaging, radiation protection, research and the incorporation of safety aspects into the ECR. The leaderships of both organisations explored avenues of increased promotion and involvement of medical physicists at the ECR.

4. EDUCATION

ESR Connect

Online activities attract, above all, the younger generation, which is vital to secure the future of our profession. Therefore, the ESR has launched ‘ESR Connect’. The project will offer high-quality online content such as news, radiology insights, roundtables, and other forms of radiation education to professionals around the globe.

European School of Radiology (ESOR)

During ECR 2018, Prof. Nicholas Gooszen- iannois, founder of the European School of Radiology (ESOR), after 12 years in office, transferred the leadership of ESOR to Prof. Valérie Vilgrain, new ESOR Scientific/ Educational Director. In 2018 ESOR contin- ued to extend its programmes delivered to residents and board-certified radiologists worldwide. 40 courses were held in Europe, Asia, Brazil, African, and in the United States. Successful in their application to be part of the European Accreditation Council in Imaging (ACI). The ESR continues to support ESOR Friends. The ESR also started to explore possible ways of cooperation with the ESRF (International Society of Radiographers & Radiological Technologists) on matters out- side Europe and cooperated with a number of national radiographer societies.

Cooperation with the European Union of Medical Specialists (UEMS)

Section of Radiology

In 2018, the ESR and the UEMS have con- tinued their fruitful partnership, including cooperation with the Accreditation Council in Imaging (ACI). The ESR continues to support the UEMS Section of Radiology in administrative and management issues. In October, the Council of the UEMS approved the Euro- pean Training Requirements in Radiology i.e. the ESR European Training Curriculum for Radiology (ETC) at ECR 2018. The International Forum was established by the ESR with the aim to intensify the collabo- ration and discuss topics of global relevance in radiology with radiological part- ners societies from outside Europe. It is held yearly during the ECR and participation is by invitation only. The ESR chose the topic ‘val- ue-based radiology’ for the ESR International Forum at ECR 2018 to discuss the trend within radiology to move from volume-based to val- ue-based practice. Again, a paper on the out- comes of the discussion has been prepared for publication in Insights into Imaging.

European Society of Radiology (ESOR)

The European School of Radiology (ESOR), the European Society of Cardiovascular Radiology (ESCOR), the European Society of Cardiovascular Imaging (ESCI) and the European Society of Nuclear Medicine (EANM) each have a respective joint task force with representatives from all societies was set up. The representatives met for the first time in June 2018 to start the development of joint initiatives.

Cooperation with the European Federation of Organisations for Medical Education (EFME) on Medical Physics (EFMP)

Based on the Memorandum of Understand- ing which was renewed for another two years at ECR 2018, ESR and EFOMP continued their partnership about quality and safety issues, including ESRoSafe Imaging, radiation protection, research and the incorporation of safety aspects into the ECR. The leaderships of both organisations explored avenues of increased promotion and involvement of medical physicists at the ECR.

ESR International Forum

The International Forum was established by the ESR with the aim to intensify the collabo- ration and discuss topics of global relevance in radiology with radiological part- ners societies from outside Europe. It is held yearly during the ECR and participation is by invitation only. The ESR chose the topic ‘val- ue-based radiology’ for the ESR International Forum at ECR 2018 to discuss the trend within radiology to move from volume-based to val- ue-based practice. Again, a paper on the out- comes of the discussion has been prepared for publication in Insights into Imaging.

Cooperation with the European Society for Radiotheraphy & Oncology (ESTRO)

In the past years, the ESR and ESTRO have been successfully working together. On Feb- ruary 26, the two societies renewed their Memorandum of Understanding for another two years in an effort to further strengthen their cooperation in the future. A joint session was organised at the respective congresses in 2018. ESTRO was further invited by the ESR to offer a session on the treatment of Lung Cancer Stage IA, which has been agreed upon by the ESR and the European Respiratory Society (ERS).

Cooperation in the field of cardiac and cardiovascular radiology

Based on the multidisciplinary Memorandum of Understanding, which were publicised in the ESR / the European Society of Cardiovas- cular Radiology (ESCOR), the European Society of Cardiology (ESC), the European Society of Cardiac Imaging (ESCI) and the European Association of Nuclear Medicine (EANM) a respective joint task force with representatives from all societies was set up. The representatives met for the first time in June 2018 to start the development of joint initiatives.

Cooperation with the European Organisation (ECOO)

The ESR continues to be involved in var- ious ECOO ventures, including the ECOO Oncopolicy Committee, the ECOO Essential Requirements of Quality Care Project and the ECOO Summit 2018 which took place in Vienna in September. With Prof. Regina Beets-Tan on the ECOO Board, the ESR has been actively involved at the highest level within ECOO. Two of the ESR’s Subspecialty and Allied Sciences member societies were successful in their application to be part of ECOO - The European Society of Oncologic Imaging (EOSI) and the European Soci- ety for Hybrid, Molecular and Translational Imaging (ESHTI) have joined the ranks of the ECOO member societies. The ECOO General Assembly took place once more in November in Brussels.

Cooperation with the European Cancer Organisation (ECCO)

The Council of the UEMS approved the Euro- pean Congress of Radiology (ECR) programme of the ECR. The leaderships of both organisations explored avenues of increased promotion and involvement of medical physicists at the ECR.

In 2018, the ESR and the UEMS have con- tinued their fruitful partnership, including cooperation with the Accreditation Council in Imaging (ACI). The ESR continues to support the UEMS Section of Radiology in administrative and management issues. In October, the Council of the UEMS approved the Euro- pean Training Requirements in Radiology i.e. the ESR European Training Curriculum for Radiology (ETC) at ECR 2018. The International Forum was established by the ESR with the aim to intensify the collabo- ration and discuss topics of global relevance in radiology with radiological part- ners societies from outside Europe. It is held yearly during the ECR and participation is by invitation only. The ESR chose the topic ‘val- value-based radiology’ for the ESR International Forum at ECR 2018 to discuss the trend within radiology to move from volume-based to val- value-based practice. Again, a paper on the out- comes of the discussion has been prepared for publication in Insights into Imaging.

ESR ACHIEVEMENTS

CHAPTER 1

ESR ACHIEVEMENTS

ANNUAL REPORT 2018

Chapter 1

ESR ACHIEVEMENTS

ANNUAL REPORT 2018

ANNUAL REPORT 2018
The Invest in the Youth programme gives young ESR Invest in the Youth promote the future of radiology. ESR’s Annual Congress attended ECR. The ESR continues to back with previous undergraduate students who as social media outreach and interviews and ECR through proactive methods such ESR Subcommittee on Undergraduate Edu- cation Radiological Education, which will be 2. CONGRESS The ECR 2018, under Programme Planning Chair Prof. Bernd Harn hit a new all-time record attendance of 28,474 participants in total, including 13,848 pro- fessional delegates, which represents an 8% increase compared to ECR 2017. Room attendance rose 10–11% throughout all days of the congress. ECR 2018 was characterised by the introduc- tion of new session formats, new locations, scientific highlights and a booming technical exhibition with more than 300 companies. The new My Thesis in 3 Minutes (MyTh) sessi- ons offered residents and young radiologists the opportunity to present their theses in just three minutes. The new Coffee & Talk sessi- ons offered an open forum for discussion. A new support programme, ‘Shape Your Skills’, was introduced for radiographers and a radiographers’ evening was organised for the first time.

To accommodate the growing number of attendees, two new locations, namely the ‘Sky High Stage’ and ‘The Cube’, were added to the main congress building, creating one big ‘ECR City’. Hosting a series of dedicated session formats, the Cube was the biggest inter- ventional radiology (IR) event ever to take place at ECR. Among the scientific highlights, the topic of artificial intelligence stood out. The programme was also broadcast via ECR Online (www.ecronline.es).

3. PUBLICATIONS

European Radiology / Insights into Imaging / European Radiology Experimental / EPOS / EURORAD

The ESR journals have seen a significant increase in submissions and downloads, underlining the importance of these publica- tions within the radiological community. The flagship journal European Radiology (www.europeanradiology.org) received an Impact Factor of 2017 of 5.0, which marks the second highest score since its foundation and strengthens its position as Europe’s num- ber one journal for general radiology. This insights into imaging (www.3-journal.org) was able to attract more submissions, whilst also continuing its trend of growth in reader base. European Radiology Experimental (www.exp.org) continued its successful jour- nally and received an increase in submissions. Addi- tionally, as of November 2018, the journal is indexed in PubMed.

Looking at the popular electronic poster database EPOS®, its quick-and-easy presentation format, the Voice of EPOS® attracted more attendees and pos- itive feedback during the congress. As EPOS® is ECR, the ESR is taking the lead in this project through the ESR- owned Quality and Safety in Imaging GmbH. From this point on, the ESR continues supporting radiologists and their central role in patient care through the ESR Value-Based Radiol- ogy Subcommittee.

ESR publications in Insights into Imaging in 2018

- ESR paper on the use of professional de- vices in radiology (March 2018)
- The ESR Audit Tool (Esperanto): genesis, contents and pilot (September 2018)
- Radiology trainees forum survey report on workplace satisfaction, ESR education, mobility and stress level (September 2018)

4. 7. PROFESSIONAL ISSUES & ADVOCACY

ESR and quality and safety activities Quality of care and patient safety in radi- ology; working together to reach the ESR does. The ESR, Quality, Safety and Standards Committee, under the leadership of Committee Chair Dr. Adrian P. Brody, is in charge with developing and implement- ing quality and safety initiatives focusing on residency training through its dedicated sub- committees and working groups. Several activities on clinical audit, e-health and radi- ation protection issues were developed and promoted to improve healthcare in Europe and abroad. These also include quality and safety guidelines, which are linked to the ESR’s EU and international affairs efforts, such as the ESR Action Plan for Medical Imaging to improve European healthcare systems, and the EuroSafe Imaging Campaign to strengthen medical radiation protection across Europe. To ensure the ESR’s guidelines for appropri- ate imaging are as widely available as pos- sible, the ESR iGuide portal was launched during ECR 2018. The ESR iGuide portal is a one-stop-shop that contains the ESR’s guidelines for a variety of conditions and can be accessed via the ESR website as well as on ECR Online.

- ESR EuroSafe Imaging

As of December 2018, the EuroSafe Imaging (www.eurosafefirmaging.org) campaign has attracted more than 5,100 ‘Friends’, includ- ing more than 350 institutional support- ers. EuroSafe Imaging’s main achievement in 2018 was the launch of the new Call for Action 2018. In addition, EuroSafe Imaging focused on ESR education, clinical diagnostic reference levels (DRLs), the expansion of the network of EuroSafe Imaging Stars, and on communications outreach activities as well as on education. The EuroSafe Imaging poster exhibition at the ECR 2018 attracted a record number of visitors. A new EuroSafe Imaging working group, the ESR iGuide Implementation and Promotion working group, was also estab- lished in 2018.

5. 7.1. ESR imaging referral guidelines - Clinical Decision Support (CDS)
The ESR’s guidelines for appropriate imaging referrers to existing referral workflows to support healthcare providers in utilizing medical imaging more appropriately to the benefit of patients. The ESR strongly encourages all radiologists to become an active stakeholder in the area of artificial intelligence in healthcare. Inter- action has taken place via e-mail and phone calls. European Commission expert groups, bilat- eral contacts, and through participation in stakeholder events and relevant consulta- tions. In a drive to emphasise implementa- tion of EU health policies for the benefit of patient outcomes, the ESR is working the very well-attended ‘From Health Policy to Practice: Medical Imaging as an Example’ conference held in Brussels on 5–6 June 2018, as part of the Digital Technology Adoption policy event at the European Parliament on June 6, 2018. The changing political landscape and the 2019 European elections encouraged the ESR to reinforce its policy ambitions for 2019 and beyond to ensure radiology remains at the centre of the healthcare debate.

European Commission project on clinical diagnostic reference levels

The ESR is leading the EC tender project EULID (European Study on Clinical Diag- nostic Reference Levels for X-ray Medical Imaging). This project started in 2017. In 2018, its main activity was the prepara- tion of surveys to collect patient data from the participating European centres for the establishment of clinical DRLs for 10 pre-
defined CT indications and 4 predefined interventional radiology procedures. Data collection started in June 2018 and will finish in early 2019.

Audit and standards
As a result of the work produced on the Clinical and Professional Issues and Economics in Radiology: a comprehensive approach for radiation protection’, the Subcommittee’s work was on artificial intelligence (AI), as one of the current hot topics. The main focus of the eHealth and Informatics Subcommittee’s work was on artificial intelligence (AI), as one of the current hot topics.

The ESR Working Group on Ultrasound, following on the success of the ESR Ultrasound Committee’s work, was turned into a subcommittee to reflect its importance and long-lasting character. The turning of the working group into the ESR Ultrasound Subdivision was approved by the ESR Executive Council in July 2018. An ESR Paper on ‘Abdominal applications of ultrasound fusion imaging technique: Liver, kidney and pancreas’ was developed by the subcommittee. The paper was approved by the ESR Executive Council in November 2018 and submitted to Insights into Imaging. The following sessions were held at ECR 2018: Ultrasound: ‘Guidelines for sonographic reporting in musculoskeletal radiology’ and ‘Standardisation of ultrasound reporting of lesions in the upper abdomen’.

Current practice of ultrasound (US) in the UK/EUropean ESR Working Group on Ultrasound was turned into a subcommittee to reflect its importance and long-lasting character. The turning of the working group into the ESR Ultrasound Subdivision was approved by the ESR Executive Council in July 2018. An ESR Paper on ‘Abdominal applications of ultrasound fusion imaging technique: Liver, kidney and pancreas’ was developed by the subcommittee. The paper was approved by the ESR Executive Council in November 2018 and submitted to Insights into Imaging. The following sessions were held at ECR 2018: Ultrasound: ‘Guidelines for sonographic reporting in musculoskeletal radiology’ and ‘Standardisation of ultrasound reporting of lesions in the upper abdomen’.

Digital Imaging Adaption Model (DIAM)
The Digital Imaging Adaption Model (DIAM) project, a joint initiative of the ESR and the Healthcare Information and Management Systems Society (HIIMSS), was launched in 2016. As of December 2018, 58 institutions from 18 countries had completed the 3-stage DIAM certification process and received their tailored gap-report. The DIAM has been involved in the expansion of the DIAM model into the field of Enterprise Imaging (EI) – the DIAM EI model entered its pilot phase in October 2018 and shall be launched in 2019. This shall work alongside the existing DIAM model.

Professional issues and Economics in Radiology (PIER)
The ESR Professional Issues and Economics in Radiology (PIER) Subcommittee continued providing expert support to the Digital Imaging Adaption Model (DIAM) project, see chapter 4. The subcommittee has further collaborated with the EuroSoft Imaging Steering Committee on action 5: ‘Performance indicators for radiation protection management’ and the updated Call for Action 2018. A paper is planned to be published in Insights into Imaging in 2019. The PIER Subcommittee prepared three sessions for the ECR 2018: ‘Establishing competence in radiology’, ‘Radiology will survive – Validate the radiation protection model still be there?’ and ‘Value-based radiology’. In 2018, the members of the subcommittee worked on 3 sessions for the ECR 2018: collaboration with other ESR bodies, namely ‘Reporting and communication today and tomorrow’, ‘Clinical audit: how to deal with the legal and professional requirements’ in collaboration with the ESR Audit and Standards Subcommittee, and ‘Professional issues for radiology departments to enable research’ in collaboration with the ESR Research Committee.

8. RESEARCH
European Institute for Biomedical Imaging Research (EIBIR)
In the past 12 years, EIBIR (www.eibir.org) has helped researchers obtain more than €6 billion in funding for biomedical imaging research. In late 2018, EIBIR published a Strategic Research Agenda for Biomedical Imaging to support advocacy for the EU’s 9th research framework programme Horizon Europe. It identifies current challenges and needs in healthcare and illustrates how biomedical imaging can help to address these challenges. It also highlights the growing impact and importance of personalised medicine and big data, and emphasises the leading role of biomedical imaging in these areas.

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Furthermore, in 2018, EIBIR successfully concluded one collaborative research project under the Horizon 2020 programme of the European Commission and is managing a further six such projects.

EIBALL
The European Biomarkers Alliance Subcommi- tees (EIBALL) appointed a new Chair in 2017: Prof. Marc Dewey. Under her lead- ership, EIBALL continued its work on setting up an inventory of imaging biomarkers and is now developing two papers: a detailed validation status and a gap-report. EIBALL is working on a set of common data structures related to imaging biomarkers, integrating radiological lexica as well as imaging biomarkers into bio- banks is the main goal of this cooperation. In 2018, the ESR experts of the MIABIS-DICOM Working group supported by the European Institute for Biomedical Imaging Research (EIBIR) started work on expanding and updating image collection descriptions that can be used for AI/machine learning research.

In July 2018, the ESR Research Committee launched a survey on randomised imaging trials and protection, led by Prof. Marc Dewey. This survey aimed to better understand the current situation of randomised imaging trials so as to assist further improvement in their implementa- tion. The survey was sent to 428 Euro- pean heads of imaging departments and all focal areas. The following results were presented to the ESR Working Group on Ultrasound, held in September and the final results and analysis will be published in European Radiology.

Survey on clinical trials in imaging and data sharing
In July 2018, the ESR Research Committee launched a survey on randomised imaging trials and protection, led by Prof. Marc Dewey. This survey aimed to better understand the current situation of randomised imaging trials so as to assist further improvement in their implementa- tion. The survey was sent to 428 Euro- pean heads of imaging departments and all focal areas. The following results were presented to the ESR Working Group on Ultrasound, held in September and the final results and analysis will be published in European Radiology.

Radiation protection research
ESR collaborated with the Australian Medical Radiation Protection Research (EUREM R) was established as a non-profit society regis- tered in Australia in July 2007. 11 member- ing members, the EANN, EFOMP, EFRS, ESR and ESTRO. In 2018, EUREM R focused on enhancing its membership and setting up its committees. EUREM R contributed to the scientific programme of the European Radia- tion Protection Week 2018 held in Rome, Cro- atia. Following the publication of the Strate- gic Research Agenda for medical radiation protection research in 2017, EUREM R is now focusing on developing a research roadmap for medical radiation protection and is col- laborating with other radiation protection platforms to support an integrated approach to European radiation protection.

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Chapter 2
European Congress of Radiology (ECR)
ECR 2018 – ABSTRACT SUBMISSIONS BY TOPIC

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<tr>
<td>Emergency Imaging</td>
<td>91</td>
<td>89</td>
<td>180</td>
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<td>Gastrointestinal Tract</td>
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<td>Genitourinary</td>
<td>271</td>
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<td>Head and Neck</td>
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<td>Interventional Radiology</td>
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<td>91</td>
<td>361</td>
<td>631</td>
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<tr>
<td>Management/Professional Issues*</td>
<td>46</td>
<td>46</td>
<td></td>
<td>92</td>
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<tr>
<td>Molecular and Hybrid Imaging</td>
<td>32</td>
<td>14</td>
<td>46</td>
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<td>Musculoskeletal</td>
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<td>1235</td>
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<td>Nuclear Medicine*</td>
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<td>92</td>
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<td>Neuros</td>
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<td>Oncologic Imaging</td>
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<td>414</td>
<td>607</td>
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<td>Paediatric</td>
<td>126</td>
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<tr>
<td>Physics in Medical Imaging</td>
<td>140</td>
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<td>260</td>
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<td>Radiographers</td>
<td>154</td>
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<td>221</td>
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<tr>
<td>Vascular</td>
<td>190</td>
<td>172</td>
<td>362</td>
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<tr>
<td>Others (Observations)</td>
<td>6</td>
<td>6</td>
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<td><strong>TOTAL</strong></td>
<td>3,439</td>
<td>110</td>
<td>3,759</td>
<td>7,308</td>
</tr>
</tbody>
</table>

1 SP = Scientific Papers, 2 CT = Clinical Trials in Radiology, 3 SE = Scientific and Educational Exhibits, *n/a for Scientific Papers

ECR 2018 – TOP 20 COUNTRIES

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>CONGRESS ATTENDEES</th>
<th>LIVE VIEWERS</th>
<th>TOTAL</th>
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</thead>
<tbody>
<tr>
<td>GERMANY</td>
<td>1,124</td>
<td>284</td>
<td>1,408</td>
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<td>ITALY</td>
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<td>AUSTRIA</td>
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<td>UNITED KINGDOM</td>
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<td>NETHERLANDS</td>
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<td>SPAIN</td>
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<td>ROMANIA</td>
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<td>FRANCE</td>
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<td>CHINA</td>
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<td>RUSSIAN FEDERATION</td>
<td>365</td>
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<td>SWITZERLAND</td>
<td>421</td>
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<td>509</td>
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<td>BRAZIL</td>
<td>251</td>
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<td>PORTUGAL</td>
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<td>INDIA</td>
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<tr>
<td>JAPAN</td>
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<td>TURKEY</td>
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<td>SAUDI ARABIA</td>
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<tr>
<td>NORWAY</td>
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<tr>
<td>SWEDEN</td>
<td>271</td>
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<td>362</td>
</tr>
</tbody>
</table>

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ECR 2018 – FACTS & FIGURES

Participants in 2018
28,474

SCIENTIFIC HIGHLIGHTS AT ECR 2018
- ESR meets China, Portugal and Switzerland
- Latest advances in hybrid imaging
- Artificial intelligence and big data in medical imaging
- New project: Interventional Radiology at the Cube
- New session formats: My Thesis in 3 Minutes, Coffee & Talk
- Educational hands-on workshops
- Enhanced dedicated radiographers’ programme
- Multidisciplinary Sessions with psychiatrists, neurologists, cardiologists, surgeons and pathologists
- Pros & Cons Sessions on dynamic contrast enhancement in prostate mpMRI and the use of gadolinium in imaging

HEADLINE SESSIONS & HONOURS AT ECR 2018
- Presentation of ESR Honorary Membership to
  Richard L. Ehman, Rochester MN/US
  Zheng Yu Jin, Beijing/CN
  Seung Hyup Kim, Seoul/KR
- Wilhelm Conrad Röntgen Honorary Lecture
  Value-based radiology: the future is now!
  Marc Dewey, Berlin/DE
- Presentation of the ESR Gold Medal to
  Lorenzo Bonomo, Rome/IT
  Filipe Caseiro Alves, Coimbra/PT
  Nicolas Grenier, Bordeaux/FI
- Marie Curie Honorary Lecture
  Hybrid imaging: the story so far and what to expect next
  Katrine Riklund, Umeå/SE
- Josef Lissner Honorary Lecture
  Human papilloma virus and head and neck cancer: the new face of malignancy
  Agnieszka Trojanowska, Lublin/PL
- 15th Anniversary of Invest in the Youth Session

ECR 2018 – FACTS & FIGURES

Congress Attendees
13,848
Industry Representatives
8,211
Countries
137
ECR Online Viewers
6,415
Exhibitors from 62 countries
311
Scientific and Educational Exhibits
3,265

Europe’s largest Industrial Exhibition
26,000 m²
Scientific and Educational Sessions
415
Scientific Papers (accepted)
1,668
Invited Lectures
1,005
Voice of EPOS Presentations
720

Radiologists
56.8%
Radiology Residents
16.3%
Medical Physicists
3.2%
Radiography Students
4.6%
Radiographers/Radiological Technologists
2.2%
Students
1.8%
Others
10.8%
Chapter 3

International Day of Radiology (IDOR)
International Day of Radiology (IDoR) 2018

The International Day of Radiology (IDoR) was celebrated for the seventh time on November 8, this year focusing on cardiac imaging, and was joined by supporters all around the world.

More than 170 radiology-related professional societies from around the world participated in the International Day of Radiology 2018, holding a range of different events to celebrate, such as public lectures, department open days, symposia, national media appearances, and press events.

The new IDoR book ‘The HEART revealed. Radiology in the diagnosis and management of cardiac conditions’ was published in October on the IDoR website as downloadable pdf. In addition, a large number of print copies were produced and, upon an initiative of the European Society of Cardiovascular Radiology (ESCR), interested national societies were able to purchase them and distribute them at their respective national congresses (Italy, Russia) or at specific IDoR events they organised (Netherlands, Switzerland). Further, the ESR handed the books over as presents to all ESR institutional member societies’ presidents at the ESR Annual Leadership Meeting in Berlin, which took place one week after the IDoR.

Under the editorial leadership of ESCR President, Professor Jens Bremerich from University Hospital Basel, Switzerland, and Dr. Rodrigo Salgado from Antwerp University Hospital, Belgium, 41 authors from Europe and the United States contributed to the book. Further chapters were provided by the ESR’s EuroSafe Imaging initiative, the European Federation of Radiographer Societies (EFRS), the International Society of Radiographers and Radiological Technologists (ISRRT) and the European Federation of Organisations for Medical Physics (EFOMP).

In addition, 43 interviews with cardiac imaging experts from 38 different countries, conducted by the ESR, were published on the IDoR webpage.

On social media, the International Day saw tremendous feedback throughout various platforms. The IDoR Facebook page, which shared a variety of events, fan posts and general IDoR information, attracted 22,483 likes on IDoR related posts (three times as many as in the previous year) and gained over 1,600 new fans with a peak during the days before the actual event.

On Twitter, which has traditionally seen the biggest buzz for IDoR related social media activities, 9,365 tweets including the hashtag #IDoR2018 have been tweeted, generating a user feed reach of 17.6 million.

The ESR celebrated IDoR 2018 with an internal staff event at its office and was joined by participants of the ESOR for EDiR Courses, which took place throughout the week in the ESR learning centre located on the same premises. This year, the ESR decided to make this a charity event; the whole staff joined in collecting for a non-profit organisation, called ‘Herzkinder’, a Vienna-based association that supports children suffering from heart diseases and their families.

IDoR 2019 will be celebrated on November 8, 2019, and will feature sports imaging (musculoskeletal radiology) as its main topic.
104 Countries
Algeria, Argentina, Armenia, Australia, Austria, Bahrain, Belarus, Belgium, Bolivia, Bosnia & Herzegovina, Brazil, Bulgaria, Canada, Chile, China, Colombia, Congo, Costa Rica, Croatia, Cuba, Cyprus, Czech Republic, Denmark, Dominican Republic, Ecuador, Egypt, El Salvador, Estonia, Finland, France, Georgia, Germany, Greece, Guatemala, Guyana, Honduras, Hong Kong, Hungary, Iceland, India, Indonesia, Iran, Iraq, Ireland, Israel, Italy, Japan, Kazakhstan, Kenya, Korea, Kosovo, Kuwait, Latvia, Lebanon, Lithuania, Luxembourg, Macedonia, Malaysia, Malta, Mauritius, Mexico, Namibia, Nepal, Netherlands, New Zealand, Nicaragua, Nigeria, Norway, Oman, Pakistan, Palestine, Panama, Peru, Philippines, Poland, Portugal, Romania, Russia, Saudi Arabia, Serbia, Slovakia, Slovenia, South Africa, South Korea, Spain, Sri Lanka, Sweden, Switzerland, Taiwan, Tanzania, Thailand, Trinidad, Tunisia, Turkey, Uganda, Ukraine, United Arab Emirates, United Kingdom, United States of America, Uruguay, Vanuatu, Venezuela, Vietnam, Yemen.
CHAPTER 3
INTERNATIONAL DAY OF RADIOLOGY (IDOR)

UPDATE OF THE IDOR WEBSITE
www.internationaldayofradiology.com
NEW BOOK

The HEART revealed Radiology in the diagnosis and management of cardiac conditions
CHAPTER 3
INTERNATIONAL DAY OF RADIOLOGY (IDOR)

CELEBRATING WORLDWIDE

Baku, Azerbaijan

Hue, Vietnam

Graz, Austria

Bogota, Colombia

ESR Office, Vienna, Austria

Hawally, Kuwait

Jeddah, Saudi Arabia

Manila, Philippines

Limerick, Ireland

Barnard Institute, Chennai, India


ANNUAL REPORT 2018
EUROPEAN SOCIETY OF RADIOLOGY
Chapter 4

European and International Affairs
The ESR Department of European and International Affairs was created to support the ESR Board of Directors in effectively representing ESR members’ interests vis-à-vis EU institutions and international organisations. International standards, rules, and regulations significantly shape and impact clinical practice for radiologists, particularly within the European Union where many areas affecting healthcare professionals are regulated at the European level. The ESR has been successful in recent years in establishing good working relations with EU institutions and international organisations. As a result, the ESR is widely recognised as a major healthcare stakeholder that has successfully promoted the interests of the radiology profession and patient safety at the international and pan-European level. Highlights of the ESR’s public affairs efforts at the international and pan-European level. The department’s main tasks are:

- Monitoring European legislative processes and policy developments relevant to the radiology profession and identifying topics that require engagement by the ESR.
- Ensuring the ESR’s interests and goals are adequately represented within European institutions.
- Organising policy events to highlight the radiology profession’s contribution to achieving resilient healthcare systems and effective patient outcomes.
- Ensuring that the ESR is recognised as a major stakeholder in European healthcare politics.
- Participating in relevant EU stakeholder consultations and developing ESR position papers and statements as appropriate.
- Engaging with regulatory bodies and international organisations to ensure the voice of European radiology is taken into account.
- Working with international organisations to ensure visibility for diagnostic imaging.
- Facilitating the participation of radiologists in international conferences, projects and programmes.

Improving quality of healthcare and patient safety

In November 2014, the ESR launched its call for a European Action Plan for Medical Imaging to improve patient safety and quality of care at the European Parliament. Endorsed by 41 national societies of radiology (inclu- ding societies from 26 EU Member States), and all 16 European subspecialty societies of radiology, this initiative sets the framework for the ESR’s engagement with political stakeholders. The call addresses key issues for the ESR, such as the harmonisation of training requirements for radiology, eHealth and research. In view of the changing politi- cal landscape and the 2019 European elec- tions, the ESR is seeking to reinforce its policy ambitions and present policymakers and collaborating organisations with a sound and coherent strategy for radiology in 2019 and beyond.

In this context, ESR experts have shared their expertise and knowledge in various settings. In 2018, ESR experts were members of:

- the European Commission eHealth Stake- holder Group; and,
- the European Medicines Agency Health- care Professionals Working Group.

The ESR contributed to conferences and meetings throughout 2018, including:
- European Commission Conference: Address- ing Societal Challenges Through Advanc- ing the Medical, Industrial and Research Applications of Nuclear and Radiation Technology;
- the ESMRE- COCR Computed Tomography Technology, Dosimetry, and Optimization Conference;
- the General Assembly of the European Coordination Committee of the Radiolo- gical, Electromedical and Healthcare IT Industry (CCOR);
- the IAEA Technical Meeting on Experiences with the Implementation of the Bonn Call for Action;
- the IAEA Technical Meeting on Preventing Unintended and Accidental Medical Expo- sure in Nuclear Medicine;
- the IAEA Consultancy Meeting on Develop- ing a Lancet Oncology Commission on Medical Imaging and Nuclear Medicine;
- the IAEA Course for Radiologists on Applying Justification and Referral Guide- lines for Imaging;
- the IAEA Technical Meeting on Safety Cul- ture in Radiation Uses in Medicine;
- the IAEA Regional Workshop on Radiation Protection Education and Training;
- the IAEA Regional Workshop on Approp- riate and Safe Use of Diagnostic Imaging; the ICRP Meeting of Senior Representatives of Organisations in Formal Relations with ICRP;
- the UEMS Conference on CME-CPD; and,
- the ECCO 2018 European Cancer Summit.

European cancer initiatives

In February 2017, the European Joint Action on Cancer Control (CanCon JA) was officially concluded at its final conference in Malta. The ESR joined the CanCon JA as a collabora- ting partner and was appointed a mem- ber of the CanCon JA policy paper drafting group, which provided scientific feedback on the “Tackling Social Inequalities in Can- cer Prevention and Control for the European Population” policy paper. The comprehensive “European Guide on Quality Improvement in Comprehensive Cancer Control” and the policy papers were released at the final conference to further contribute to the goal of reducing cancer incidence by 15 percent by 2020. As a follow-up initiative, the Innovative Part- nership for Action Against Cancer Joint Action (IPAAC) was launched in 2018 for a three- year period. It builds further on the outcomes of the CanCon JA and is designed to develop innovative approaches to advance in cancer care. IPAAC is strongly linked to innovative approaches in cancer care in which diagnosis and screening play an essential role in qua- lity assurance in breast screening. In 2018, the ESR has strengthened ties with organisations active in the field of cancer care, be it patient or professional organisations, to jointly achieve the develop- ment and implementation of concrete policies to improve cancer care across Europe. To this end, the ESR has been a long-time member of the European CanCon Organisation (ECCO), a multidisciplinary platform aimed at improving cancer patient outcomes. In 2018, the ESR participated in ECCO’s annual congress and, being represented in the Board of Direc- tors and the Oncopolicy Committee, contribu- ted to formulating and implementing pan-Euro- pean cancer initiatives.

In 2015, the ESR became part of the Euro- pean Commission Initiative on Breast Can- cer (EOBC). One aim of this initiative is to develop the new European Breast Guide- lines, evidence-based recommendations for breast cancer screening and diagnosis that will replace the European Guidelines for Qual- ity Assurance in Breast Cancer Screening and Diagnosis that were released in 2006. Another aim of the initiative is to develop a voluntary European breast OA scheme for breast cancer services. The initiative further- more seeks to establish a platform for high quality guidelines for stages of breast cancer.
care other than screening and diagnosis. In 2018, the ECBC released a new set of recommendations addressing screening and diagnosis, while the comprehensive European Breast Guidelines are expected for publication in 2019.

Medical devices legislation

After lengthy inter-institutional negotiations, the Council of the EU and the European Parliament formally adopted a new regulation for medical devices in April 2017. This new regulation is designed to enhance the safety of medical devices while allowing patients to benefit from harmonised rules for timely and innovative healthcare solutions. Having entered into force in May 2017, and after a transitional period of three years as provided for in the legislation, the regulation will become applicable from May 2020.

Apart from strengthening the authorisation of medical devices across the EU, the new regulation introduces new requirements for the traceability of devices and stricter rules for notified bodies that assess medical devices, such as ensuring they have qualified personnel available to conduct factory inspections. Under the new legislative framework, manufacturers will be held responsible for continuous follow-up on the quality and safety of devices placed on the market.

As imaging equipment falls within the scope of the regulation, the ESR has been closely monitoring the implementation process, in cooperation with other stakeholders, to ensure timely access to innovative solutions for the radiology profession and patients. The renewed Letter of Intent between the ESR and the European Coordination Committee of the Radiological, Electromedical and Healthcare IT Industry (COCRIR) is testament to the ESR’s enhanced, EU-wide cooperation, in order to ensure timely access to innovation, which allows it to continue benefiting patient outcomes and the sustainability of healthcare systems.

eHealth

Since 2012, the ESR has been a member of the EC’s eHealth Stakeholder Group (eHSG), with the aim of contributing to the development of legislation and policy related to eHealth. This membership was renewed for a new three-year term in 2016, and the ESR was represented at the eHSG meetings in 2018 in order to take stock of new developments and to engage with policymakers. The eHSG’s current mandate ends in February 2019, and, taking into account the likely continuation of a stakeholder group dedicated to eHealth, the ESR will remain a committed member, supporting the roll-out of digital health across Europe.

The ESR’s main aim in the field of eHealth is to influence the digital transformation of healthcare and overcome barriers in the fields of digital innovation, research and interoperability, actively collaborating with the EU institutions to promote solutions that are successfully implemented in radiology.

The event clearly illustrated that medical imaging is firmly embedded in a multidisciplinary care process, integrating different medical disciplines to ensure targeted, personalised health policies and exchange on the impact of AI on the healthcare sector, the ESR strongly encourages policy initiatives related to AI to be dealt with at member state level alone. The ESR has urged policymakers and stakeholders to continue to monitor policy initiatives related to digital health, and, in line with priorities in the fields of digital innovation, research and interoperability, actively collaborate with the EU institutions to promote solutions that are successfully implemented in radiology.

The ESR policy event at the European Parliament on 6 June 2018, the ESR organised the event ‘From Health Policy to Practice: Medical Imaging as an Example for Improving Patient Outcomes through Technology Adoption’, hosted by Member of the European Parliament Dr. Biljana Borzan (S&D, Croatia) at the European Parliament. The meeting brought together MEPs, EC officials, and health stakeholders to discuss the importance of effectively implementing health policies and legislation in clinical practice to benefit patient outcomes.

Future of health in the EU

Against the backdrop of a new EU budget proposal for the period 2021-2027 and the upcoming 2019 European elections, the ESR has called on the EU institutions to continue commitments to invest in AI-related research and development in the field of AI related to healthcare and digitisation. It furthermore offers a platform for the ESR to present ongoing activities mapping opportunities and challenges for radiology and exchange with partner organisations.

Digital Single Market

In 2018, the European Commission put forward an approach to drive developments in Artificial Intelligence (AI) across a broad range of sectors and multiple initiatives were presented to mobilize private and public investments in AI research & innovation. The ESR is very well aware that the gradual introduction of AI is expected to bring disruptive changes to medical healthcare systems are organised and require the medical profession to adapt to this new reality of innovation and automation. In parallel, the European Commission launched the European AI Alliance to act as a multi-stakeholder forum to foster discussion and exchange on the impact of AI on the economy and society. The ESR successfully applied for membership, which enables the radiology profession to keep track of EU developments in the field of AI related to healthcare and digitisation. It furthermore offers a platform for the ESR to present ongoing activities and an opportunity to engage with partner organisations.

In 2018, the ESR presented ambitious proposals to further digital health in the EU, setting out a framework to enable the sharing of health data, advance research and personalised health, and foster digital tools for citizen empowerment and patient-centred care. The ESR has already provided input to the ECI initiatives in the area of digital health taking stock of initiatives aimed at transforming ‘Transformation Health and Care in the Digital Single Market’. The ESR will, however, continue to monitor policy initiatives related to digital health, and, in line with priorities in the fields of digital innovation, research and interoperability, actively collaborate with the EU institutions to promote solutions that are successfully implemented in radiology.

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The ESR has committed to remain a trusted partner to enhance sustainability of healthcare systems, which goes hand-in-hand with supporting EU initiatives to spur digitisation, improve clinical practice and stimulate research. Considering the numerous challenges in the healthcare sector, the ESR strongly encourages calls for strong political leadership in health at EU-level and an institutional setup that is tailor-made for enhanced coordination and targeted action.

European Medicines Agency (EMA)

Membership of the EMA Healthcare Professionals’ Working Party (HCPWP) enables the ESR to be actively involved in the activities of the MA and facilitates direct dialogue with regulators. In 2018, the ESR’s input to the HCPWP focused on issues related to Gadeliusin-based contrast agents. The ESR also participated in a joint meeting of the EMA Working Party with Patients and Consumers (PCWP) and the HCPWP in which participants were updated on the EMA relocation and implications of Brexit, as well as on the use of patient registries for regulatory purposes.
VALUE-BASED RADIOLoGY
Due to the significance of the movement towards value-based radiology, the ESR’s Value-Based Radiology Working Group was converted into a subcommittee in 2018. The subcommittee is chaired by Prof. Michael Fuchsjäger of the University of Graz, Austria, and it also has Prof. Michael Pihlström of the Board of Directors. The subcommittee continues to lead the ESR’s response to trends that are driving value in health care, in particular in terms of quality of care, patient safety and reimburse- ment systems increasingly central to health-care provision.

Following on from the concept paper on value-based radiology, the ESR’s subcommittee in conjunction with the ESR’s Insights into Imaging in August 2017, a writing group was established in 2018 for a joint paper with the American College of Radiology (ACR), Canadian Association of Radiologists (CAR), ESR, International Society for Strategic Education (ISSE), Royal Australian and New Zealand College of Radiologists (RANZCR) and, Radiological Society of North America (RSNA). This paper aims to both demonstrate that radiology is a key component in the provision of value in healthcare and the ESR’s role in supporting organisations to be doing providing improved value. This paper is planned for publication in early 2019.

The ESR Value-Based Radiology Subcom- mittee is also working to implement two surveys to better understand what value means for patients and what value-based radiology ini- tiatives exist in different European countries. For the first survey (ASQR), the group is working closely with the ESR’s Patient Advisory Group (PAG). It is hoped that the results of this survey will be presented at the ECR 2019. The second survey will potentially be a multi-year project which could form the basis of a revised white paper in 2020.

Prof. Lorentzo Derchi, from the University of Genoa, Italy, presented a talk at the European Carcin Organisation (ECOC) summit in September on the value of the diagnostic process, which formed part of a session on how the role of professional cancer care can impact patients, and other interventions, can be bet- ter valued and recognised within national health systems.

THE DIGITAL IMAGING ADOPTION MODEL (DIAM)
The ESR Professional Issues and Economics in Radiology (PIER) Subcommittee is respon- sible for overseeing the ESR’s contribution to the Digital Imaging Adoption Model (DIAM) project. The ESR and the Healthcare Information and Management Systems Society (HIMSS) jointly developed this project in 2016 with the goal of supporting organisations in the planning and implementing of imaging IT in radiology departments. The DIAM model has a three-step process involving: completion of an online assessment form (the DIAM sur- vey), quality assurance assessment by HIMSS experts, and the creation of a DIAM score, plac- ing the organisation within an eight-stage framework (stages 0–7), and gap report. The DIAM survey is free in Europe and can be com- pleted in approximately 3 hours by radiologi- sters, radiographers, and/or IT-experts (ideally collaboratively). It does not require in-depth IT knowledge. The DIAM score is designed to assist in benchmarking and alignment of best practices with other institutions – regionally within a specific country, or around the world. As the DIAM network grows, the potential benchmarking is increasing. As of December 2018, 58 hospitals from 18 countries around the world have participated.

DIAM has been particularly frequently imple- mented in the Netherlands, Germany, and the United Kingdom. The subcommittee has gathered data from countries as diverse as Canada, the USA, Singapore, and Saudi Arabia, which, in the King Abdulaziz Medical City (KMC), Riyadh, boasts the only hospital in the world to have been awarded DIAM stage 6. Particip- ating organisations can utilise the DIAM model to identify gaps in their imaging IT and pinpoint the appropriate digital strategy for optimum progress.

The DIAM model is now in the process of being expanded through the development of the Enterprise Imaging (EI) platform, which ente- red its pilot-phase in 2018. EI goes beyond radiology imaging to include ophthalmo- logy, dermatology, cardiology etc. as well as non-diagnostic imaging, such as digital pho- tos to document wound care or endoscopy imaging during surgery. Additional criteria to EI include imaging governance, data privacy, and a focus on multi-disciplinary collabora- tion. The EI initiative’s broader applicability reduces its potential for detailed, depart- ment-based analysis of weaknesses etc. As such, the extended DIAM system can help to make the DIAM model for radiology redun- dant. Organisations will be given the choice to select their preferred type of evaluation or to use the two models alongside each other to maximise the depth and breadth of the assessment.

An article describing the DIAM model and elaborating on its impact and its future was submitted to Insights into Imaging in December 2018.

EUROPEAN COMMISSION-FUNDED TENDER PROJECTS
EUCLID – European Study on Clinical Diagnostic Reference Levels for X-ray Medical Imaging
The 31-month European Commission tender project EUCLID will provide up-to-date cli- nical Practice Reference Values (RPVs) for the most important, from a radiological per- spective, X-ray imaging tasks in Europe. The project is led by the ESR and began in August 2017. The project team focused its activities in 2018 on the preparation of surveys to collect patient data from 20 European countries from 13 countries for the establishment of clinical DRls for 10 predefined CT indications and 4 predefined interventional radiology proce- dures. The data collection started in June 2018 and will finish in early 2019. In addition, the project team prepared the data analysis methodology, and preliminary survey results were presented to the European Commission in November 2018.

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PDRL – European Diagnostic Reference Levels for Poaledge Imaging
The European Commission tender project PDRL, headed by the ESR, is aimed at providing European DRls for poaledge examinations and at promoting their use to achieve the appropriate radiation pro- tection of poaetic patients, with a focus on CT, interventional procedures using fluor- oscopy, and digital radiographic imaging. It ran from December 2013 to January 2016. In autumn 2018, the European Commission offi- cially published the long-awaited European Guidelines on DRls for Poajective Imaging (RP185), the main outcome from the PDRL project.

COLLABORATION WITH THE IAEA
Practical arrangement
The longstanding cooperation between the ESR and the IAEA was formalised with the conclusion of a practical arrangement between the organisations in February 2017. Based on this agreement, collaboration, the ESR and the IAEA have produced an International Radiological Imaging (INR) book. The project is led by the ESR and began in August 2017. The project team focused its activities in 2018 on the preparation of surveys to collect patient data from 20 European countries from 13 countries for the establishment of clinical DRls for 10 predefined CT indications and 4 predefined interventional radiology procedures. The data collection started in June 2018 and will finish in early 2019. In addition, the project team prepared the data analysis methodology, and preliminary survey results were presented to the European Commission in November 2018.

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In the context of the European Union’s EUCLID project, the ESR and the IAEA joined forces to produce the extended DIAM model. The ESR and the IAEA are the joint editors of the extended DIAM model, which is currently being developed. The ESR and the IAEA will work together to ensure that the extended DIAM model is suitable for use in a wide range of healthcare settings, including those that fall outside the scope of poaademic radiology, such as digital photography, radiology imaging to include ophthalmo-logy, dermatology, cardiology etc. as well as non-diagnostic imaging, such as digital photos to document wound care or endoscopy imaging during surgery. Additional criteria to EI include imaging governance, data privacy, and a focus on multi-disciplinary collabora- tion. The EI initiative’s broader applicability reduces its potential for detailed, depart- ment-based analysis of weaknesses etc. As such, the extended DIAM model is designed to make the DIAM model for radiology redundant. Organisations will be given the choice to select their preferred type of evaluation or to use the two models alongside each other to maximise the depth and breadth of the assessment.

An article describing the DIAM model and elaborating on its impact and its future was submitted to Insights into Imaging in December 2018.

Moreover, the ESR and the IAEA joined forces to promote the free-on-line access to ECR Online, the ECR live web stream.

Conferences
The IAEA Technical Meeting focusing on the Born Call for Action Toolkit was held in Vienna, Austria on March 5–7, 2018. Prof. Guy Frijia, chair of EuroSafe Imaging, presented the EuroSafe Imaging tools, which can be incorporated into the Toolkit, which will officially be launched at ECR 2019.

The IAEA Technical Meeting on Preventing Unintended and Accidental Exposures in Nuclear Medicine was held in Vienna, Aust- ria on May 16–18, 2018. The ESR was invited to present its view on managing accident exposures and overexposures in nuclear medicine, including reporting measures.

The IAEA Regional Workshop on Appropri- ate and Safe Use of Diagnostic Imaging was organised in Tiflis, Georgia on July 10–14, 2018. The ESR was actively involved with presentations on ESR’s imaging referral gui- delines and ESR IuNoX, clinical DRLs, and the EUCLID project, as well as education and training for radiologists.

The IAEA Council for Radiologists on Applying Justification and Referential Guidelines for Im- aging was organised in Warsaw, Poland on September 3, 2018, another occasion for the ESR to present ESR IuNoX and the EuroSafe Imaging Call for Action 2018.

The IAEA Technical Meeting on Safety Culture in Medical Uses of Radiation took place in Vienna, Austria on October 1–3, 2018, in which the ESR presented on the ESR’s imaging activities and efforts to strengthen the safety culture in medical imaging.

The IAEA Regional Workshop on Radiation Protection Education and Training of Health Professionals in Diagnostic and Interventio- nal Radiology was held in Córdoba, Spain on October 22–24, 2018 and provided the opportunity for the ESR to present training approaches and resources for radiation pro- tection education, as well as EuroSafe Im- aging resources and plans for future educati- onal activities.

Lancet Oncology Commission on medical imaging and nuclear medicine
The ESR supports and contributes to the Lancet Oncology Commission on medical imaging and nuclear medicine initiated by the IAEA in 2018 with the aim of increasing global awareness of the importance of cancer imag- ing and improving access to imaging.
ESR EUROSAFE IMAGING

ESR EuroSafe Imaging

Implementation of Radiation Safety Imaging supports and strengthens medical radiation protection across Europe, following a holistic, inclusive approach. EuroSafe Imaging’s main achievement in 2018 was the launch of the new Call for Action 2018. In addition, EuroSafe Imaging focused on the promotion of the concept of clinical diagnostic reference levels (DRLs), the expansion of the network of EuroSafe Imaging Stars, as well as communication and outreach activities and education. The EuroSafe Imaging poster exhibition at the European Congress of Radiology 2018 saw a record number of participants. A new EuroSafe Imaging working group, the ESR iGuide Implementation and Promotion working group, was also established in 2018.

EuroSafe Imaging Call for Action 2018

The EuroSafe Imaging Call for Action 2018 was launched at the occasion of the European Congress of Radiology 2018. It builds on the first Call for Action, issued in 2014 to support the Born Call for Action from 2012 prepared by the International Atomic Energy Agency (IAEA) and the World Health Organization (WHO). By implementing the 13 actions of the Call for Action 2018, EuroSafe Imaging significantly contributed to achieving the aims in the ten priority areas of the Born Call for Action.

EuroSafe Imaging working groups

Since 2015, EuroSafe Imaging has established different working groups to support the implementation of its Call for Action and a variety of relevant ESR projects. As of 2018, there are six EuroSafe Imaging subgroups: Ask EuroSafe Imaging; Appropriate Image Quality; Clinical Diagnostic Reference Levels (DRLs); European CT Dose Repository (the focus of which is on dose management systems); Paediatric Imaging; and ESR iGuide Implementation and Promotion. The ‘ESR iGuide Implementation and Promotion’ working group was launched in 2018. It aims to develop scenarios for the implementation of imaging referral guidelines and clinical decision support and at promoting the use of the ESR iGuide at national and regional level. Moreover, the working group focuses on supporting developing countries to use the ESR iGuide.

Additionally, a new working group dedicated to ‘Dosimetry for Imaging in Clinical Practice’ was prepared. It will be launched at ECR 2019.

Clinical DRLs

Diagnostic reference levels (DRLs) are an important tool for optimisation. EuroSafe Imaging is promoting the concept of DRLs based on clinical indications, instead of anatomical locations, and is thus supporting the EUCILD project (European Study on Clinical Diagnostic Reference Levels for X-ray Medical Imaging). For this purpose, the concept was presented at different meetings and conferences in 2018, and efforts will be continued in 2019 as well. EuroSafe Imaging is also advocating for a clinical DRL project dedicated to paediatric patients.

Collaboration, communication and outreach

EuroSafe Imaging went on a worldwide tour again in 2018, having been presented at major conferences such as Arab Health 2018, the Arab Radiology Conference, the World Congress of Medical Physics and Biomedical Engineering, the European Congress of Medical Physics, the African Regional IRPA (International Radiation Protection Association) Congress, the Annual Meeting of the Cardiovascular and Interventional Radiological Society of Europe (CIRSE), the European Radiological Protection Research Week, the European Society of Breast Imaging (ESOBI) Congress, as well as at many national congresses of radiology (e.g. in Algeria, Argentina, Armenia, Austria, Belarús, Brazil, Bulgaria, Czech Republic, Denmark, France, Germany, Hungary, Iran, Ireland, Israel, Italy, Korea, Moldova, Morocco, Nigeria, Portugal, Romania, Russia, Saudi Arabia, Spain, Switzerland, Turkey, Ukraine, United Arab Emirates, United Kingdom, etc.).

In addition, various meetings of the IAEA and the Heads of European Radiological Protection Competent Authorities (HERCA) were attended by EuroSafe Imaging representatives.

EuroSafe Imaging is a role model for five other safe imaging campaigns worldwide. They are coordinated by the International Society of Radiology Quality & Safety Alliance (ISQSA), which is co-chaired by Prof. Guy Frija, chair of EuroSafe Imaging, and Dr. Donald P. Frush, chair of the Image Gently Alliance. Moreover, efforts to initiate ‘safe’ campaigns in China and the Asian-Oceanian region at large are ongoing.

Twelve guidelines, the ‘Tips & Tricks’ for professionals and patients, are also available on the ESR’s e-learning platform Education on Demand. Upon completion of an on-line test, two to three e-CMEs can be earned.
Moreover, the EuroSafe Imaging Steering Committee has started an educational project aimed at the development of a dedicated multi-professional radiation protection course. It is envisaged that the first course will be organised, either face-to-face or electronically, in Q3/Q4 of 2019.

Research
In line with EuroSafe Imaging Action 9 focusing on fostering research in radiation protection, the European Alliance for Medical Radiation Protection Research (EURAMED) was founded by the ESR, the European Association of Nuclear Medicine (EANM), the European Federation of Organisations for Medical Physics (EFPOM), the European Federation of Radiographer Societies (EFRS), and the European Society for Radiotherapy and Oncology (ESTRO) as a non-profit society registered in Austria in October 2017. EURAMED’s goal is to improve medical care and to solve its radiation protection issues through comprehensive research efforts. In 2018, EURAMED focused on enlarging its membership and setting up its committees. EURAMED contributed to the scientific programme of the European Radiation Protection Week 2018 held in Rovinj, Croatia, and encouraged the medical community to participate in the 2018 Euratom Horizon 2020 call. Following the publication of the Strategic Research Agenda for medical radiation protection in 2017, EURAMED now focuses on developing a research roadmap for medical radiation protection research.

Clinical Decision Support – ESR iGuide
ESR iGuide is a clinical decision support (CDS) system utilising imaging referral guidelines developed by the ESR based on the American College of Radiology Appropriateness Criteria (ACR AC). The ESR advocates the use of CDS integrated into existing imaging workflow to support healthcare providers with evidence-based guidance in using medical imaging more appropriately for the benefit of patients. Based on a 2014 agreement between the ACR and ESR to cooperate on referral guidelines, the ESR created an expert group to review the ACR AC and ACR Select content to create guidelines for ESR iGuide. This group was transformed into a permanent ESR Working Group on Imaging Referral Guidelines (IRG WG) at ECR 2016, and, in summer 2018, was transformed into the ESR Referral Guidelines Subcommittee (RSCS) to reflect the permanent importance of the work on referral guidelines as part of the ESR’s mission. In February 2018, the ESR’s latest edition of the guidelines, based on ACR Select content version 13, was released in ESR iGuide. The new ESR iGuide content version includes almost 700 new scenarios and indications, including a new chapter dedicated to paediatric imaging and an ‘oncology matrix’ that can be implemented by healthcare organisations using ESR iGuide with localised recommendations for cancer indications.

At ECR 2018, the ESR launched a new ESR iGuide portal. This stand-alone solution is designed to widen access to the ESR’s referral guidelines for over 1,800 clinical indications. The portal can also support EU member states in complying with the Basic Safety Standards Directive (2013/55/Euratom) and other countries in implementing the recommendations of the international basic safety standards for radiation protection and safety of radiation sources, published in 2014 by the IAEA. Any individual can sign up to use the ESR iGuide portal, and institutional or country-wide licenses, including the option of a fully translated user interface and content, are available for institutional or even country-wide CDS adoption.

The individual subscription option and the possibility of obtaining institutional or country-wide licenses offer a solution for referring physicians to access guidelines where integration into electronic order entry systems is not available. In addition to maintaining the ESR iGuide content, the software is now also distributed by the ESR under a restructured licensing arrangement with NDSC, which concluded in autumn 2018. The society’s Quality and Safety in Imaging GmbH assumed all responsibilities for licensing ESR iGuides, taking over the tasks hitherto performed by NDSC Europe GmbH, which was dissolved after Change Healthcare acquired NDSC LLC in the United States in early 2018. NDSC and the ESR agreed that the best way to ensure successful ESR iGuide adoption in Europe would be to assign all the required rights to the society. The cooperation on referral guidelines and appropriate use criteria between the ESR and ACR is not affected by this change.

With this new setup, the ESR hopes to accelerate the adoption of referral guidelines and decision support in clinical practice in Europe, and focuses increasingly on implementing ESR iGuides in multi-centre settings to better assess its impact on the appropriateness of imaging referrals.

ESR iGuide
The ESR iGuide portal is also used in the educational project ‘ESR eGuide’. Users utilise the ESR iGuide portal complete case-based scenarios in the ESR’s Education on Demand platform. ESR iGuide is successfully being used in university settings at the Charité – Universitätsmedizin Berlin and the Medical University Vienna. Results confirming a significant learning effect of using CDS in a pilot project at the Charité were presented during ECR 2018.
MEMORANDA
OF UNDERSTANDING
SIGNED BY THE ESR

ACR
American College of Radiology
May 15, 2013
Renewed: March 4, 2017

ACR
Asociación Colombiana de Radiología
(Colombian Association of Radiology)
March 9, 2013
Renewed: March 6, 2015, March 4, 2017

AOSR
Asian Oceanian Society of Radiology
October 20, 2012

BBMRI-ERIC
Biobanking and Biomolecular Resources Research Infrastructures – European Research Infrastructure Consortium
November 11, 2015

CAR
Canadian Association of Radiologists
April 25, 2014
Renewed: March 3, 2016, March 4, 2018

CBR
Colégio Brasileiro de Radiologia e Diagnóstica por Imagem
(Brazilian College of Radiology)
August 9, 2018

CIR
Colégio Interamericano de Radiologia
(Interamerican College of Radiology)
March 6, 2015
Renewed: March 4, 2016, March 3, 2018

CSR
Chinese Society of Radiology
April 22, 2014
Renewed: March 3, 2018

EFOMP
European Federation of Organisations in Medical Physics
November 19, 2015
Renewed: March 3, 2018

EFDR
European Federation of Radiographer Societies
June 24, 2013
Renewed: June 18, 2015
New MoU: November 17, 2016

EFSUMB
European Federation of Societies for Ultrasound in Medicine and Biology
March 26, 2015
Renewed: March 3, 2017

EORTC
European Organisation for Research and Treatment of Cancer
September 5, 2014
Renewed: August 3, 2017

ERS
European Radiological Society
March 1, 2018

ESC
European Society of Cardiology

EACVI
European Association of Cardiovascular Imaging

EANM
European Association of Nuclear Medicine

ESCR
European Society of Cardiovascular Radiology
March 3, 2017

ESNM
European Society of Radiology and Nuclear Medicine
March 3, 2018

ESTRO
European Society for Radiotherapy and Oncology

EANM
European Association of Nuclear Medicine

IRIA
Indian Radiological and Imaging Association
April 30, 2014
Renewed: March 4, 2016, March 1, 2018

IRIS
Indian Radiological Society

KSR
Korean Society of Radiology

SIR
Society of Interventional Radiology

MIM
Medical Image Informatics

Falk
Falk Foundation

ÖRG
Österreichische Röntgengesellschaft

RANZCR
Royal Australian and New Zealand College of Radiologists
March 5, 2015
Renewed: March 2, 2018

RCRT
Royal College of Radiologists of Thailand

RST
Radiology Society of Thailand
March 1, 2018

RSE
Radiology Society of the Emirates
January 31, 2017

RSNA
Radiological Society of North America

RSSA
Radiological Society of Saudi Arabia
September 20, 2018

SDR
Sociedad Dominicana de Radiología

SMRI
Sociedad Mexicana de Radiología e Imagen

SPR
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THE ESR PATIENT ADVISORY GROUP (ESR-PAG)

The ESR Patient Advisory Group (ESR-PAG) was established in 2013 to bring together patients, the public, and imaging professionals in order to collectively address and leverage developments in the field of radiology. The ESR-PAG advocates for a patient-centred approach in the activities of the ESR, with the aim of benefiting patients across Europe. The ESR is the first medical specialty to successfully launch a professional-patient body that gathers patient representatives from various disease-specific fields.

The ESR-PAG has six core aims:
• to improve communication with patients;
• to raise awareness of medical imaging amongst patients;
• to improve patients’ knowledge of imaging procedures;
• to liaise with patient groups on policy issues of common interest;
• to involve patient representatives in strategic decisions regarding medical imaging and,
• to ensure a patient-centred, human approach is embedded in the work of the ESR.

In 2018, the ESR-PAG launched concrete initiatives to enhance the group’s functioning amongst patients, the public, and imaging professionals in the radiology department, particularly presenting ideas for how to address the professional-patient relationship in the Radiology Department, with the aim of benefiting patients across Europe.

The ESR is the first medical specialty to successfully launch a professional-patient body that gathers patient representatives from various disease-specific fields.

The ESR-PAG advocates for a patient-centred approach in the activities of the ESR, with the aim of benefiting patients across Europe. The ESR-PAG seeks to increase its membership and maintain a close alignment between professionals and the patient community. The ECR, widely praised as an excellent forum to address topics key to the patient-professional relationship, will be utilised to improve visibility, with the aim of emphasising the role of patients in the ESR’s activities. Furthermore, ESR-PAG representatives participated in various conferences and policy events throughout 2018 to demonstrate the importance of the ESR attaches to patient engagement. One of these occasions was the event ‘From Health Policy to Practice: Medical Imaging as an Example for Improving Patient Outcomes through Technology Adoption’, organised by the ESR at the European Parliament on June 6, 2018. The ESR-PAG reiterated calls to put the patient at the centre of medical imaging and advocated for shared decision-making in clinical practice and research. It was emphasised that an interactive relationship is key to empowering patients within the framework of diagnosis and treatment.

In its ongoing efforts to advocate for a patient-centred approach within radiology, the ESR-PAG seeks to increase its membership and maintain a close alignment between professionals and the patient community.

In 2018, the ESR-PAG in collaboration with the ESR Audit and Standards Subcommittee, refined the questionnaire on patient satisfaction which was introduced at ECR 2017, to facilitate a pilot launch across radiology departments in Europe. In the context of transforming healthcare systems and the impact on patient outcomes, the ESR-PAG has been deeply involved in ESR activities in the area of value-based radiology, providing patients’ insights on the value of radiology procedures. Throughout 2018, the ESR-PAG was furthermore responsible for providing the patients’ perspective in official ESR publications and position papers.

Increased patient engagement across medical specialties incentivised the ESR-PAG to develop a new strategy to increase its membership and maximise output for the sake of a strong patients’ voice in radiology across Europe in 2019 and beyond. In its ongoing efforts to advocate for a patient-centred approach within radiology, the ESR-PAG seeks to increase its membership and maintain a close alignment between professionals and the patient community.

More than ever, the ESR-PAG is committed to engaging in further activities in different fields, wherever the patients’ perspective is needed. In this regard, the ESR-PAG is delivering valuable input to European imaging as well as to other activities pursued by the ESR and patient organisations. The ESR-PAG is also represented in the ESR Value-Based Radiology (VBR) Subcommittee and ultrasound working groups and the EUCLID project, guaranteeing a strong patient voice in these projects. The ESR-PAG will continue to give a unique voice to patients in the area of medical imaging to the benefit of clinical practice and patient outcomes.

THE ESR-PAG IS COMPOSED OF THE FOLLOWING MEMBERS:

Chairperson:
Nicola Bedlington, European Patients’ Forum (EPF)

Vice-Chairperson:
Nikolata Tryakova, Chairperson of the ESR Communication and External Affair Committee

Representatives of pan-European patient organisations:

Judy Birch, Pelvic Pain Support Network (PPSN)
ESA Prostate, Europe Uomo (European Prostate Cancer Coalition)
European Federation of Crohn’s & Ulcerative Colitis Associations (EFCCA) representative to be appointed

Brigit Bauer, European Multiple Sclerosis Platform

Donna Walsh, European Federation of Neurological Associations (EFNA)

ESR 2nd Vice-President:
Michael Fuchsjäger

ESR Quality, Safety and Standards Committee Chairperson:
Adrian Brody

ESR National Societies Committee Chairperson:
Christoph Bickel

ESR Subspecialties and Allied Sciences Committee Chairperson:
Athina Giangalezi

European Federation of Radiographer Societies (EFRS):

Veetih Syhrangat

European Federation of Crohn’s and Ulcerative Colitis Association (EFCCA):

Martina Jovic

THE ESR PATIENT ADVISORY GROUP (ESR-PAG)
A YEAR OF GROWTH AND CHANGE

The ESR journal family has been on a very successful path in 2018. The collaboration between all three journals was enhanced by a regular exchange between the Editors, the launch of new websites and the update of their corporate designs.

The flagship journal European Radiology was able to impressively strengthen its pole position as Europe’s number one journal in general radiology. In the first year of Prof. Yves Menu from Paris in office as Editor-in-Chief, the journal saw a substantial increase of +34% in submissions. This is not only a sign of increasing popularity, but also a sign of appreciation for the editorial services that are offered during peer-review to authors. Editorial and production workflows were reviewed and improved where necessary, and despite the increase in submissions, the turnaround times remained very attractive due to the huge efforts made by the team of Editors and reviewers. Furthermore, usage increased as downloads over the past year reached a new record of 799,437. In addition to these impressive numbers, European Radiology received an Impact Factor of 4.027, which lifts the journal above 4 again.

Insights into Imaging, the Open Access journal for education and guidelines, saw a healthy growth in submissions (+30%). Under the new Editor-in-Chief, Prof. Luis Martí-Bonmatí from Valencia, Spain, the journal expanded its editorial board, as well as its portfolio with the introduction of the article types ‘Critical review’ and ‘Educational review’. Unfortunately, the application for an Impact Factor remains unanswered, nevertheless, the journal received a remarkable total of 470,000 downloads in 2018. European Radiology Experimental, the youngest member of the ESR journal family, edited by Prof. Francesco Sardanelli from Milan, Italy, received a total of 77 submissions (+33% compared to the previous year), which enhances its growing trend. The most important milestone European Radiology Experimental achieved was the indexation in PubMed in November 2018, which – together with the Open Access nature of the journal – will hopefully ensure visibility and dissemination of all published articles, which are dedicated to emerging fields experimental settings in clinical radiology. Given the young age of the journal, a total of 42,391 downloads in the last year show also a great interest from readers. The ESR’s commitment to cover the article processing charges for active ESR members who submit to Insights into Imaging and European Radiology Experimental was rewarded by the flourishing of the two journals, and will be continued in 2019.

ESR’s eLearning platform, Education on Demand was expanding continuously, with over 480 modules and more than 500 e-CME points available. By the end of the year, the portal was temporarily closed to start a transition period towards a new technical platform, which is foreseen to launch in early 2019 with improved usability. More than 3,700 abstracts were submitted to EPOS® (Electronic Presentation Online System) for ECR 2018, which maintained the record level of the previous year. Nearly 3,500 posters were uploaded for the congress, and EPOS remained one of the most popular ESR platforms with around 250,000 visits per month.

The Voice of EPOS® has grown again, and 107 sessions with 720 presentations were held at ECR 2018. The ESR’s database for radiological case reports, EURORAD, published 481 new cases in 2018, and attracted up to 18,000 monthly visitors. With the end of the calendar year, EURORAD closed temporarily for the transition to a new and improved submission system and website.

The worldwide distribution of users and readers of all ESR publications proves once more the international importance and presence of the ESR.
EUROPEAN RADIOLOGY

Founded in 1991
Editor-in-Chief: Yves Menu, Paris/France

Editorial board members: 163
Active reviewers: 2,505
Submissions: 3,324
Accepted papers: 649
Impact Factor 2017: 4.027
Pages published: 5,395
Full text downloads: 799,437

Impact Factor

4.027

Full text downloads

799,437
INSIGHTS INTO IMAGING

Founded in 2010
Editor-in-Chief: Luis Martí-Bonmatí, Valencia/Spain
Open access since 2012

Editorial board members: 35
Active reviewers: 218
Submissions: 289
Accepted papers: 92
Pages published: 1,115
Full text downloads: 470,717

Submissions 2018: 154

EUROPEAN RADIOLOGY EXPERIMENTAL

Founded in 2016
Editor-in-Chief: Francesco Sardanelli, Milan/IT
Open access

Editorial board members: 41
Active reviewers: 68
Submissions: 77
Accepted papers: 52
Pages published: 45
Full text downloads: 42,391

Submissions 2018: 77

Full text downloads 2018: 470,717
EURORAD
Established in 1999
Editor-in-Chief: Olle Ekberg, Malmö/SE
Teaching case platform for radiological case reports
More than 7,000 cases published

Submissions / Publications 2018
574/481

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### EPOS

**Launched at ECR 2003**  
Editor-in-Chief: Ioana G. Lupescu, Bucharest/RO  
Poster database of ECR 2003–2018 and other congresses  
Over 35,000 posters included

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### Poster abstracts submitted ECR 2018

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### Posters uploaded ECR 2018

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</tr>
<tr>
<td>ECR 2018</td>
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</tr>
</tbody>
</table>
THE VOICE OF EPOS

Launched at ECR 2016
Oral poster presentations
Sessions organised by topic or language
Broadcast online via ECR Live
Recordings available via ECR Online

<table>
<thead>
<tr>
<th>ECR 2018 related figures</th>
<th>Sessions</th>
<th>Presentations</th>
<th>Attendance at sessions</th>
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<tr>
<td>ECR 2017</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECR 2018</td>
<td>107</td>
<td>720</td>
<td>3,431</td>
</tr>
</tbody>
</table>

Sessions
- ECR 2016: 35
- ECR 2017: 87
- ECR 2018: 107

Presentations
- ECR 2016: 719
- ECR 2017: 637
- ECR 2018: 720

Onsite Audience
- ECR 2016: 1,368
- ECR 2017: 2,801
- ECR 2018: 3,431
ESR EDUCATION ON DEMAND

Launched in March 2015
Subcommittee Chair:
Sue Barter, Cambridge/UK – since ECR 2017
eLearning platform
450+ modules available

Subcommittee members:

<table>
<thead>
<tr>
<th>Name</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>52</td>
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Users:

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<tr>
<td>2018</td>
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</table>

Returned tests in 2018

33,840
Research is a key pillar of the ESR’s activities: medical imaging technology is advancing rapidly, and the ESR aims to survey up-to-date information about the needs of the radiological research community in order to develop recommendations that will enhance radiologists’ involvement in emerging fields in research and innovation.

In 2018, the ESR Research Committee was able to publish the results of its autumn 2017 survey, led by Prof. Olivier Clément, of the Hôpital Européen Georges Pompidou, Paris, France. This survey aimed to produce a clearer understanding of which research was being conducted in radiology in Europe. The results of the 2017 survey can be found on the ESR website.

In 2018, the ESR Research Committee carried out a survey on randomised imaging trials and data sharing, led by Prof. Marc Dewey, of the Charité Humboldt University, Berlin. It was conducted online between July and September 2018 among European heads of imaging departments and speakers at the Clinical Trials in Radiology sessions at ECR 2015–2018. The survey aimed to provide better understanding of the current situation of randomised imaging trials to further improve their implementation. Randomised imaging trials are clinical studies in which imaging biomarkers or biomolecular data is collected from one group of patients in order to compare the findings with another. The survey was performed between July and September 2018 among European heads of imaging departments and speakers at the Clinical Trials in Radiology sessions at ECR 2015–2018. The survey aimed to provide better understanding of the current situation of randomised imaging trials to further improve their implementation. Randomised imaging trials are clinical studies in which imaging biomarkers or biomolecular data is collected from one group of patients in order to compare the findings with another.

Further activities related to the ESR’s Research Committee are given below.

European Imaging Biomarkers Alliance (EIBALL) Subcommittee

The European Imaging Biomarkers Alliance (EIBALL) Subcommittee saw a change in leadership in 2018 as the term of Prof. Sigfried Trautig ended and Prof. Nandita deSouza, of the Institute of Cancer Research at the Royal Marsden Hospital, London, England, became the new Chair of the EIBALL Subcommittee. Prof. deSouza oversaw the introduction of a new mission statement for the subcommittee: “To facilitate imaging biomarker development, standardisation and promote their use in clinical trials and in clinical practice by collaboration with specialist societies, international standards agencies and trials organisations to develop a network of excellence”.

With the goal of fulfilling this mission statement, the EIBALL Subcommittee also finalised its two-year roadmap in May. This roadmap comprised of three pillars: establishing a functional biomarker profile that is current and relevant; enabling clinical use of biomarkers by setting standards for data acquisition and imaging processing; and, education on appropriate use of functional imaging biomarkers and their interpretation.

The EIBALL roadmap is designed to facilitate one of EIBALL’s primary objectives: getting more biomarkers into clinical trials. To encourage this, the EIBALL Subcommittee is working towards the development of an online inventory of biomarkers that can be accessed by imaging and used to inform them about the biomarkers available, their effectiveness, their appropriateness for particular trials, and how to use them. Defining exactly how and why biomarkers are useful is seen as the key to convincing funders of clinical trials to collaborate more with radiologists.

ESR/ERS Working Group (Lung Cancer Screening)

The ESR and the European Respiratory Society (ERS) are currently finalising a joint statement on lung cancer screening programmes in Europe. The ESR-ERS Working Group has been collaborating on the statement paper since late 2017, holding regular online meetings. Prof. Hans-Ulrich Kauczor, of the University Hospital Heidelberg, Germany, chairs the working group, which consists of 22 representatives from the ESR and ERS. The statement is intended to be an update of a past ESR-ERS working group white paper on lung cancer screening, published in 2015. It will contain an updated review of the literature and common practice in lung cancer screening in Europe and will also refer to the recently published preliminary NELSON results. The paper is expected to be published in 2019 with both societies hoping that it will stimulate further discussion and action on the implementation of lung cancer screening programmes in European countries.
CHAPTER 6
EIBIR RESEARCH ACTIVITIES

EUROPEAN INSTITUTE FOR BIOMEDICAL IMAGING RESEARCH (EIBIR)

The European Institute for Biomedical Imaging Research (EIBIR) is a non-profit organisation founded by the European Society of Radiology in 2006. EIBIR coordinates and supports research and development in biomedical imaging as well as the dissemination of knowledge, with the ultimate goal of improving the diagnosis, treatment and prevention of disease. It supports research networking and collaborative European research projects. EIBIR also plays a key role in spreading good practice, promoting common initiatives and developing interoperability in the field of biomedical imaging research.

One of its main services is supporting research proposal writing and applications to major European research funding programmes, such as Horizon 2020. EIBIR provides its network members with the services they need to make their project idea a reality.

Strategic Research Agenda for Biomedical Imaging

EIBIR published its first Strategic Research Agenda (SRA) for Biomedical Imaging in September 2018. The agenda identifies current challenges and needs in healthcare and illustrates how biomedical imaging and derived data can help to address these challenges. It includes:

- Meeting the healthcare demands of Europe’s population
- Developing new disease-specific, targeted and image-guided therapies
- Contributing to a healthy start
- Providing assessment of lifestyle and environmental impact factors on health
- Making Europe the world leader in machine learning and artificial intelligence

In particular, the agenda addresses the current paradigm shift in medicine, which has moved from reactive to proactive approaches by providing predictive, preventive, and personalised solutions for individual patients. It highlights the growing impact of personalised medicine on patients and its ability to address challenges of ineffective treatment and rising costs.

The SRA is aimed at informing policymakers and funding authorities about key areas of research in biomedical imaging while also highlighting hot topics to consider in future funding programmes. It was developed by the EIBIR office and Scientific Advisory Board, in collaboration with its eleven shareholder organisations, representing scientific societies related to biomedical imaging.

Collaborative research projects

EIBIR currently serves as project coordinator of the MEDIPAD project, which is investigating implications of low dose radiation exposure, the HYPMED project, which is developing a hybrid PET/MBI insert for breast cancer, and served in the same capacity for the recently concluded EURO-CAS. Health Conformity Assessment programme. For more details, please visit the EIBIR website at www.eibir.org.

Specific activities within the joint initiatives include initiating and coordinating collaborative research efforts and projects, organising workshops and symposia, training and educating young scientists through exchange programmes and summer schools, and sharing state-of-the-art equipment.

EIBIR Joint Initiatives

EIBIR currently supports seven joint initiatives, which represent interdisciplinary groups working towards a common biomedical imaging-focused research goal.

- Biomedical Imaging Analysis Platform
- Cell Imaging Network
- Chemistry Platform
- European Imaging Biomarkers Alliance (EIBALL)
- European Alliance for Medical Radiation Protection Research (EUARMed)
- European Network for the Assessment of Imaging in Medicine (EurAIM)
- Image Guided Radiotherapy
- Paediatric Radiology

In particular, the agenda addresses the current paradigm shift in medicine, which has moved from reactive to proactive approaches by providing predictive, preventive, and personalised solutions for individual patients. It highlights the growing impact of personalised medicine on patients and its ability to address challenges of ineffective treatment and rising costs.

In addition to these Horizon 2020 projects, EIBIR is involved in two investigator-initiated, industry-sponsored clinical studies:

- The MIPA study, led by the University of Milan and funded by Bayer, is investigating pre-operative breast MRI for breast cancer and recently finished its patient enrolment.

EIBIR encourages collaboration between research institutions and plays a key role in the implementation of EU-funded projects.

EIBIR network members and dedicated services

EIBIR relies on a large number of actively contributing network members. More than 80 leading European research institutions represent a variety of different imaging fields and more than 20 countries within Europe. Organisations with an interest in biomedical imaging are invited to become a part of the EIBIR network.

EIBIR shareholders

Current EIBIR shareholders include:

- European Society of Medical Imaging Informatics (EUSOMI)

All shareholders are represented at the General Meeting, where major strategic decisions are taken. Each shareholder organisation may also nominate a representative to sit on EIBIR’s Scientific Advisory Board, which advises the EIBIR Team on all scientific matters and plays a key role in the implementation of EU-funded projects.
Professor Valérie Vilgrain, founder Professor Nicholas Gourtsoyiannis handed over the reins to

After more than twelve years as ESOR Scientific Director, ESOR contributed significantly to raising the scientific profile of radiological education and promoting the importance of subspecialisation as well as introducing fellowships in radiology in Europe.

During 2018 ESOR has expanded its range of activities by adding new course series and training programmes to its portfolio, to accommodate the ever-evolving needs for radiological education.

The outcome once more emphasises the importance of establishing a long-term commitment for education in partnership and the value of delivering structured modular and mentored opportunities to learn from exchange.

2018 marked also the completion of twelve years of ESOR in action, years of continuous growth in educational activities, tailored to address the needs of thousands of radiologists. During this period ESOR contributed significantly to raising the scientific profile of radiological education and promoting the importance of subspecialisation as well as introducing fellowships in radiology in Europe.

After more than twelve years as ESOR Scientific Director, ESOR founder Professor Nicholas Gourtsoyiannis handed over the reins to Professor Valérie Vilgrain.

### SPECIFIC TASKS OF ESOR

- To organise teaching courses and workshops as visiting schools and seminars
- To develop fellowship and scholarship programmes
- To support the eLearning initiatives of ESR
- To support the implementation of the European Training Curriculum
- To establish and enlarge the ESOR community and to ensure the continuation of furthering education in the future
- To provide radiological education worldwide following and strengthening strategic tasks of the ESR

#### ESOR ACTIVITIES IN 2018

<table>
<thead>
<tr>
<th>COURSE TYPE</th>
<th>TOPIC</th>
<th>VENUE</th>
<th>DATE</th>
<th>PARTICIPANTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESOR Course for EDiR</td>
<td>Head and Neck Radiology</td>
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<td>November 2018</td>
<td>26</td>
</tr>
<tr>
<td>ESOR Course for EDiR</td>
<td>Breast Imaging</td>
<td>Vienna, Austria</td>
<td>November 2018</td>
<td>13</td>
</tr>
<tr>
<td>ESOR Course for EDiR</td>
<td>Cardiac Imaging</td>
<td>Vienna, Austria</td>
<td>November 2018</td>
<td>83</td>
</tr>
<tr>
<td>ESOR Course for EDiR</td>
<td>Multidisciplinary Approach to Cancer Imaging</td>
<td>Rome, Italy</td>
<td>October 2018</td>
<td>60</td>
</tr>
<tr>
<td>ESOR Course for EDiR</td>
<td>Ultrasound</td>
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<td>November 2018</td>
<td>26</td>
</tr>
<tr>
<td>ESOR Course for EDiR</td>
<td>Cardiac Imaging</td>
<td>Vienna, Austria</td>
<td>November 2018</td>
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<td>ESOR Course for EDiR</td>
<td>Breast Imaging</td>
<td>Vienna, Austria</td>
<td>November 2018</td>
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<td>ESOR Course for EDiR</td>
<td>Cardiac Imaging</td>
<td>Vienna, Austria</td>
<td>November 2018</td>
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<td>ESOR Course for EDiR</td>
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<td>Vienna, Austria</td>
<td>November 2018</td>
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<tr>
<td>ESOR Course for EDiR</td>
<td>Women’s Imaging</td>
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<tr>
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<td>76</td>
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#### TOTAL

- 2,242 participants
- 118 fellowships
- 40 exchange programmes in Europe
- 35 exchange programmes for fellowships in the USA
- 2 exchange programmes for fellowships in Europe with ESAR, ELGOSB, ESOR, ESHR, ESSH, ESR, ESMR, ESOI, ESPR, ESTI
- 8 full one-year fellowships in Europe
- 100 visiting professorships and tutorials

#### TOTAL SCHOLARSHIPS / FELLOWSHIPS

118
Chapter 8
European Board of Radiology (EBR)
EUROPEAN BOARD OF RADIOLOGY (EBR)

European Diploma in Radiology (EDiR)

The European Diploma in Radiology (EDiR) is organised by the European Board of Radiology (EBR). The EDiR is an additional qualification of excellence, which serves the standardisation and accreditation of radiologists across European borders. It provides an international benchmark for general radiology and is officially and fully endorsed by the European Union of Medical Specialists (UEMS) and the ESR.

Its target audience are certified radiologists or radiology residents in the last year of their national radiology training programme at the time of the examination. The application for the EDiR examination can be carried out individually or as a group through hospital heads of department or the corresponding national society.

As the EDiR is a benchmark of European training standards, the EBR is devoting more efforts to design educational resources to prepare for the examination. On October 15, 2018, the EDiR app was launched. This app has two main sections: the self-assessment section and the EBR blog. In the self-assessment section, candidates can practice with sample and mock examinations and, very soon, a bundle of questions ordered by subspecialty (initially on abdominal radiology, breast and other subspecialties like physics and nuclear medicine) will be available. On the EBR blog, radiologists can participate and interact among themselves through neuroradiology, emergency radiology and chest cases (Dr. Pepe). Everybody receives the latest news on EDiR as well as numerous opportunities to participate in many challenges with tempting prizes for the winner. In future, there will be cases about additional subspecialties on the self-assessment platform, and on the EBR blog, candidates will be able to register for examinations and access many other features.

The EDiR app is available for download at:


Access the EBR blog at: https://blog.myEBR.org/

EDiR examinations in 2018 (places sold)

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<th>Place</th>
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<tr>
<td>Röntgenveckan</td>
<td>Örebro, Sweden</td>
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<tr>
<td>Röntgenveckan</td>
<td>Örebro, Sweden</td>
<td>85 candidates</td>
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<tr>
<td>Paris, France</td>
<td>50 candidates</td>
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<tr>
<td>Istanbul, Turkey</td>
<td>90 candidates</td>
<td></td>
</tr>
<tr>
<td>Istanbul, Turkey</td>
<td>90 candidates</td>
<td></td>
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<tr>
<td>Vienna, Austria</td>
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</tr>
<tr>
<td>Moscow, Russia</td>
<td>15 candidates</td>
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</table>

In 2018, a total of 805 people applied for the EDiR examination; candidates came from 47 different countries, with 60% of the total coming from within Europe.
CHAPTER 8
EUROPEAN BOARD OF RADIOLOGY (EBR)

The Accreditation Council in Imaging (ACI)

In January 2016 the Accreditation Council in Imaging (ACI) was officially launched. It was established under the umbrella of the European Board of Radiology (EBR) to cooperate and collaborate with the accreditation council of the European Union of Medical Specialists (UEMS), the European Accreditation Council for Continuing Medical Education (EACCME®), and its Radiology Section in delivering and harmonising Continuing Medical Education (CME) accreditation in imaging.

The ACI aims to provide, together with the UEMS/EACCME® the highest level of CME accreditation available today. Its purpose is to make managing CME quick and easy for all applicants and guarantee the quality of the events and materials accredited. CME is considered a cornerstone of quality assurance in medical care and homogenised recognition is a necessary step towards European harmonisation of educational standards in radiology.

The ACI committees are composed of active radiologists who are members of the EBR and the UEMS Radiology Section, and they combine a vast amount of expertise in the imaging field.

The ACI Leadership consists of three members:

Paolo Ricci
(ACI Scientific Director and President of the UEMS Radiology Section)

Christian Loewe
(ACI Reviewing Committee Chair)

Milos Lucic
(ACI Policy Committee Chair)

Since the ACI’s launch in January 2016, more than 440 imaging events have been accredited.

The European Training Assessment Programme (ETAP 2.0)

The European Training Assessment Programme (ETAP) was established in 2001 as a joint initiative of the former European Association of Radiology (EAR) and the European Union of Medical Specialists (UEMS) Section of Radiology. From the beginning, the visits have been positive experiences for hosts and institutions, but new times demand new solutions.

The ETAP 2.0 moves from an external assessment audit to a virtual self-assessment audit.

In March 2017 the ESR, the UEMS Section of Radiology and the EBR agreed on its new concept and shift to the EBR. The ETAP Working Group (composed equally by EBR/ESR and UEMS members) has been working since then on the adaptation and development of the ETAP 2.0 programme and the necessary documents.

The ETAP 2.0 aims to:

• Improve and harmonise the standards of radiology training in Europe and beyond based on the ESR European Training Curriculum for Radiology (ETC)

• Provide institutions that offer postgraduate radiology education with objective assessment of their training programmes by nominated external assessors (ETAP 2.0 Scientific Committee members)

• Develop assessment systems and guidelines for use by postgraduate education authorities at a national level

• Be recognised as an excellence certificate and added value by the different radiological training institutions

The ETAP 2.0 was officially launched at ECR 2018, and it is led by Dragos Negru (ETAP 2.0 Scientific Director). Thanks to the EBR’s advertising campaign, more centres have been assessed, and the first Platinum Certificate was granted.
Chapter 9
ESR Social Media
ESR SOCIAL MEDIA

All of the ESR social media channels have continued to attract new followers throughout 2018. Notable increases have occurred for the ESR accounts on Instagram (the fastest growing social network in terms of users) and Twitter, as well as the European Radiology Experimental Facebook page, which has continued to grow well since its launch in November 2016.

Also of note is the launch of a new Twitter account to represent the ESR’s scientific publications (the three journals, plus Eurorad, EPOS, etc).

### Facebook

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<tr>
<td>European School of Radiology (ESOR)</td>
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<td>up 15%</td>
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<tr>
<td>International Day of Radiology</td>
<td>19,654</td>
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</tr>
<tr>
<td>European Radiology</td>
<td>13,080</td>
<td>up 16%</td>
</tr>
<tr>
<td>Insights into Imaging</td>
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<td>up 15%</td>
</tr>
<tr>
<td>European Radiology Experimental</td>
<td>1,001</td>
<td>up 127%</td>
</tr>
<tr>
<td>European Diploma in Radiology (EDIR)*</td>
<td>6,574</td>
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*Page now managed by the European Board of Radiology office in Barcelona

### Twitter

<table>
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<th>Followers</th>
<th>Change</th>
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### Instagram

<table>
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<th>Followers</th>
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</thead>
<tbody>
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### YouTube

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<th>Subscribers</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,679</td>
<td>up 29%</td>
</tr>
</tbody>
</table>
Chapter 10
ESR Connect
ESR CONNECT

By launching this brand new project, our constantly self-rejuvenating society is following current trends and adapting to the needs of the future generation of radiologists. ESR Connect provides high quality online content – live webinars, interviews, round table discussions – combining entertainment and state-of-the-art scientific programmes.

In September 2018, our TV Studio in Barcelona started to produce several types of audio-visual content, including both live broadcasts and recorded productions. Besides our traditional content, such as round table discussions, interviews and promotional material, online congresses can now be produced and carried out in-house.

The success of the pilot project, Conference on Hybrid Imaging Live (CHILI), a virtual conference on hybrid imaging, hosted by the European Society for Hybrid, Molecular and Translational Imaging (ESHIMT), speaks for itself: 2,400 live viewers from 107 countries tuned in to watch the conference on October 26. In addition, 1,000 people registered to watch the recording, which was available for 72 hours after the virtual congress.

• Live webinars
• Virtual conferences
• Lectures
• Interviews
• Round table discussions
• News
Chapter 11
ESR Promotional Activities
CHAPTER 11
ESR PROMOTIONAL ACTIVITIES

ESR PROMOTIONAL ACTIVITIES

ESR Newsletters
ESR News
ESR@Work
Noticias de la Sociedad Europea de Radiología - Edición Especial
Notícias da Sociedade Europeia de Radiologia – Edição Especial
Rising Stars Newsletter
ESOR Mailings

ECR 2018 Promotion
Get Ready
Thank You
ECR Online
ECR 2018 App

ECR 2019 Promotion
Abstract Submission
Registration
Clinical Trials in Radiology
Radiographers – Programme
Radiographers – Shape Your Skills
My Thesis in 3 Minutes
Radiographers – Registration special fee
ESR meets Africa
ESR meets Pakistan
ESR meets Italy
Abstract Submission reminder in 20 languages
EPGS

EuroSafe Imaging
European Diploma in Radiology (EDIR) promotion
European Training Assessment Programme 2.0 (ETAP 2.0) promotion
International Day of Radiology (IDOR) promotion
Youtube Channel Promotion
European Radiology

FOREIGN CONGRESSES (ESR & ECR PROMOTION)

Name of congress Country
Danish Congress of Radiology (DRS Årsmøde 2018) Denmark
17th Asian Oceanian Congress of Radiology & 71st National Conference of the Indian Radiological and Imaging Association India
Arab Health Exhibition and Congress United Arab Emirates
SMRI Annual Meeting Mexico
Ukrainian Congress of Radiology Ukraine
PAARS 2018 – Pan Arab Association of Radiological Societies conference / 52nd Egyptian Society of Radiology and Nuclear Medicine Conference Egypt
Iranian Congress of Radiology Iran
SPR Jornada Paulista de Radiologia Brazil
99th German Congress of Radiology 2018 Germany
Swiss Congress of Radiology 2018 Switzerland
CNR 2018 XIV Congresso Nacional de Radiologia Portugal
SERAM 2018 Spain
Congress of the Moldova Society Moldova
Hungarian Congress of Radiology Hungary
Armenian Congress of Radiology Armenia
Colombian Congress of Radiology Colombia
European Congress of Medical Physics Denmark
RCR Annual Meeting United Kingdom
34th Korean Congress of Radiology South Korea
Society of Radiology and Medical Imaging in Romania Annual Meeting Romania
Argentine Congress of Radiology, Diagnostic Imaging and Radiation Therapy Argentina
Irish Faculty of Radiologists’ Annual Scientific Meeting 2018 Ireland
Congress of the Croatian Society of Radiology Croatia
Baltic Congress of Radiology Lithuania
Radiographers Scientific Conference (RASCO – Congress of the Society of Radiography in Kenya) Kenya
RSSA 2018 (Radiological Society of Saudi Arabia) Saudi Arabia
Congresso Brasileiro de Radiologia (CBR – Congress of the Brazilian College of Radiology) Brazil
JFR 2018 (Journées Francophones de Radiologie) France
1st Congress of the Belarussian Society of Radiology Belarus
The Royal Australian and New Zealand College of Radiologists (RANZCR) Annual Scientific Meeting Australia
Israel Radiological Association Annual Meeting (ISRA 2018) Israel
Annual Radiology Meeting in the United Arab Emirates United Arab Emirates
National Congress of the Russian Society of Radiology Russia
Chinese Congress of Radiology (CSR 2018) China
XXVI Congreso Peruano de Radiología (Congress of the Peruvian Society of Radiology) Peru
SRBM – Società Italiana di Radiologia Medica e Interventistica Italy
Hellenic Congress of Radiology Greece
Chapter 12
ESR on Tour
ESR President Prof. Lorenzo E. Derchi from Genoa was awarded SFR Honorary Membership during the Journées Francophones de Radiologie in October, in Paris.

ESR President Prof. Lorenzo E. Derchi (pictured with Prof. Péter Bogner, Chair of the HSR Organising Committee) promoted ECR 2019 at the Hungarian Congress of Radiology in Pécs, in June.

EuroSafe Imaging Chair, Prof. Guy Frija, promoting quality and safety in imaging and highlighting the importance of multidisciplinarity in radiation protection at the European Congress of Medical Physics (ECMP) in Copenhagen in August 2018.

At the 37th Annual Meeting of the European Society for Radiotherapy and Oncology in April in Barcelona, Prof. Regina Beets-Tan from Amsterdam, Chair of the ESR Publications Committee, received ESTRO Honorary Membership.

### Table: ESR on Tour

<table>
<thead>
<tr>
<th>Date of Congress</th>
<th>Name of Congress</th>
<th>City, Country</th>
<th>ESR Representation</th>
<th>Honours</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 25-27</td>
<td>ESMPE – European School for Medical Physics Experts</td>
<td>Prague, Czech Republic</td>
<td>P.M. Panzel</td>
<td></td>
</tr>
<tr>
<td>January 26-25</td>
<td>47th Asian Oceanian Congress of Radiology (AOOCR) and 71st Annual Conference of the Indian Radiological and Imaging Association (IRRA)</td>
<td>Mumbai, India</td>
<td>G. Clement</td>
<td></td>
</tr>
<tr>
<td>January 29-February 1</td>
<td>Arab Health</td>
<td>Dubai, United Arab Emirates</td>
<td>P.M. Panzel, B. Brkljačić, A. Brady, M. Fuchsberger</td>
<td></td>
</tr>
<tr>
<td>February 14-18</td>
<td>SMRT – Annual Meeting of the Mexican Society of Radiology</td>
<td>Mexico City, Mexico</td>
<td>L.E. Derchi</td>
<td></td>
</tr>
<tr>
<td>February 23-24</td>
<td>ACTEDI – Cotedan Association of Radiographers congress</td>
<td>Barcelona, Spain</td>
<td>L. Donoso</td>
<td></td>
</tr>
<tr>
<td>March 5-7</td>
<td>IAEA Technical Meeting focusing on the Born Call for Action Toolkit</td>
<td>Vienna, Austria</td>
<td>G. Frija</td>
<td></td>
</tr>
<tr>
<td>March 9-11</td>
<td>Tunisian Congress of Radiology</td>
<td>Tunis, Tunisia</td>
<td></td>
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<tr>
<td>March 15-17</td>
<td>XVIII Congress of the Nicaraguan Association of Radiology and Imaging</td>
<td>Managua, Nicaragua</td>
<td></td>
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</tr>
<tr>
<td>March 16-17</td>
<td>Meeting of young radiologists from Slovenia, Hungary, Slovakia and Croatia</td>
<td>Rogaska Slatina, Slovenia</td>
<td>B. Brkljačić</td>
<td></td>
</tr>
<tr>
<td>March 28-30</td>
<td>Ukrainian Congress of Radiology</td>
<td>Kiev, Ukraine</td>
<td>B. Brkljačić</td>
<td></td>
</tr>
<tr>
<td>April 12-15</td>
<td>70th International Society of Radiographers and Radiological Technologists (ISRRT) World Congress</td>
<td>Port of Spain, Trinidad and Tobago</td>
<td></td>
<td></td>
</tr>
<tr>
<td>April 12-15</td>
<td>JRC 2018 – 77th Annual Meeting of the Japan Radiological Society</td>
<td>Yokohama, Japan</td>
<td>B. Hamm</td>
<td></td>
</tr>
<tr>
<td>April 13-14</td>
<td>Raaustria – Association of Austrian Radiologic Technologists Annual Congress</td>
<td>Graz, Austria</td>
<td></td>
<td></td>
</tr>
<tr>
<td>April 20-24</td>
<td>ESTRO 37 – European Society for Radiotherapy and Oncology Annual Meeting</td>
<td>Barcelona, Spain</td>
<td>Honorary Membership for R. Beets-Tan</td>
<td></td>
</tr>
<tr>
<td>April 24-27</td>
<td>30th Arab radiology conference (ARC 2018) of the Pan Arab Association of Radiological Societies (PAARS) and the 52nd Annual Conference of the Egyptian Society of Radiology &amp; Nuclear Medicine (ESIRM)</td>
<td>Alexandria, Egypt</td>
<td>L.E. Derchi, B. Brkljačić, G. Frija</td>
<td></td>
</tr>
<tr>
<td>May 1-4</td>
<td>Iranian Congress of Radiology</td>
<td>Tehran, Iran</td>
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<tr>
<td>May 3-5</td>
<td>SIEUR congress – Società Italiana di Diagnostica Integrata in Urologia, Andrologia, Nefrologia</td>
<td>Trieste, Italy</td>
<td>L.E. Derchi</td>
<td></td>
</tr>
</tbody>
</table>
May 3–6
48th Sao Paulo Radiological Meeting
São Paulo, Brazil

May 9–12
59th German Röntgen Congress
Leipzig, Germany
B. Hamm
Honorary Membership for B. Hamm

May 10–12
Swiss Congress of Radiology
Lausanne, Switzerland
P.M. Parizel
Schinz Medal for P.M. Parizel

May 11–13
Radiology Asia / Singapore Radiological Meeting
Singapore

May 16–19
XIV Congress of the Portuguese Society of Radiology and Nuclear Medicine
Albufeira, Portugal

May 17–19
Meeting of the Romanian Society of Ultrasound
Brașov, Romania
L.E. Derchi

May 23–27
SERAM 2018 – 34 Congresso Nacional de la Sociedad Española de Radiología
Pamplona, Spain

May 25–26
AIRTI – National congress of the Italian Association of Interventional Radiographers
Palermo, Italy

May 31 – June 2
Congress of the Moldovan Society of Radiology
Chisinau, Moldova
L.E. Derchi

May 31 – June 2
Annual Meeting of the International Society of Neurovascular Disease
Zhangzhou, China
B. Hamm

June 12–15
ESSGAR 2018 – European Society of Gastrointestinal and Abdominal Radiology annual meeting
Dublin, Ireland

June 3–8
World Congress on Medical Physics & Biomedical Imaging
Prague, Czech Republic
G. Frija

June 21–23
Hungarian Congress of Radiologists
Pecs, Hungary
B. Brkzačić, L.E. Derchi

June 29 – July 1
Armenian Congress of Radiology
Yerevan, Armenia

July 2–4
UK Radiological and Radiation Oncology Congress (UKRCO)
Liverpool, United Kingdom

July 10–14
IAEA Regional Workshop on Appropriate and Safe Use of Diagnostic Imaging
Tiflis, Georgia
V. Sinitsyn

July 12–14
XXIX Congress of the Interamerican College of Radiology
Punta Cana, Dominican Republic

August 2–4
CCR – Congress of the Colombian Association of Radiology
Cartagena, Colombia
V. Sinitsyn

August 16–19
Refresher Course of the Radiological and Diagnostic Imaging Society of Sao Paulo (SPR)
São Paulo, Brazil

At the RT Austria Congress in Graz, Austria, in March, radiographers were already looking forward to ECR 2019.

Chairman of the ESR Board of Directors, Prof. Bernd Hamm, received Honorary Membership of the German Röntgen Society (DRG) on May 10, during the German Röntgen Congress held in Leipzig/DE.

ESR Past President, Prof. Paul Parizel, was awarded the Schinz Medal by the Swiss Society of Radiology in a special ceremony at the Swiss Congress of Radiology in Lausanne, in May.
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
<th>Organizers</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 23–25</td>
<td>EFOMP – 2nd European Congress of Medical Physics</td>
<td>Copenhagen, Denmark</td>
<td>G. Frija, C. Granata</td>
</tr>
<tr>
<td>September 3</td>
<td>IAEA Course for Radiologists on Applying Justification and Referral Guidelines for Imaging</td>
<td>Warsaw, Poland</td>
<td>G. Frija</td>
</tr>
<tr>
<td>September 7–9</td>
<td>ECCO 2018: European Cancer Summit</td>
<td>Vienna, Austria</td>
<td>L.E. Derchi, R. Beets-Tan, C. Catalano</td>
</tr>
<tr>
<td>September 10–12</td>
<td>RCR 2018 – Annual Meeting of the Royal College of Radiologists of the UK</td>
<td>Liverpool, United Kingdom</td>
<td></td>
</tr>
<tr>
<td>September 12–15</td>
<td>KCR 2018 – 74th Korean Congress of Radiology</td>
<td>Seoul, Korea</td>
<td>B. Hamm</td>
</tr>
<tr>
<td>September 15–16</td>
<td>ESUR 2018 – 25th European Symposium on Urogential Radiology</td>
<td>Barcelona, Spain</td>
<td>B. Hamm, L.E. Derchi</td>
</tr>
<tr>
<td>September 19–23</td>
<td>ESNR 2018 – The European Society of Neuroradiology Annual Meeting</td>
<td>Rotterdam, Netherlands</td>
<td></td>
</tr>
<tr>
<td>September 20–22</td>
<td>Romanian Congress of Radiology and Medical Imaging 2018</td>
<td>Constanta, Romania</td>
<td>L.E. Derchi</td>
</tr>
<tr>
<td>September 25–27</td>
<td>CADI – Argentine Congress of Radiology</td>
<td>Buenos Aires, Argentina</td>
<td></td>
</tr>
<tr>
<td>September 21–28</td>
<td>CRISIE – Cardiovascular and Interventional Radiological Society of Europe Annual Meeting 2018</td>
<td>Lisbon, Portugal</td>
<td>L.E. Derchi, R. Loose</td>
</tr>
<tr>
<td>September 26–28</td>
<td>Irish Faculty of Radiologists’ Annual Scientific Meeting 2018</td>
<td>Dublin, Ireland</td>
<td></td>
</tr>
<tr>
<td>September 6–9</td>
<td>30th Euroson Congress of the European Federation of Societies for Ultrasound in Medicine and Biology (EFSUMB)</td>
<td>Poznan, Poland</td>
<td>B. Brkljačić</td>
</tr>
<tr>
<td>October 1–3</td>
<td>IAEA Technical Meeting on Safety Culture in Medical Uses of Radiology</td>
<td>Vienna, Austria</td>
<td>F. Karbinger</td>
</tr>
<tr>
<td>October 1–3</td>
<td>ERPW 2018 – 3rd European Radiological Protection Research Week</td>
<td>Rovign, Croatia</td>
<td>G. Frija</td>
</tr>
<tr>
<td>October 3–6</td>
<td>II International Congress and XXVIII Congress of Diagnostic and Therapeutic Imaging of the Mexican Federation of Radiology</td>
<td>León, Mexico</td>
<td></td>
</tr>
<tr>
<td>October 4–7</td>
<td>Congress of the Croatian Society of Radiology</td>
<td>Split, Croatia</td>
<td>B. Brkljačić</td>
</tr>
<tr>
<td>October 4–6</td>
<td>Congress of the Balkan Society of Radiology</td>
<td>Izmir, Turkey</td>
<td>L.E. Derchi</td>
</tr>
<tr>
<td>October 4–6</td>
<td>Baltic Congress of Radiology</td>
<td>Kaunas, Lithuania</td>
<td></td>
</tr>
<tr>
<td>October 4–6</td>
<td>ÖRG – Österreichischer Röntgenkongress 2018</td>
<td>Salzburg, Austria</td>
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<tr>
<td>October 8–13</td>
<td>Czech Congress of Radiology</td>
<td>Olomouc, Czech Republic</td>
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<tr>
<td>October 9–12</td>
<td>RISSA – Radiological Society of Saudi Arabia Annual Meeting</td>
<td>Riyadh, Saudi Arabia</td>
<td></td>
</tr>
<tr>
<td>October 11–13</td>
<td>CBIR – Brazilian Congress of Radiology</td>
<td>Rio de Janeiro, Brazil</td>
<td>R. Beets-Tan, N. Trajkova</td>
</tr>
<tr>
<td>October 11–13</td>
<td>EUSOBI 2018 – European Society of Breast Imaging Annual Meeting</td>
<td>Athen, Greece</td>
<td></td>
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<tr>
<td>October 13–17</td>
<td>EANM 2018 – European Association of Nuclear Medicine 21st Annual Congress</td>
<td>Düsseldorf, Germany</td>
<td></td>
</tr>
<tr>
<td>October 18–20</td>
<td>Chilean Congress of Radiology</td>
<td>Santiago de Chile, Chile</td>
<td></td>
</tr>
<tr>
<td>October 19–20</td>
<td>Radiology Together (Bulgarian Resident Association’s Congress)</td>
<td>Sofia, Bulgaria</td>
<td>C. Catalano</td>
</tr>
<tr>
<td>October 22–24</td>
<td>IAEA Regional Workshop on Radiation Protection Education and Training of Health Professionals in Diagnostic and Interventional Radiology</td>
<td>Coimbra, Portugal</td>
<td>C. Granata</td>
</tr>
<tr>
<td>October 25–26</td>
<td>1st Congress of the Belarusian Society of Radiology</td>
<td>Minsk, Belarus</td>
<td>B. Brkljačić</td>
</tr>
<tr>
<td>October 25–28</td>
<td>RANZCR Annual Scientific Meeting – The Royal Australian and New Zealand College of Radiologists</td>
<td>Canberra, Australia</td>
<td>L.E. Derchi</td>
</tr>
<tr>
<td>October 27</td>
<td>Georgian Association of Radiology congress ‘Oncological Imaging from Head to Toe’</td>
<td>Tbilisi, Republic of Georgia</td>
<td>B. Brkljačić, N. Trajkova</td>
</tr>
<tr>
<td>October 31 – November 2</td>
<td>ISRA 2018 – Israel Radiological Association Annual Meeting</td>
<td>Elat, Israel</td>
<td>B. Brkljačić, Honorary Membership for B. Brkljačić</td>
</tr>
<tr>
<td>October 31 – November 2</td>
<td>Annual Radiology Meeting in UAE – Radiology Society of the Emirates</td>
<td>Dubai, United Arab Emirates</td>
<td>A. Leghi</td>
</tr>
<tr>
<td>November 7–9</td>
<td>National Congress of Russian Society of Radiology</td>
<td>Moscow, Russia</td>
<td></td>
</tr>
<tr>
<td>November 6–11</td>
<td>TÜRKRAPCO – Turkish National Congress of Radiology</td>
<td>Ankara, Turkey</td>
<td></td>
</tr>
<tr>
<td>November 7–11</td>
<td>Chinese Congress of Radiology</td>
<td>Beijing, China</td>
<td>B. Hamm, P. Asbach, Honorary Membership for B. Hamm</td>
</tr>
<tr>
<td>November 8–9</td>
<td>Congress of the Cuban Society of Imaging</td>
<td>Havana, Cuba</td>
<td>P.M. Parizel, Honorary Membership for P.M. Parizel</td>
</tr>
<tr>
<td>November 8–10</td>
<td>XXVI Peruvian Congress of Radiology</td>
<td>Lima, Peru</td>
<td></td>
</tr>
</tbody>
</table>
November 8–10  Wiener Radiologisches Symposium – Vienna School of Radiology (VISOR) Vienna, Austria
November 8–11  SIRM 2018 – 48th National Congress of the Italian Society of Medical Radiology Genova, Italy L.E. Derchi, B. Hamm, P.M. Parizel Honorary Membership for B. Hamm and P.M. Parizel
December 7–9  Hellenic Congress of Radiology Athens, Greece B. Hamm
December 5–8  EuroEcho Imaging 2018 – 22nd Annual Congress of the European Association of Cardiovascular Imaging (EACVI) Milan, Italy A. Brady
December 14–15  18èmes Journées Algéro Françaises de Radiologie et d’Imagerie Médicale Algiers, Algeria L.E. Derchi, G. Frija

‘Radiology Together’, a special meeting for Bulgarian residents took place in Sofia, Bulgaria, in October; ESR Education Committee Chair Carlo Catalano surrounded by residents and speakers.

Radiology Together’, a special meeting for Bulgarian residents took place in Sofia, Bulgaria, in October; ESR Education Committee Chair Carlo Catalano surrounded by residents and speakers.

ESR Past President, Prof. Paul M. Parizel, was awarded with Honorary Membership of the Radiological Society of North America (RSNA) on November 26, during RSNA 2018, held in Chicago, US.

Chairman of the ESR Board of Directors, Prof. Bernd Hamm, proudly presenting ‘the bigger picture’ at the 74th Korean Congress of Radiology in Seoul/KR in September.
Chapter 13

esr organisation
ESR Executive Council
March 2018 – March 2019

ESR BOARD OF DIRECTORS

1. CHAIRMAN OF THE BOARD OF DIRECTORS (BOD) Bernd Hamm, Berlin/DE
2. PRESIDENT Lorenzo E. Derchi, Genoa/IT
3. 1ST VICE-PRESIDENT Boris Brkljačić, Zagreb/HR
4. 2ND VICE-PRESIDENT Michael Fuchsberger, Graz/AT
5. PAST-PRESIDENT Paul M. Parizel, Antwerp/BE

CHAIRPERSONS OF STATUTORY COMMITTEES

6. Communication and External Affairs Committee Nikoleta Traykova, Plovdiv/BG
7. ECR 2019 Programme Planning Committee Lorenzo E. Derchi, Genoa/IT
8. ECR 2020 Programme Planning Committee Boris Brkljačić, Zagreb/HR
9. Education Committee Carlo Catalano, Rome/IT
10. Finance and Internal Affairs Committee Deniz Akata, Ankara/TR
11. National Societies Committee Christoph D. Becker, Geneva/CH
12. Publications Committee Regina Beets-Tan, Amsterdam/NL
13. Quality, Safety and Standards Committee Adrian P. Brady, Cork/IE
14. Research Committee Olivier Clément, Paris/Fr
15. Subspecialties and Allied Sciences Committee Afshin Gargi, Strasbourg/Fr
16. ESOR Scientific/Educational Director Valérie Vilgrain, Clichy/Fr
17. Executive Director Peter Baierl, Vienna/AT
EUROPEAN BOARD OF RADIOLOGY (EBR)
18. Chairman of the EBR Shareholders’ Board
   Bernd Hamm, Berlin/DE
19. EBR Institutional Representative
   Paul M. Parizel, Antwerp/BE
20. EDIR (European Diploma in Radiology) Scientific Director
   Laura Oliega, Barcelona/ES
21. ACI (Accreditation Council in Imaging) Scientific Director
   Paolo Rizzi, Rome/IT
22. ETAP (European Training Assessment Programme) Scientific Director
   Dragos Negru, Iasi/RO

EUROPEAN INSTITUTE FOR BIOMEDICAL IMAGING RESEARCH (EIBIR)
23. ESR Representative and Chair of EIBIR General Meeting
   Paul M. Parizel, Antwerp/BE
24. EIBIR Scientific Director
   Gabriel P. Krestin, Rotterdam/NL

ESR PUBLICATIONS
25. Editor-in-Chief of European Radiology
   Yves Menu, Paris/FR
26. Editor-in-Chief of Insights into Imaging
   Luis Martí-Bonmatí, Valencia/ES
27. Editor-in-Chief of European Radiology Experimental
   Francesco Sardanelli, Milan/IT
28. Editor-in-Chief of EPOS
   Ioana G. Lapescu, Bucharest/RO
29. Editor-in-Chief of EURORAD
   Olle Elberg, Malmö/SE
30. Editor-in-Chief of ESR News
   Roberto Pozzi Mucelli, Verona/IT
31. Editor-in-Chief of ESR@Work
   Christoph D. Becker, Geneva/CH
CHAPTER 13
ESR ORGANISATION

SUBCOMMITTEES (CHAIRS)

32. Audit and Standards  
David Howlett, Eastbourne/UK

33. eHealth and Informatics  
Emanuele Neri, Pisa/IT

34. eLearning  
Sue Barter, Cambridge/UK

35. European Imaging Biomarkers Alliance  
Nandita deSouza, Surrey/UK

36. Professional Issues and Economics in Radiology  
Peter Mildenberger, Mainz/DE

37. Radiation Protection  
Reinhard W.R. Loose, Nuremberg/DE

38. EuroSafe Imaging Steering Committee  
Guy Frija, Paris/FR

39. Radiology Trainees Forum  
Atis Svare, Jelgava/LV

40. Referral Guidelines  
Myriam Hunink, Rotterdam/NL

41. Ultrasound  
Dirk Clevert, München/DE

42. Undergraduate Education  
Vlastimil Valek, Brno/CZ

43. Value-Based Radiology  
Michael Fuchsjäger, Graz/AT

WORKING GROUPS (CHAIRS)

44. Patient Advisory Group  
Nicola Bedlington, Vienna/AT

45. Patient Advisory Group Vice-Chair  
Nikoleta Traykova, Plovdiv/BG
ESR Member Societies

INSTITUTIONAL MEMBER SOCIETIES (63)
EUROPEAN NATIONAL SOCIETIES (48)

ALBANIA  Albanian Imaging Association
ARMENIA  Armenian Association of Radiologists
AUSTRIA  Austrian Roentgen Society
BELARUS  Belarussian Society of Radiologists
BELGIUM  Belgian Society of Radiology
BOSNIA AND HERZEGOVINA  Association of Radiology of Bosnia & Herzegovina
BULGARIA  Bulgarian Association of Radiology
CRONIAIA  Croatian Society of Radiology
CYPRUS  Cyprus Radiological Society
CZECH REPUBLIC  Czech Radiological Society
DENMARK  Danish Society of Radiology
ESTONIA  Estonian Society of Radiology
FINLAND  Radiological Society of Finland
FRANCE  French Society of Radiology
GEORGIA  Georgian Association of Radiologists
GERMANY  German Radiological Society
GREECE  Hellenic Radiological Society
HUNGARY  Hungarian Society of Radiologists
ICELAND  Radiological Society of Iceland
IRELAND  Faculty of Radiologists, Royal College of Surgeons in Ireland
ISRAEL  Israel Radiological Association
ITALY  Italian Society of Radiology
KAZAKHSTAN  Radiological Society of Kazakhstan
KOSOVO  Radiologists Association of Kosovo
KYRGYZSTAN  Kyrgyzstan Radiological Society
LATVIA  Latvian Association of Radiologists
LITHUANIA  Lithuanian Radiological Association
LUXEMBOURG  Luxembourg Society of Radiology
MACEDONIA, REPUBLIC OF  Macedonian Society of Radiology
MALTA  Maltese Association of Radiologists and Nuclear Medicine Physicians
MOLDOVA  Moldavian Society of Radiology and Medical Imaging
MONTENEGRO, REPUBLIC OF  Radiological Association of Montenegro
THE NETHERLANDS  Radiological Society of the Netherlands
NORWAY  Norwegian Society of Radiology
POLAND  Polish Medical Society of Radiology
PORTUGAL  Portuguese Society of Radiology and Nuclear Medicine

EUROPEAN SUBSPECIALTY AND ALLIED SCIENCES SOCIETIES (15)

CIRSE  Cardiovascular and Interventional Radiological Society of Europe
ESCR  European Society of Cardiovascular Radiology
ESER  European Society of Cardiovascular Radiology
ESGAR  European Society of Gastrointestinal and Abdominal Radiology
ESHMRT  European Society for Hybrid, Molecular and Translational Imaging
ESNR  European Society of Head and Neck Radiology
ESHMIG  European Society of Magnetic Resonance in Medicine and Biology
ESNIR  European Society of Nuclear Medicine
ESDI  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
ESUOR  European Society of Breast Imaging
EUSOMI  European Society of Medical Imaging Informatics

EUROPEAN NATIONAL SOCIETIES (48)

ALBANIA  Albanian Imaging Association
ARMENIA  Armenian Association of Radiologists
AUSTRIA  Austrian Roentgen Society
BELARUS  Belarussian Society of Radiologists
BELGIUM  Belgian Society of Radiology
BOSNIA AND HERZEGOVINA  Association of Radiology of Bosnia & Herzegovina
BULGARIA  Bulgarian Association of Radiology
CRONIAIA  Croatian Society of Radiology
CYPRUS  Cyprus Radiological Society
CZECH REPUBLIC  Czech Radiological Society
DENMARK  Danish Society of Radiology
ESTONIA  Estonian Society of Radiology
FINLAND  Radiological Society of Finland
FRANCE  French Society of Radiology
GEORGIA  Georgian Association of Radiologists
GERMANY  German Radiological Society
GREECE  Hellenic Radiological Society
HUNGARY  Hungarian Society of Radiologists
ICELAND  Radiological Society of Iceland
IRELAND  Faculty of Radiologists, Royal College of Surgeons in Ireland
ISRAEL  Israel Radiological Association
ITALY  Italian Society of Radiology
KAZAKHSTAN  Radiological Society of Kazakhstan
KOSOVO  Radiologists Association of Kosovo
KYRGYZSTAN  Kyrgyzstan Radiological Society
LATVIA  Latvian Association of Radiologists
LITHUANIA  Lithuanian Radiological Association
LUXEMBOURG  Luxembourg Society of Radiology
MACEDONIA, REPUBLIC OF  Macedonian Society of Radiology
MALTA  Maltese Association of Radiologists and Nuclear Medicine Physicians
MOLDOVA  Moldavian Society of Radiology and Medical Imaging
MONTENEGRO, REPUBLIC OF  Radiological Association of Montenegro
THE NETHERLANDS  Radiological Society of the Netherlands
NORWAY  Norwegian Society of Radiology
POLAND  Polish Medical Society of Radiology
PORTUGAL  Portuguese Society of Radiology and Nuclear Medicine

EUROPEAN SUBSPECIALTY AND ALLIED SCIENCES SOCIETIES (15)

CIRSE  Cardiovascular and Interventional Radiological Society of Europe
ESCR  European Society of Cardiovascular Radiology
ESER  European Society of Cardiovascular Radiology
ESGAR  European Society of Gastrointestinal and Abdominal Radiology
ESHMRT  European Society for Hybrid, Molecular and Translational Imaging
ESNR  European Society of Head and Neck Radiology
ESHMIG  European Society of Magnetic Resonance in Medicine and Biology
ESNIR  European Society of Nuclear Medicine
ESDI  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
ESUOR  European Society of Breast Imaging
EUSOMI  European Society of Medical Imaging Informatics
ASSOCIATE INSTITUTIONAL MEMBER SOCIETIES (49)

ALGERIA  Algerian Society of Radiology and Medical Imaging
ARGENTINA  Argentinian Society of Radiology
AUSTRALIA & NEW ZEALAND  The Royal Australian and New Zealand College of Radiologists
BOLIVIA  Bolivian Society of Radiology
BRAZIL  Brazilian College of Radiology
CHILE  Chilean Society of Radiology
CHINA  Chinese Society of Radiology
COLOMBIA  Colombian Association of Radiology
Costa Rica  Costa Rican Association of Radiology
CUBA  Cuban Society of Imaging
DOMINICAN REPUBLIC  Dominican Society of Radiology
EGYPT  Egyptian Society of Radiology and Nuclear Medicine
EL SALVADOR  Salvadoran Association of Radiology, Ultrasonography and Diagnostic Imaging
GUATEMALA  Guatemalan Civil Association of Diagnostic Imaging and Radiotheraphy
HONDURAS  Honduran Association of Radiology and Imaging
HONG KONG  Hong Kong College of Radiologists
INDIA  Indian Radiological & Imaging Association
IRAN  Iranian Society of Radiology
IRAQ  Iraq Association of Radiologists
IVORY COAST  Ivorian Society of Medical Imaging
JAPAN  Japan Radiological Society
KOREA  Korean Society of Radiology
LEBANON  Lebanese Society of Radiology
MALAYSIA  Malaysian College of Radiology
MAURITANIA  Mauritanian Society of Radiology and Medical Imaging
MEXICO  Mexican Federation of Radiology and Imaging
MONGOLIA  Mongolian Radiological Society
MOROCCO  Moroccan Society of Radiology
NICARAGUA  Nicaragua Association of Radiology and Imaging
NIGERIA  Association of Radiologists in Nigeria
oman  Oman Radiology and Molecular Imaging Society
PAKISTAN  Radiological Society of Pakistan
PANAMA  Panamanian Society of Radiology and Imaging
PARAGUAY  Paraguayan Society of Radiology
PERU  Peruvian Society of Radiology
PHILIPPINES  Philippine College of Radiology
SAUDI ARABIA  Radiological Society of Saudi Arabia
SINGAPORE  Singapore Radiological Society
SOUTH AFRICA  Radiological Society of South Africa
SRI LANKA  Sri Lanka College of Radiologists
TANZANIA  Tanzanian Association of Radiologists
THAILAND  The Royal College of Radiologists of Thailand
TUNISIA  Tunisian Society of Radiology
UGANDA  Association of Radiologists of Uganda
UNITED ARAB EMIRATES  Radiology Society of the Emirates
URUGUAY  Uruguayan Society of Radiology and Imaging
VENEZUELA  Venezuelan Society of Radiology and Diagnostic Imaging
VIETNAM  Vietnamese Society of Radiology and Nuclear Medicine
YEMEN  Yemen Society of Radiology
### THE ESR WELCOMES ITS SUPPORTING MEMBERS

The ESR would like to express its gratitude to all supporting membership companies. As the ESR puts a special focus on innovation and keeping up to date with recent developments in the field, close cooperation with the industry leaders is indispensable. The active involvement of the companies contributes significantly to the success of the society and its congress, as well as supporting the cause of radiology in Europe.

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#### PLATINUM

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Thank you for your involvement!