

BY CARLO MARTINOLI AND FILIP M. VANHOENACKER

Boost your career opportunities with the ESSR Diploma

Subspecialisation is a key to the future of radiology and represents one of the cornerstones of the ESSR's work. In order to harmonise standards of knowledge among European subspecialty societies, the European Society of Musculoskeletal Radiology (ESSR) has recently changed the architecture of the requirements for the Diploma in Musculoskeletal Radiology, creating a new scheme with more robust content, better structure and featuring eligibility criteria according to the guidelines of the European Training Curriculum (ETC) for Subspecialisation in Radiology (Level III). The European Diploma in Musculoskeletal Radiology is awarded to certified radiologists who have satisfied specific criteria related to continuing education and practice in musculoskeletal radiology. Basically, it aims at confirming specific competences in performing, interpreting and reporting conventional radiography, ultrasound, MR imaging (including arthro-MR imaging), CT (including arthro-CT) examinations, and image-guided interventional procedures related to the musculoskeletal system.

To get certification, candidates have to pass an examination based on two steps that give formal proof of their qualification:

Step 1: Professional requirements. These include completion of a programme of CME-accredited activities over a 5-year period and membership for ESSR and ESR during the full duration of the programme. An RIS documentation/logbook of recorded activities is required to ensure that the candidate is professionally active in musculoskeletal radiology.

Step 2: Written and oral examination. In the written test, the candidate is asked to answer up to 40 multiple choice questions on all aspects of musculoskeletal radiology in one hour; in the oral examination, the candidate discusses two cases shown at the workstation with a board of examiners.

The ESSR Diploma certification is valid for five years and can be renewed.

Drawing up a competence profile for a musculoskeletal radiologist is challenging given the heterogeneity in the typology of work across different countries in Europe. Among ESSR members, only a few work in orthopaedic hospitals, many perform MR imaging but not MR-arthrography, many (even experts) do

not perform ultrasound, and their practice is essentially based on MR imaging or vice versa. Others are general radiologists interested in the musculoskeletal area but with limited access to some modalities. In addition, many musculoskeletal radiologists don't examine the spine because this job is performed by neuroradiologists. The situation appears to be very different compared to other subspecialty societies where the typology of examinations is much more homogeneous among their members. Based on these considerations, the architecture of the examination to earn the diploma has been designed to be as inclusive as possible while remaining, at the same time, a serious check of theoretical knowledge in the field.

In three years of experience, the pass rate of the exam has been 87%, with the level of difficulty ranging from moderate to difficult as reported by candidates. Interestingly, 25% of them applied from non-EU countries and approximately 50% came from countries that do not adopt subspecialisation or in which a structured post-doctoral training programme in musculoskeletal radiology is not

established yet. In these countries, the European Diploma may have a role in fostering subspecialisation, assisting radiologists in the promotion of their skills, and as proof of experience in musculoskeletal imaging when dealing with other clinical colleagues and with the general public.

Advantages of a European Diploma in Musculoskeletal Radiology are many. Although the diploma cannot replace any national board certificate, it may contribute in strengthening the candidate's CV, thus helping to build up a career profile in musculoskeletal radiology.

References and more information can be found at <https://essr.org/diploma>

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Another topic underpinning the patient-health professional relationship is the rapid technological development and increased use of 'big data' in healthcare. Radiology departments are required to thoroughly rethink and adapt working procedures in response to cybersecurity threats and data protection concerns (on this topic see also the article on page 1).

The ESR-PAG is delighted to hold a session today on a topic that goes right to the heart of both patients and health professionals: The patient-doctor relationship and interdisciplinary communication in the radiology department. This session will look in-depth at the modalities of the patient-radiologist/radiographer relationship, emphasising the need for accurate, effective and timely communication with and for patients and between different hospital departments. This session will bring together patient representatives, radiologists and radiographers so that they can effectively express their views and improve each other's understandings on this sensitive but nonetheless important topic.

The prospect of entering an intimidating, grey and tailor-made hospital room is everyday business for doctors and other health professionals. However, let us put on the patient's hat and realise that the type of communication and human interaction encountered in radiology departments is sometimes viewed as impersonal and too theoretic. Continuous technological innovations and standardisation, which are admittedly benefiting patient outcomes, seem to have resulted in less direct interaction with the patient. A department's communication strategy may also affect a patient's experience. This session will address the impact of communication on the patient's

experience and offer practical solutions to improve patient-doctor communications.

Patients are right to expect accurate, understandable and timely information concerning their examination/intervention. The radiology report is one crucial tool, if not the centrepiece, to ensure communication between the patient and radiologist/radiographer. Patients, together with professions operating outside the radiology department, expect a report that is to the point and consistent to avoid confusion.

As the radiology department is only part of a broader chain of communication inside the hospital, it proves crucial to embed the department's input in the overall stream of information that follows the patient from entry to aftercare. This ensures that accurate information reaches the patient during every step of the healthcare process. For this reason, it is essential for radiologists and radiographers to have a good understanding of professions working outside the radiology department and vice versa, to streamline communication across hospital departments. The session will thus discuss methods to better integrate the radiology department in the overall stream of communication reaching the patient, calling for a multidisciplinary approach not only limited to the clinical practice, but also encompassing communication and interaction with the patient across departments.

Today's second ESR-PAG session features a topic that has gained prominence at previous ECR editions, and is also recurring in every discussion related to eHealth, digital innovation, and research: 'Big data: implications for medical imaging and the need for data protection and cyber security'. The session's timing fits very nicely with

BY JONAS VAN RIET

ESR Patient Advisory Group puts the patient at the centre of the debate on big data and the patient-doctor relationship

The ESR Patient Advisory Group (ESR-PAG) is hosting two sessions dedicated to patient safety issues during this year's ECR. One of the ESR-PAG's key aims is to launch initiatives striving for improved communication between the patient and the health professional in the radiology department.

approaching deadline for the implementation of the EU's centrepiece legislation on data protection, the General Data Protection Regulation, applicable starting May 2018. In this session, the discussion will map the impact of 'big data' in radiology and the need for data protection, presented from both the patient and radiologist/radiographer perspective.

The introduction of the General Data Protection Regulation will have far-reaching implications for the processing and sharing of health data, including medical images, whereas patients are given more stringent safeguards in terms of access and use of their personal health data. The processing of health data will require explicit consent by the data subject, while all patients must have access to their personal data and have the right to transfer personal data to another service provider.

Striking a balance between data protection and the use of 'big data' for pursuing public health interests and innovative research outcomes is a precarious exercise that deserves a profound and open debate. The use of personal health data in many cases leads to an early diagnosis and triggers a better understanding of new symptoms so treatments can be timely implemented and adapted to the needs of the patient. In addition, research projects may also prosper from using personal health data, giving rise to innovative and breakthrough treatments. However, we realise that putting measures in place to adequately protect personal health data is required to maintain the patient's trust in healthcare services and research projects.

The setting of this session facilitates a frank discussion among health professionals and patient representatives on how practical

tools can reconcile differing interests in relation to the use of 'big data' in medical imaging and research in particular.

Expanding the use of data in medical imaging and research projects due to rapid technological developments raises questions regarding data security and the risk of data breaches. The ever-increasing use of big data has unfortunately not yet fully coincided with the implementation of strong and resistant cyber security programmes that are able to deter this threat. There is, however, no doubt that security breaches disclosing personal health data are detrimental to patients' trust and their willingness to share data for scientific and clinical purposes.

Imaging equipment can also be vulnerable to cyber threats. Hackers can use medical equipment to infiltrate the institutions' network in their quest for data access. In the worst-case scenario, imaging equipment can be rendered ineffective, causing delays and interruptions with potential negative repercussions for patients. This session highlights the importance for radiology departments to have in-house knowledge on how to deal with cyber threats. Practical solutions will be presented during the session to ensure the patient's safety and minimise the risk of security breaches.

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.

Background

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1. Data on file and from public sources, 2017. 2. Results from Friedewald, SM, et al. "Breast cancer screening using tomosynthesis in combination with digital mammography." JAMA 311:24 (2014): 2499-2507; a multi-site (13), non-randomized, historical control study of 454,000 screening mammograms investigating the initial impact of the introduction of the Hologic Selectra™ Dimensions™ on screening outcomes. Individual results may vary. The study found an average 4% increase and that 12.95% CI: 0.8-16) additional invasive breast cancers per 1000 screening exams were found in women receiving combined 2D FFDM and 3D™ mammograms acquired with the Hologic 3D™ Mammography System versus women receiving 2D FFDM mammograms only. 3. In an internal study comparing Hologic's standard compression technology to the SmartCurve™ system (8 x 24cm), ADS-02143-EUR-EN Rev001 © 2018 Hologic, Inc. All rights reserved. Hologic, 3D, 3Dimensions, 3D Mammography, Dimensions, Selenia, The Science of Sure, and associated logos are trademarks and/or registered trademarks of Hologic, Inc. and/or its subsidiaries in the US and/or other countries. All other trademarks, registered trademarks, and product names are the property of their respective owners.

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