### EUROPEAN CONGRESS OF RADIOLOGY

**J**2024

AWAKENING

# **NEXT GENERATION RADIOLOGY** VIENNA / FEBRUARY 28 – MARCH 03

### **MYESR.ORG**

THE ANNUAL MEETING OF

DESIRE OF RADIOLOGY

EFRS EUROPEAN FEDERATION OF RADIOGRAPHER SOCIETIES ESHIMT MOLECULAR TRANSLATIONAL HYBRID IMAGING

# FOREWORD BY THE ESR PRESIDENT CARLO CATALANO



Dear Colleagues and Friends,

It is with great pleasure and considerable anticipation that I introduce to you the scientific and educational programme for the **European Congress of Radiology 2024**.

This congress will be held at a time where we as radiologists find ourselves at the dawn of a new era – the era of 'Next Generation Radiology'. This congress slogan encapsulates our shared vision of not just staying ahead, but defining the future of our field.

In the ever-evolving landscape of medical imaging, radiologists continue to play a pivotal role in transforming healthcare. Our journey at ECR 2024 will extend beyond the boundaries of the present, where innovation and discovery converge to redefine patient care. We are no longer just interpreters of images; we are pioneers of precision medicine, harnessing the power of data, technology, and collaboration to chart a new course in medical care. Now more than ever, we stand at the nexus of information and innovation, serving as the bridge between cutting-edge technology and improved clinical outcomes – ECR 2024 will underline, embrace, and celebrate this fact.

Our theme for this year, 'Next Generation Radiology,' reflects not only our commitment to embracing the future, but also our recognition of the transformative potential it holds. It signifies our commitment to exploring the uncharted territories of medical imaging, where artificial intelligence augments human expertise, where radiomics unlocks the hidden patterns within images, and where telemedicine connects us to patients across borders. It's about embracing the future while preserving the essence of compassionate patient care that has always defined our profession.

In this congress, we will delve deep into the frontiers of radiology, where quantum computing transforms image processing, where 3D printing revolutionizes personalized treatment, and where advanced molecular imaging unravels the mysteries of disease. So, what can you expect at ECR 2024? Embodying our congress theme, this year's In Focus programme will be dedicated to cutting-edge technology and practices in healthcare. Innovation in Focus will have its own series of stand-out sessions and an area at the congress focussed on all things future.

As we continue to explore the evolving landscape of radiology, we remain committed to preserving the most beloved session formats from previous congresses. At ECR 2024, you'll find a rich variety of sessions, from State-of-the-Art Symposia to Image Interpretation Quizzes, from Refresher Courses to New Horizons sessions.

Additionally, we will welcome international perspectives from our three Meets countries this year, Argentina, Italy and Singapore, sharing their unique insights and practices. The AI Theatre & Exhibition, dedicated to the world of artificial intelligence, and The Cube, dedicated to the world of Interventional Radiology, will also make a come-back, along with three outstanding Plenary Lectures from highly accomplished speakers.



DESIGNE EUROPEAN SOCIETY OF RADIOLOGY 'Next Generation Radiology' demands collaborative thinking and diverse perspectives. Thus, we will continue to feature Open Forum sessions, encouraging dynamic discussions and sharing of ideas among attendees. These sessions will spotlight the role of radiology trainees, radiographers, and the numerous initiatives of the European Society of Radiology. Furthermore, with a continued commitment to interactivity, ECR 2024 will see a series of hands-on workshops on topics ranging from Cardiac CT & MRI, imaging stroke patients, MRI of the prostate and MSK Ultrasound.

Another traditional and highly popular feature of our congress will celebrate its tenth congress next year. The Clinical Trials in Radiology session format will mark a decade at ECR with a special commemorative session.

I must also mention our Opening Ceremony at next year's congress. Here, we have something very special for you planned – an evening featuring technical innovations that have never been seen at ECR before. I do not wish to give anything away, so all I will say is that you will be truly shocked by what we have in store for you.

Of course, the ECR is not just a meeting for radiologists; it's a gathering of multidisciplinary professionals. We extend our warm invitation to colleagues from allied sciences and other medical specialties who will join us in this journey of discovery and collaboration.

We understand that accessibility is paramount, and our aim is to make 'Next Generation Radiology' accessible to all, regardless of geographical boundaries. In the spirit of adaptability that the ECR has demonstrated over the past few years, we remain committed to delivering a high-quality experience, both onsite and online.

In closing, I would like to extend my heartfelt gratitude to all those who have contributed and continue to contribute tirelessly to bringing ECR 2024 to fruition. The collective effort of countless individuals, often working behind the scenes, has shaped this unique and memorable congress. Thank you for your dedication and passion.

I eagerly look forward to welcoming you to Vienna, where together, we will explore the limitless possibilities of 'Next Generation Radiology'.

Warm regards,

Prof. Carlo Catalano ECR 2024 President



# FOREWORD BY THE EFRS PRESIDENT **ANDREW ENGLAND**



Dear colleagues and friends,

It is my honour as the President of the EFRS to invite you to attend the **ECR 2024** Congress in Vienna (February 28 to March 3, 2024). The European Congress of Radiology (ECR) is the official congress of the EFRS. Over the past months, the Radiographers' Scientific Subcommittee, under the leadership of Dr Jonathan Portelli (Malta), has been working hard to prepare a diverse and rich programme for all radiographers. This will include over **30 dedicated radiographer sessions** containing **over 100 presentations**. Abstract submission remains open, and we encourage all radiographers to consider disseminating their research at ECR 2024. Like previous congresses there will be a dedicated Radiographers' Lounge, EFRS Research Hub and Society Booths.

As the European voice of radiographers, our aim is to make the **ECR 2024** congress the best yet! We look forward to welcoming you to Vienna and continuing the journey to improve professional practice and outcomes for our patients.

With best wishes,

Andrew England EFRS President & ECR2024 Programme Planning Committee Member





# ECR 2024 Session definitions

#### MYESR.ORG



#### Clinical Trials in Radiology Sessions

In Clinical Trials in Radiology (CTiR) sessions, scientific evidence is presented for imaging tests that are very likely to impact a radiologist's clinical practice in the future. Each CTiR presented during these sessions is accompanied by an opinionated live discussion by experts in the respective field.

#### E<sup>3</sup> - Advanced Courses

The E<sup>3</sup> - Advanced Courses are a series of sessions covering subjects of great relevance. This year's courses include imaging of the heart, sustainable technological innovations and imageguided therapy. Conducted by specialists in their discipline, the various sessions within each course demonstrate the multiple facets of these topics while complementing one another to provide an in-depth exploration of the respective field.

#### E<sup>3</sup> - ECR Master Classes

The E<sup>3</sup> - ECR Master Classes focus on continuous professional development and lifelong learning. The classes are designed for subspecialised radiologists seeking cutting-edge information in their particular fields of interest. They are held by experts in the field and reflect state-of-the-art knowledge, as well as emerging trends. The contents mostly cover Level III European Training Curriculum (ETC) learning objectives and beyond.

#### E<sup>3</sup> - European Diploma Prep Sessions

The E<sup>a</sup> – European Diploma Prep sessions aim to provide a preparation for future European Diploma in Radiology (EDiR) candidates and are held in close cooperation with the European Board of Radiology (EBR). They are also suitable for residents wishing to obtain an overview of the various topics relevant to imaging and for those preparing for their national board examinations. The content of the programme reflects Levels I+II European Training Curriculum for Radiology (ETC) learning objectives across a two-year cycle.

#### E<sup>3</sup> - The Beauty of Basic Knowledge Sessions

The E<sup>3</sup> - Beauty of Basic Knowledge sessions offer participants the chance to refresh their knowledge in fundamental topics of imaging. This year, the Beauty of Basic Knowledge sessions focus on sports, hybrid and vascular imaging, allowing anyone from new residents to board-certified radiologists to strengthen their understanding in these essentials of radiology.

#### E<sup>3</sup> - Young ECR Programme

The E<sup>3</sup> - Young ECR Programme is tailored for residents, students, radiographers, and trainee radiographers, designed especially to offer a variety of essential knowledge. An assortment of sessions is provided to ensure a thorough examination of the topics, including Basic Sessions, Case-Based Diagnosis Training Sessions, Student Sessions, and the Radiology Trainees Forum Programme, including the RTF Highlighted Lectures and the entertaining RTF Quiz.

#### **EFRS** Meets Session

The 'EFRS Meets' session is organised by the European Federation of Radiographer Societies (EFRS) and provides a platform to introduce and highlight the accomplishments of their member societies in the world of radiography. This year's session features experts from Italy.

#### ESR at Work Sessions

The ESR at Work sessions are organised by bodies of the European Society of Radiology to showcase their current activities.

#### **ESR Meets Sessions**

The 'ESR Meets' sessions are an opportunity for the radiological community to gain a greater insight into the innovations and perspectives of other nations and societies while also strengthening the bonds between the ESR and its guest societies. This year, the ESR is proud to host the countries of Italy, Argentina and Singapore.

#### Hands-on Workshops

The ECR Hands-on Workshops are an excellent opportunity for attendees to practice their skills in a "learning by doing" approach. Topics featured at ECR 2024 are cardiac CT and MRI, imaging stroke patients, MRI of the prostate and musculoskeletal ultrasound.

The programme will also include a radiology reporting workshop series as well as the i-Violin workshop.

#### In Focus Programme

Amidst the dynamic landscape of medical imaging, radiologists persist as trailblazers, sculpting the future of healthcare. But the future of this field is not always clear, and there are many discussions about the best ways to move forward as a strong and united medical discipline.

Through the Innovation in Focus programme, we will look at how radiology is currently transcending the boundaries of the present, converging innovation and discovery to reshape the landscape of patient well-being. With topics ranging from sustainability and data-management in radiology through to the use of chat bots and integrated diagnostics, Innovation in Focus will take attendees on a journey to the unexplored realms of medical imaging and beyond.

Taking place in its own unique congress area dedicated to all things future, the In Focus programme at ECRv 2024 is a mustsee series for all attendees who wish to understand and define the next generation in radiology.

#### ISRRT Meets Session

The 'ISRRT Meets' session, hosted by the International Society of Radiographers and Radiological Technologists (ISRRT), demonstrates the vital role that radiographers play in the medical imaging profession. This is accomplished through the exploration of the practice, research, and unique challenges faced by radiographers. This year's session features experts from Australia.

#### Joint Sessions

The Joint Sessions are an opportunity to gain a deeper insight into multidisciplinary collaboration of the ESR with a multitude of other disciplines related to the world of medical imaging. The sessions highlight collaborative efforts in regard to science and professional issues.

#### (Junior) Image Interpretation Quizzes

The Image Interpretation Quizzes, two traditional interactive highlights of every ECR, provide both education and entertainment. Distinguished radiologists will share their knowledge and diagnosis strategies with the audience.

#### **Multidisciplinary Sessions**

The Multidisciplinary sessions (MS) aim to promote a multidisciplinary approach to detection and treatment, integrating radiologists and other clinicians to share their expertise.

#### New Horizons Sessions

The New Horizons sessions (NH) provide an insight into recent developments within a specific area of practice, be that innovations in technique, evolvements within a speciality, or improvements in disease treatment. Exploring these topics allows presenters to highlight advancements that may become routine in the near future, or that indicate a whole new area of research and clinical application.

#### **Open Forum Sessions**

The Open Forum (OF) sessions are an opportunity to discuss important topics. This year's Open Forums are dedicated to Trainees, Radiographers, and ESR activities.

#### **Plenary Lectures**

ECR 2024 will feature excellent plenary lectures, presented by Rick Abramson, Annemiek Snoeckx and Geoffrey D. Rubin.

#### **Professional Challenges Sessions**

The Professional Challenges sessions (PC) aim to provide a platform for important issues experienced by those working within the field of radiology. Subjects of current relevance, such as training, education, research, communication, and management, are presented.

#### **Refresher Courses**

The Refresher Courses (RC) are comprised of a variety of key radiological topics orchestrated by the scientific subcommittees. The aim of the sessions is not only to refresh the audience's knowledge, but also to review, inform, and offer updates of the various fields through engaging presentations suitable for new radiologists through to experienced doctors.

#### **Research Presentation Sessions**

This year's Research Presentation (RP) sessions will feature the best abstracts of each topic submitted for ECR 2024.

#### **Round Table Sessions**

The Round Table sessions (RT) feature a panel of experts who will engage and challenge each other in a live discussion on the most relevant topics in radiology.

#### **Special Focus Sessions**

The Special Focus sessions (SF) explore cutting edge developments within the world of clinical radiology, tackling these complex matters through in-depth analysis and debate.

#### State of the Art Symposia

The State of the Art symposia (SA) are an opportunity for experts in their field to educate and inform the audience on essential topics such as anatomical regions, specific diseases, or particular techniques. Presentations are backed by experience, evidence and data of the chosen subjects.

#### The Cube

The Cube, ECR's popular interventional radiology event, focuses on the following four topics in an engaging and hands-on environment: peripheral, central, oncological, and neurological interventional radiology. It offers a balanced combination of short lectures from experts in the field and a large number of simulation-based activities at the popular Simulator Adventure Park, where participants get the chance to work with devices and simulators under the guidance of tutors.

#### Transatlantic Course of ESR and RSNA

The Transatlantic Course (TC) combines the resources of the ESR and RSNA (Radiological Society of North America) to present a series of sessions concentrated around a central topic. This year's focus is on the imaging of neurodegenerative disorders.







Preliminary programme printed on April 2, 2024 subject to change without previous notice

#### ST 1 - Morning Welcome with Carlo Catalano

Categories: Education, General Radiology, Multidisciplinary, Professional Issues

Date: February 28, 2024 | 07:50 - 08:00 CET

Grab your morning coffee and join our studio moderators as they discuss the most exciting highlights of the upcoming day with Congress President Prof. Carlo Catalano. Make a list of what not to miss and hear his insights on some of the biggest trends currently rocking the world of radiology.

#### Moderator:

Mélisande Rouger; Bilbao / Spain

**Interview** (30 min) Carlo Catalano; Roma / Italy







#### RC 111 - Post-neurosurgery: what to expect on imaging

Categories: Neuro ETC Level: LEVEL II+III Date: February 28, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderator: Sofie Van Cauter; Holsbeek / Belgium

**Chairperson's introduction** (5 min) Sofie Van Cauter; Holsbeek / Belgium

**Operative approaches in the skull: common findings and complications** (15 min) Stephen Price; Cambridge / United Kingdom

**Post-neurosurgery artifacts on MRI imaging** (15 min) Torstein Ragnar R. Meling; Copenhagen / Denmark

**CSF shunts: post-operative evaluation and complications** (15 min) Joanna Bladowska; Wroclaw / Poland

Panel discussion: How to improve post-operative reporting in neuroradiology (10 min)







#### HW 1Pa - Peripheral zone: how to detect typical and not-so-typical tumours

Categories: Genitourinary, Oncologic Imaging

ETC Level: LEVEL ||+|||

Date: February 28, 2024 | 08:00 - 09:00 CET

CME Credits: 1

Registered participants are requested to arrive at the workshop room 20 minutes before the scheduled start of the session to complete their check-in.

We would like to thank our workshop sponsors. For more information click  $\underline{here}.$ 

Please note we will be utilising equipment from certain vendors during the workshop sessions; however, a wide range of alternative options from other vendors is also available.

In this session participants will be able:

1. To understand the importance of optimal image quality for prostate MRI interpretation.

2. To become familiar with the typical features of PI-RADS 4 and 5 lesions.

3. To develop practical skills in minimising PI-RADS 3 lesions.

**Instructors** (60 min) Tristan Barrett; Cambridge / United Kingdom Francesco Giganti; London / United Kingdom







#### BS 1 - Pearls and pitfalls in paediatric and foetal imaging

Categories: Imaging Methods, Musculoskeletal, Neuro, Paediatric ETC Level: LEVEL II Date: February 28, 2024 | 08:00 - 09:00 CET CME Credits: 1

**Moderator:** Maria Argyropoulou; Ioannina / Greece

**Chairperson's introduction** (5 min) Maria Argyropoulou; Ioannina / Greece

**Pearls and pitfalls of imaging paediatric skeletal dysplasias** (15 min) Amaka Cynthia Offiah; Sheffield / United Kingdom

**Pearls and pitfalls of imaging of the paediatric head trauma** (15 min) Élida Vazquez; Barcelona / Spain

Pearls and pitfalls of imaging the foetus (15 min) Eléonore Blondiaux; Paris / France

Questions and answers (10 min)







#### **RPS 101 - Pre- and post-treatment imaging in cirrhosis and HCC**

Categories: Abdominal Viscera, Imaging Methods, Oncologic Imaging Date: February 28, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderator: Joanna Podgórska; Warszawa / Poland

Abbreviated liver MRI with second shot arterial phase image to assess the viability of treated HCC (7 min)

Jaewon Han; Busan / Korea, Republic of

The imaging features of LI-RADS nonviable or equivocal lesions in the first follow-up evaluation after TACE for HCC to predict recurrence (7 min) Shu-Hang Zhang; Jiangsu / China

MRI evaluations of focal liver reactions (FLR) following stereotactic body radiotherapy (SBRT) for small hepatocellular carcinoma: relationship between MRI features and dose-volumetric parameters (7 min) Rungian Huang; Guangzhou / China

Ascites in patients with hepatocellular carcinoma undergoing transarterial chemoembolisation: the more, the worse? (7 min) Lukas Müller; Mainz / Germany

Adding estimates for central venous pressure boosts performance of non-invasive assessment of portosystemic gradient prior to TIPS implantation (7 min)

Felix Hahn; Mainz / Germany

The comparison of preoperative and intraoperative graft volumes in living donor liver transplantation: effect of graft type on accuracy (7 min) Hande Özen Atalay; Istanbul / Turkey







#### **RPS 102 - Breast imaging biomarkers**

Categories: Artificial Intelligence & Machine Learning, Breast, Oncologic Imaging Date: February 28, 2024 | 08:00 - 09:00 CET CME Credits: 1

**Moderator:** Fleur Kilburn-Toppin; Cambridge / United Kingdom

MRI radiomics analysis predicting early recurrence in breast cancer patients who are candidates for neoadjuvant chemotherapy (7 min) Charlotte Marguerite Lucille Trombadori; Rome / Italy

**PET/CT radiomics integrated with clinical indexes as a tool to predict Ki67 in breast cancer: a pilot study** (7 min) Cong Shen; Xi'an / China

Automatic breast segmentation-based radiomics for classifying breast composition and detecting neoplastic lesions on chest CT (7 min)

Giridhar Dasegowda; Little Rock / United States

Prediction of human epidermal growth factor receptor 2 (HER2) status in breast cancer by mammographic radiomics features and clinical characteristics: a multicentre study (7 min) Yalan Deng; Shanghai / China

**Performance of radiomic features in STIR sequences in predicting histopathological outcomes of breast cancer** (7 min) Günay Rona; Istanbul / Turkey

Radiogenomics model based on quantitative spatial heterogeneity for predicting pathological complete response and prognosis of triple-negative breast cancer (7 min) Jiayin Zhou; Shanghai / China

**Prediction of cancer aggressiveness based on breast MRI features** (7 min) Veronica Magni; Milan / Italy

**Quantitative radiomic analysis in contrast-enhanced mammography for breast lesions characterisation** (7 min) Gianmarco Della Pepa; Milan / Italy







#### **RPS 105 - Automatic segmentation techniques**

Categories: Artificial Intelligence & Machine Learning, Imaging Methods, Multidisciplinary, Research Date: February 28, 2024 | 08:00 - 09:00 CET CME Credits: 1

#### Moderator:

Liliana Caldeira; Cologne / Germany

**Deep learning for segmentation and classification of cardiac implantable electronic devices on chest x-rays** (7 min) Felix Busch; Berlin / Germany

Advancing total tumour volume estimation in colorectal liver metastases: development and evaluation of a selflearning auto-segmentation model (7 min) Inez Margaretha Verpalen; Amsterdam / Netherlands

A deep learning-based pipeline for cervical spinal cord segmentation and labelling on heterogeneous T1w brain images (7 min) Ricardo Magalhaes; Braga / Portugal

**Multi-organ CT-based automatic segmentation via semi-supervised learning** (7 min) Alejandro Vergara; Valencia / Spain

ACMA-net and unscented Kalman filter-based accurate coronary artery segmentation: an application of deep learning to computed tomography angiography image (7 min)

Bao Li; Beijing / China

Deep learning-based bowel automatic segmentation and visualisation of Crohn's disease using multilabelled continuous MRE images (7 min) Li Huang; Guangzhou / China

Replicability of outcome prediction across IPF patient cohorts based on machine learning features learned without supervision (7 min) Jeanny Pan; Vienna / Austria







#### E<sup>3</sup> 24A - Hybrid imaging in oncology (part 1): where is it standard-of-care?

Categories: Hybrid Imaging, Nuclear Medicine, Oncologic Imaging ETC Level: LEVEL I Date: February 28, 2024 | 08:00 - 09:00 CET CME Credits: 1

**Moderator:** Clemens C. Cyran; München / Germany

**Chairperson's introduction** (5 min) Clemens C. Cyran; München / Germany

Hybrid imaging in haematological malignancies (15 min)

Marius E. Mayerhöfer; Vienna / Austria

Head and neck tumours: hybrid imaging for guiding therapy (15  $\mbox{min})$ 

Andrew Scarsbrook; Leeds / United Kingdom

**PET/CT for lung cancer therapy management** (15 min) Helmut Prosch; Vienna / Austria

Panel discussion: Hybrid imaging as standard-of-care: accessibility guaranteed? (10 min)







#### E<sup>3</sup> 22A - Hip and pelvis

Categories: Education, General Radiology, Musculoskeletal ETC Level: LEVEL I+II Date: February 28, 2024 | 08:00 - 09:00 CET CME Credits: 1

**Moderator:** Andrea B. Rosskopf; Zurich / Switzerland

**Chairperson's introduction** (2 min) Andrea B. Rosskopf; Zurich / Switzerland

Athletic pubalgia and extraarticular soft tissue injuries (25 min) James Teh; Oxford / United Kingdom

Hip joint injuries and hip impingement: basic claims for reporting (25 min) Diana Afonso; Lisbon-Funchal / Portugal

Panel discussion (8 min)









#### OF 1R - Latest developments in contrast media utilisation

**Categories:** Contrast Media, EuroSafe Imaging/Radiation Protection, Evidence-Based Imaging, Imaging Methods, Radiographers **Date:** February 28, 2024 | 08:00 - 09:00 CET

CME Credits: 1



This session focuses on the latest developments in contrast media utilisation in medical imaging. This session will feature three talks by distinguished experts in the field, each shedding light on critical aspects of contrast media use across different imaging modalities, namely CT, MRI and Ultrasound. This session promises to be a valuable resource for radiographers, radiologists, healthcare professionals, researchers, and educators seeking to stay at the forefront of contrast media utilisation in medical imaging. Consequently, attendees will gain insights into the latest trends and breakthroughs in contrast media use, ultimately contributing to enhanced patient safety and better-informed clinical decisions.

#### Moderators:

Sonyia Lorraine McFadden; Belfast / United Kingdom Laura Romanini; Brescia / Italy

**Chairpersons' introduction** (5 min) Sonyia Lorraine McFadden; Belfast / United Kingdom Laura Romanini; Brescia / Italy

CT: how low can we go with modern protocols? (16 min)

Efthimios M. Agadakos; Athens / Greece

MRI: current issues with gadolinium-based agents (16 min)

Peter C Murphy; Cork / Ireland

Ultrasound: indications and protocols for contrast agent administration (16 min)

Barbara Kraus; Wolkersdorf / Austria

Open forum discussion (7 min)







#### RC 117 - Near misses and great pickups in trauma imaging

Categories: Emergency Imaging, Multidisciplinary ETC Level: LEVEL I Date: February 28, 2024 | 08:00 - 09:00 CET CME Credits: 1

**Moderator:** Stefan Wirth; München / Germany

**Chairperson's introduction** (5 min) Stefan Wirth; München / Germany

Head and neck injuries beyond the spine (15 min) Massimo Caulo; Chieti / Italy

**Chest injuries** (15 min) Inès Saab; Paris / France

Abdominal and pelvic injuries (15 min) Michael N. Patlas; Toronto / Canada

Panel discussion: Tips and tricks to avoid near misses (10 min)







#### RC 103 - Pathology in and around the heart: from outside to inside

Categories: Cardiac, Imaging Methods, Professional Issues, Vascular ETC Level: LEVEL II+III Date: February 28, 2024 | 08:00 - 09:00 CET CME Credits: 1

**Moderator:** Jens Bremerich; Basel / Switzerland

**Chairperson's introduction** (5 min) Jens Bremerich; Basel / Switzerland

**Imaging in pulmonary hypertension (PH)** (15 min) Karl-Friedrich Kreitner; Mainz / Germany

**Imaging in pericardial disease** (15 min) Aparna Deshpande; Leicester / United Kingdom

**Non-invasive imaging in cardiac arrhythmias** (15 min) Alexis Jacquier; Marseille / France

Panel discussion: To outline effective imaging strategies with regard to current guidelines (10 min)







#### E<sup>3</sup> 25A - Abdominal vasculature

Categories: Vascular ETC Level: LEVEL I+II Date: February 28, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderator: Ulrike I. Attenberger; Bonn / Germany

**Chairperson's introduction** (5 min) Ulrike I. Attenberger; Bonn / Germany

Atherosclerotic disease and pre-EVAR workup (23 min) Akos Varga-Szemes; Charleston / United States

**Non-atherosclerotic disease, including compression syndromes** (23 min) Dominika Suchá; Utrecht / Netherlands

Panel discussion (9 min)









## RC 113 - Considerations on radiation doses and associated risks in case of oncological patients' pathways: frequency and type of examinations in focus

**Categories:** EuroSafe Imaging/Radiation Protection, Imaging Methods, Multidisciplinary, Physics in Medical Imaging, Professional Issues

ETC Level: LEVEL I

Date: February 28, 2024 | 08:00 - 09:00 CET

CME Credits: 1



**Moderator:** Mika Kortesniemi; ESPOO / Finland

Chairperson's introduction (5 min) Mika Kortesniemi; ESPOO / Finland

Appropriate imaging in oncology (15 min) Denis Joseph D'Almada Remedios; Harrow / United Kingdom

**Recurrent medical imaging procedures in case of oncological patient's pathways** (15 min) Agnieszka Kuchcinska; Warsaw / Poland

Radiation protection issues concerns: cumulative doses and possible radiation risk (15 min) Marco Brambilla; Novara / Italy

Panel discussion: How to choose the appropriate medical imaging modality and frequency of examinations in case of patients receiving innovative oncological therapy? (10 min)









#### RC 116 - Normal variants and mimics in oncologic imaging

Categories: Chest, Genitourinary, GI Tract, Oncologic Imaging ETC Level: LEVEL I Date: February 28, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderator: Inês Santiago; Lisbon / Portugal

**Chairperson's introduction** (5 min) Inês Santiago; Lisbon / Portugal

**Chest imaging** (15 min) Marie-Pierre Revel; Paris / France

**Gastrointestinal imaging** (15 min) Luis Curvo-Semedo; Coimbra / Portugal

**Female pelvis imaging** (15 min) Lucia Manganaro; Rome / Italy

Panel discussion: Errors and discrepancies in oncologic imaging (10 min)







#### **CUBE 1 - New frontiers in IR**

Categories: Interventional Radiology Date: February 28, 2024 | 09:00 - 09:30 CET CME Credits: 0.5

#### Peripheral IR Day - Topic Coordinator: Dr. Raúl García Marcos

The "Tools of the Trade" session is an innovative session format that introduces the audience to the most important devices (tools) used in interventional radiology. A specialist leads these sessions, describing the devices and its use, and demonstrating its application on anatomical phantoms. Participants also have the opportunity to touch and explore these devices, which are circulated in the audience.

#### Moderator:

Raúl García Marcos; Valencia / Spain

**Chairperson's introduction** (2 min) Raúl García Marcos; Valencia / Spain

New frontiers in IR (28 min) Ruben Eduardo Pacios Blanco; Madrid / Spain









#### ST 6 - The Cube - Unconventional Interventional

Categories: Education, Interventional Radiology, Students

Date: February 28, 2024 | 09:00 - 09:30 CET

Step into the world of Interventional Radiology with The Cube @ ECR. Immerse yourself in hands-on experiences using one of the most extensive collections of ready-to-use endovascular simulators and flow models. Engage with medical professionals and device tutors, explore an exclusive 'unboxing' area at the Cube's Adventure Park to interact with and understand IR devices firsthand.

Join us for a comprehensive 4-day programme on neuro, peripheral, central and onco IR, featuring academic content presented by European IR experts and their teams, covering everything from basic to advanced levels. The Cube offers an exciting blend of challenges, surprises, and prizes, making it the perfect space for colleagues intrigued by the captivating field of Interventional Radiology. Come and enjoy the experience!

#### Moderator:

Mélisande Rouger; Bilbao / Spain

**Interview** (30 min) Miltiadis Krokidis; Athens / Greece Maximilian De Bucourt; Berlin / Germany









#### RC 212 - Novel techniques in paediatric pulmonary imaging

Categories: Chest, Imaging Methods, Paediatric ETC Level: LEVEL III Date: February 28, 2024 | 09:30 - 10:30 CET CME Credits: 1

**Moderator:** Pierluigi Ciet; Rotterdam / Netherlands

**Chairperson's introduction** (2 min) Pierluigi Ciet; Rotterdam / Netherlands

**DUAL energy and photon counting CT** (12 min)

Joseph Cao; Durham / United States

#### Ultrafast and real-time MRI of the lungs (12 min)

Franz Wolfgang Hirsch; Leipzig / Germany

**Practical applications of lung MRI in children** (12 min) Kushaljit Singh Sodhi; Chandigarh / India

**Ultrasound of the lungs** (12 min) Jovan Lovrenski; Novi Sad / Serbia

Panel discussion: Will MRI take over lung imaging in the future? (10 min)







#### NH 2 - The arrival of immunotherapy: new horizons for radiologists

Categories: Artificial Intelligence & Machine Learning, Imaging Methods, Molecular Imaging, Oncologic Imaging ETC Level: LEVEL III Date: February 28, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

**Moderator:** Ahmed Ba-Ssalamah; Vienna / Austria

**Chairperson's introduction** (5 min) Ahmed Ba-Ssalamah; Vienna / Austria

**Immunotherapy: primers for radiologists** (20 min) Ahmed Ba-Ssalamah; Vienna / Austria

Assessing immunotherapy response with functional imaging and radiomics (20 min) Evis Sala; Rome / Italy

Imaging appearances of immunotherapy adverse effects (20 min) Sandra Baleato Gonzalez; SANTIAGO DE COMPOSTELA / Spain

Panel discussion: How can imaging assess prognosis and response to immunotherapy? (25 min)

Ahmed Ba-Ssalamah; Vienna / Austria Evis Sala; Rome / Italy Sandra Baleato Gonzalez; SANTIAGO DE COMPOSTELA / Spain







#### SF 2b - Chest x-ray: will it stay or will it go?

Categories: Artificial Intelligence & Machine Learning, Chest, Education, Evidence-Based Imaging

ETC Level: ALL LEVELS

Date: February 28, 2024 | 09:30 - 11:00 CET

#### CME Credits: 1.5

The session will include a brief overview of the role of AI in the screening of several cancer tumours. Cancer prevention, screening and early detection offer the best chance of beating cancer and saving lives. The extension of screening programmes and shortage of radiologists are jeopardising elements for the fully implementing of population-based cancer programmes. The lectures will focus on the feasibility, testing and planning of innovative AI solutions, with the identification of and addressing barriers and facilitators for the utilisation of AI in screening services within the different health systems.

#### Moderator:

Thomas Frauenfelder; Zurich / Switzerland

Chairperson's introduction (5 min)

Thomas Frauenfelder; Zurich / Switzerland

Will the use of AI improve chest x-ray diagnosis sufficiently to prevent a change to CT? (20 min)

Marie-Pierre Revel; Paris / France

**Replacing chest x-ray by ultra-low dose CT: pros and cons** (20 min) Thomas Frauenfelder: Zurich / Switzerland

Which patients should go straight to CT without a CXR (20 min)

Anthony Edey; Bristol / United Kingdom

Panel discussion: Is there still a role for chest x-ray imaging in the next decade? (25 min)







#### SF 2a - HCC subtypes: from histology to imaging

Categories: Abdominal Viscera, Imaging Methods, Oncologic Imaging ETC Level: LEVEL II+III Date: February 28, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

**Moderator:** Valérie Vilgrain; Clichy / France

**Chairperson's introduction** (5 min) Valérie Vilgrain; Clichy / France

Histological and molecular classification of HCC: impact on patient management and outcome (25 min) Aurélie Beaufrère; Clichy / France

Imaging of classic (NOS) and rare HCC subtypes (25 min) Roberto Cannella; Palermo / Italy

HCC alterations and aggressiveness: impact on imaging (25 min) Raneem Albazaz; Leeds / United Kingdom

Panel discussion: How can imaging anticipate histologic results? (10 min)







#### **RPS 210 - Exploring knee imaging**

Categories: Artificial Intelligence & Machine Learning, Imaging Methods, Musculoskeletal Date: February 28, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

Moderator: Reto Sutter; Zürich / Switzerland

Assessing lateral posterior meniscal root insertion variations of the knee on a clinical 7 Tesla MRI in an asymptomatic cohort (7 min) Roy P. Marcus; Zurich / Switzerland

Stability of deep learning-based image quality improvement in MRI of the knee: correlation with arthroscopy (7 min) Seokhee Park; Seoul / Korea, Republic of

M score as an alternative to T score in the evaluation of femoral osteoporosis? (7 min) Muhammet Batuhan Gökhan; Ankara / Turkey

Extension and costs of low-value MRI of the knee in Norway (7 min) Bjørn Morten Hofmann; Gjøvik / Norway

Investigation of the anatomic risk factors in acute anterior cruciate ligament rupture coexisted with ramp lesions of the medial meniscus by quantitative MRI (7 min) Ziyi Tang; Chongging / China

Leveraging subtraction STIR-T1 MAVRIC sequences for precise discrimination of artefacts vs peri-implant infections in total knee replacement prostheses (7 min) Sriram Rajan; New Delhi / India

Deep learning-based MRI quantification of the thigh muscles in sarcopenia (7 min)

Zaizhu Zhang; Beijing / China

Five-minute knee MRI: an AI-based super resolution reconstruction approach for compressed sensing. A validation study on healthy volunteers (7 min) Robert Angelo Terzis; Cologne / Germany

dGEMRIC evaluation of autologous conditioned adipose tissue with leukocyte-poor platelet rich plasma for treatment of mild knee osteoarthritis (7 min) Vid Matišić; Zagreb / Croatia







**Performance of low-field MR for knee cartilage quantification: results on comparison with arthroscopy** (7 min) Francesco Pucciarelli; Rome / Italy

To evaluate the impact of cartilage damage on knee joint functionality through dynamic CT imaging (7 min) Manou Acke; Elsene / Belgium







#### **RPS 209 - Advances in liver loco-regional treatment**

Categories: Abdominal Viscera, Interventional Oncologic Radiology, Interventional Radiology, Oncologic Imaging, Vascular Date: February 28, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

#### Moderator:

Nicolas Frédéric Mathieu Villard; Lausanne / Switzerland

Salvage therapy outcomes of degradable starch microspheres transarterial chemoembolisation (DSM-TACE) in patients with uveal melanoma liver metastases (7 min)

Johannes Maximilian Ludwig; Heidelberg / Germany

Percutaneous combined treatment (transarterial chemoembolisation + thermal ablation) in patients with hepatocellular carcinoma enlisted for liver transplant: pathological findings and follow-up (7 min) Federica Piccione; Turin / Italy

Two-dimensional perfusion-angiography permits direct visualisation of redistribution of flow in hepatocellular carcinoma during balloon-occluded TACE (7 min) Paolo Vetri; Rome / Italy

Interventional treatment of unresectable or recurrent hepatic cholangiocarcinoma: transarterial chemoembolisation (TACE) with combined thermal ablation vs TACE alone (7 min)

Andreas Michael Bucher; Frankfurt am Main / Germany

Cone beam-assisted transarterial chemoembolisation in malignant liver tumours: evaluation of parenchymal blood volume (7 min) Andreas Michael Bucher; Frankfurt am Main / Germany

Long-term outcome of transarterial radioembolisation for patients with hepatocellular carcinoma (7 min) Riccardo Muglia; Bergamo / Italy

Percutaneous thermal segmentectomy for liver malignancies over 3 cm: retrospective multicentric study of mid-term oncological performance and predictors of sustained complete response (7 min) Bianca Rocco; Rome / Italy

Radiomics analysis of pre-treatment imaging in hepatocellular carcinoma (HCC) undergoing trans-arterial chemoembolisation (TACE): correlations with treatment response and survival (7 min)

Elio Damato; Rome / Italy







European multicentre retrospective study of balloon-occluded transarterial chemoembolisation (B-TACE) for A ARCH 03 hepatocellular carcinoma (HCC) long term (31 months) follow-up (7 min) Elio Damato; Rome / Italy

Eno Damato, Nome / Italy

MRI-based investigation of dynamic changes in viable hepatocellular carcinoma following transarterial chemoembolisation (7 min) Shu-Hang Zhang; Jiangsu / China







#### **RPS 203 - Strain analysis in cardiac MRI**

Categories: Cardiac, Imaging Methods, Research Date: February 28, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

**Moderator:** Ursula Reiter; Graz / Austria

**Moderator introduction** (6 min) Ursula Reiter; Graz / Austria

The additive effects of coronary obstruction on right ventricular diastolic and systolic dysfunction in type 2 diabetes mellitus patients: evaluated by CMR feature tracking (7 min) Jin Wang; Chengdu / China

**Preoperative left atrial strain predicts outcome in patients with HOCM after myectomy** (7 min) Shujuan Yang; Beijing / China

Subacute and convalescent phases of Takotsubo syndrome: CMR Feature-Tracking evaluation of left atrial and ventricular involvement (7 min) Giacomo Carlo Pambianchi; Rome / Italy

Impairment of left atrial and ventricular strain as early markers of myocyte dysfunction in hereditary transthyretin (h-TTR) mutation carriers (7 min)

Luca Conia; Rome / Italy

Acute cardiac injury after postoperative left-sided breast cancer radiotherapy assessed by CMR feature-tracking strain (7 min) Linlin Zheng; Chengdu / China

Unveiling subclinical myocardial changes in a cohort of treatment-naive cancer population with diffuse large B-cell lymphoma (DLBCL) and breast cancer: is advanced cancer a cardiovascular syndrome? (7 min) Costanza Lisi; Milan / Italy

Atrial and ventricular strain using cardiovascular magnetic resonance in the prediction of outcomes of pericarditis patients: a pilot study (7 min) Riccardo Cau; Cagliari / Italy

Atrial and ventricular involvement in acute myocarditis patients with preserved ejection fraction (7 min)







Riccardo Cau; Cagliari / Italy



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**Strain analysis using feature-tracking CMR: a predictor of cardiac involvement in hypereosinophilia patients?** (7 min) Christos Vasileiou Gkizas; Lille / France

The additive effect of metabolic syndrome on left ventricular deformation and function in patients with obstructive coronary artery disease assessed by 3.0T cardiac magnetic resonance feature tracking (7 min) Chenyan Min; Chengdu / China

**Biventricular dysfunction and ventricular interdependence in patients with pulmonary hypertension: a 3.0 T cardiac MRI feature tracking study** (7 min) Han Fang; Chengdu / China







#### **RPS 211 - Normal brain development and psychiatric disorders**

Categories: Multidisciplinary, Neuro, Research Date: February 28, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

**Moderator:** Paul M. Parizel; Perth / Australia

**Brain responses to complex addition problems in children, adolescents and adults** (7 min) Asya Istomina; Moscow / Russia

Association of variability in body size with imaging metrics of brain structural health (7 min) Jing Sun; Beijing / China

Resolving heterogeneity in post-traumatic stress disorder using individualised structural covariance network analysis (7 min) Li Chen; Chengdu / China

**Default-mode network overlap with the mirror-neuron system activation task in trauma-exposed veterans** (7 min) Oleksandr Zakomornyi; Kyiv / Ukraine

Abnormal reward circuits in adolescents with first-episode non-suicidal self-injury based on subcortical volume and lateralisation index (7 min) Nian Liu; Nanchong / China

Network controllability developmental patterns in first-episode drug-naïve schizophrenia (7 min) Siyi Li; Chengdu / China

Altered cerebellar effective connectivity in first-episode schizophrenia and their long-term changes after treatment (7 min) Xia Wei; Chengdu / China

**Evaluating diffusion tensor imaging of corpus callosum in patients with psychosis** (7 min) Rajul Rastogi; Moradabad / India

**Resting state functional MRI in patients with obsessive-compulsive disorder to detect the areas of activation** (7 min) Anand Narsingam Parimalai; Chennai / India







**Neural correlates of auditory verbal hallucinations: a combined structural and resting state fMRI**<sup>(</sup>(<sup>FEBRUARY 28</sup> – MARCH 03</sup> Faten Aldhafeeri; Hafar al-Batin / Saudi Arabia







#### HW 2Sa - The imaging dilemma in acute stroke: CT vs MR

Categories: Education, Emergency Imaging, Imaging Methods, Neuro, Vascular

ETC Level: LEVEL II+III

Date: February 28, 2024 | 09:30 - 10:30 CET

#### CME Credits: 1

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Please note we will be utilising equipment from certain vendors during the workshop sessions; however, a wide range of alternative options from other vendors is also available.

In this session participants will be able:

1. To become familiar with stroke and therapeutic decisions by investigating the role of MRI and CT in guiding therapeutic decisions related to strokes.

2. To learn about imaging techniques to differentiate stroke mimics from genuine stroke cases.

3. To develop practical skills in identifying stroke mimics by exploring conditions that resemble strokes but have different underlying causes.

4. To become familiar with identifying stroke mimics by exploring conditions that resemble strokes but have different underlying causes.

5. To understand the interventional-diagnostic correlation with the aim of a better prognostic outcome.

Instructors (60 min)

Jessica Jesser; Heidelberg / Germany Charlotte S. Weyland; Aachen / Germany









#### IF 2 - Integrated diagnostics in radiology

**Categories:** Artificial Intelligence & Machine Learning, Imaging Informatics, Oncologic Imaging, Professional Issues, Translational Imaging

ETC Level: LEVEL III

Date: February 28, 2024 | 09:30 - 11:00 CET

#### CME Credits: 1.5

This session will discuss the bleeding edge of integrated diagnostics in radiology - where imaging biomarkers will be used as an integral part of a patient's health data and allow for a comprehensive view of disease and prognosis. Speakers will discuss how imaging biomarkers are currently used and highlight strategies and potentials for integration in multidisciplinary settings. Such integrative overviews will allow for the creation of digital twins opening up new opportunities for research and personalised medicine.

#### **Moderator:**

Tobias Penzkofer; Berlin / Germany

#### Chairperson's introduction (5 min)

Tobias Penzkofer; Berlin / Germany

#### The EIBALL perspective on imaging biomarkers: where are we at? (20 min)

Aad Van Der Lugt; Rotterdam / Netherlands

#### Integrated diagnostics: strategies for radiology (20 min)

Geraldine B. Mcginty; New York / United States

#### eHealth and Al-integrated diagnostics with multidisciplinary digitised data (15 min)

Horst Karl Hahn; Bremen / Germany

#### Digital twin: the boundary between reality and dream (15 min)

Simone Novelli; Roma, RM, Italia / Italy

#### Panel discussion: Where do we see integrated diagnostics in 10 years? (15 min)







#### EU 2 - ESR iGuide: clinical decision support for imaging referrals

Categories: EuroSafe Imaging/Radiation Protection, Evidence-Based Imaging, Imaging Informatics, Professional Issues ETC Level: ALL LEVELS Date: February 28, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

**Moderator:** Boris Brkljačić; Zagreb / Croatia

**Chairperson's introduction** (10 min) Boris Brkljačić; Zagreb / Croatia

**Implementing a clinical support tool at a national level: opportunities and challenges** (12 min) Maria Papapanayidou; Nicosia / Cyprus

**CT and MRI imaging in Sweden: retrospective appropriateness analysis of large referral samples** (12 min) Henrietta Stahlbrandt; Eksjo / Sweden

The role of CDS in referral vetting (12 min) Ronan P Killeen; Dublin / Ireland

Data analysis and indirect benefits of ESR iGuide (12 min) Marta Serrallonga Mercader; Vic / Spain

ESR iGuide implementation update: Israel (12 min)

Jacob Sosna; Jerusalem / Israel

Panel discussion (20 min)







#### HW 2Pc - Mimickers: not every lesion is a tumour

Categories: Genitourinary, Oncologic Imaging

ETC Level: LEVEL ||+|||

Date: February 28, 2024 | 09:30 - 10:30 CET

CME Credits: 1

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Please note we will be utilising equipment from certain vendors during the workshop sessions; however, a wide range of alternative options from other vendors is also available.

In this session participants will be able:

1. To become familiar with the typical mimickers in the central zone.

2. To understand the differential diagnosis of a hypertrophied AFS and a tumour.

3. To know the mimickers in the peripheral zone.

4. To know the mimickers in the transition zone.

**Instructors** (60 min) Geert M. Villeirs; Gent / Belgium Pieter Julien Luc De Visschere; Ghent / Belgium







#### SF 2c - Imaging after treatment in head and neck cancer

Categories: Head and Neck, Hybrid Imaging, Oncologic Imaging

ETC Level: LEVEL II+III

Date: February 28, 2024 | 09:30 - 11:00 CET

#### CME Credits: 1.5

This session will address four critical issues concerning imaging after head and neck cancer treatment. The first question focuses on grading the likelihood of recurrence by assigning a standardised value to each suspicious imaging feature, which is then added to a final scale. NIRADS will significantly improve patient classification homogeneity in multidisciplinary team analysis and treatment planning. The second issue concerns the extrapolation of imaging biomarkers that have been shown to help predict treatment outcomes. The following questions will be asked: Should pre-treatment imaging data be used to extract biomarkers? Could they be obtained early during (chemo)radiation treatment? The final two issues will focus on expected and unexpected changes in tumours and surrounding tissues (including organs at risk) due to chemoradiation- and immunotherapy.

#### Moderator:

Roberto Maroldi; Concesio / Italy

#### Chairperson's introduction (5 min)

Roberto Maroldi; Concesio / Italy

#### Prognostic value of imaging biomarkers for treatment outcome (15 min)

Ann Dorothy King; Hong Kong / China

#### Imaging head and neck cancer after chemoradiation therapy (15 min)

Steve Connor; London / United Kingdom

**Immunotherapy in head and neck: expected and non-expected findings** (15 min) Alexandra Borges; Lisbon / Portugal

#### NIRADS PET CT and MRI (15 min)

Barton F. Branstetter IV; Wexford / United States

#### Post-treatment interactive cases presentation (15 min)

Minerva Becker; Geneva / Switzerland

Panel discussion: How to practically organise the follow-up: my advice (10 min)







#### E<sup>3</sup> 223 - Urogenital

Categories: Genitourinary ETC Level: LEVEL I+II Date: February 28, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

**Moderator:** Valeria Panebianco; Roma / Italy

**Chairperson's introduction** (6 min) Valeria Panebianco; Roma / Italy

**Renal and adrenal imaging** (28 min) Marie-France Bellin; Le Kremlin Bicêtre / France

**Imaging of the ureter and bladder** (28 min) Alberto Hebert Vargas; New York / United States

**Prostate imaging** (28 min) Tristan Barrett; Cambridge / United Kingdom







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#### PC 2a - Challenges in recruitment and retention of radiographers

Categories: Education, Management/Leadership, Professional Issues, Radiographers Date: February 28, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

**Moderators:** Charlotte A. Beardmore; London / United Kingdom Dávid Sipos; Pécs / Hungary

**Chairpersons' introduction** (12 min) Charlotte A. Beardmore; London / United Kingdom Dávid Sipos; Pécs / Hungary

**Opportunities and innovations for increasing student training capacity** (22 min) Carst Buissink; Groningen / Netherlands

Safe staffing ratios/quality and safety workload, the need for a framework for radiographers (22 min) Diego Catania; Milan / Italy

**Solving retention issues for radiographers: a multifactorial approach** (22 min) Patrick Vorlet; Lausanne / Switzerland

Panel discussion: What are the most successful strategies for solving radiographer staffing issues? (12 min)







#### VBR - Value-based radiology: a vague idea or practical reality?

Categories: Audit, Education, Evidence-Based Imaging, Interventional Oncologic Radiology, Interventional Radiology, Multidisciplinary ETC Level: LEVEL II Date: February 28, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

Moderator: Andrea Grace Rockall; Godalming / United Kingdom

Chairperson's introduction (2 min) Andrea Grace Rockall; Godalming / United Kingdom

How can we measure value in diagnostic radiology? (17 min) Nuria Bargallo I Alabart; Barcelona / Spain

How can we measure value in interventional radiology? (17 min) Douglas Mulholland; Dublin / Ireland

What do patients value from imaging departments: findings of ESR patient survey (17 min) Judy Birch; Poole / United Kingdom

How can we translate value into resourcing of radiology: a European perspective? (17 min) Michael Fuchsjäger; Graz / Austria

Panel discussion: Can value-based radiology (as opposed to the volume of work) become the real measure of radiology's impact? (20 min)







#### CTiR 2 - CTiR - Next-generation imaging: clinical trials and AI

Categories: Artificial Intelligence & Machine Learning, Research

ETC Level: ALL LEVELS

Date: February 28, 2024 | 09:30 - 10:30 CET

#### CME Credits: 1

This session celebrates the 10th anniversary of the Clinical Trials in Radiology (CTiR) programme at the European Congress of Radiology (ECR). Renowned speakers will explain how they successfully planned, conducted and published their CTiR at ECR and in high-impact journals. This will help the radiology community by providing 'how to do it' role model information for future CTiRs. Two distinguished discussants will put the two exemplary studies into perspective by explaining how they have helped to shape clinical practice. In addition, the audience will learn about the research and educational importance of CTiR as well as its implications for value-based radiology and will have the opportunity to interact with the faculty in the discussion section of this session.

#### **Moderators:**

Marc Dewey; Berlin / Germany Adrian Brady; Cork / Ireland Carlo Catalano; Roma / Italy

#### Chairpersons' introduction: the importance of clinical trials (6 min)

Marc Dewey; Berlin / Germany Adrian Brady; Cork / Ireland Carlo Catalano; Roma / Italy

How to do a clinical trial in radiology: the example of the DENSE trial (9 min)

Ritse Maarten Mann; Nijmegen / Netherlands

#### How did the DENSE trial change our clinical practice? (4 min)

Fiona J. Gilbert; Cambridge / United Kingdom

### How to do a clinical trial in radiology: the example of the DISCHARGE trial (9 min)

Maria Bosserdt; Berlin / Germany

#### How did the DISCHARGE trial change our clinical practice? (4 min)

Rozemarijn Vliegenthart; Groningen / Netherlands

### The research importance of clinical trials in radiology (4 min)

Regina G. H. Beets-Tan; Amsterdam / Netherlands

### The educational importance of clinical trials in radiology (4 min)

Annemiek Snoeckx; Zandhoven / Belgium







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**The implications of clinical trials in radiology for value-based radiology** (4 min) Adrian Brady; Cork / Ireland

Discussion (16 min)









#### E<sup>3</sup> 219 - The "new" digital transition in the radiology department

Categories: Artificial Intelligence & Machine Learning, EuroSafe Imaging/Radiation Protection, Management/Leadership

ETC Level: LEVEL III Date: February 28, 2024 | 09:30 - 11:00 CET CME Credits: 1.5



**Moderator:** Guy Frija; Paris / France

**Chairperson's introduction** (5 min) Guy Frija; Paris / France

**Dose monitoring systems: how to optimise radiation exposure** (25 min) Jacob Sosna; Jerusalem / Israel

Business analytics (BA) for data-driven decisions (25 min) Andrea Laghi; Roma / Italy

Al implementation: benefits, threats, and barriers (25 min)

Tim Leiner; Rochester / United States

Discussion (10 min)







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#### PC 2b - Strategies for success in cardiac imaging

Categories: Cardiac, Imaging Methods, Management/Leadership, Multidisciplinary, Professional Issues ETC Level: LEVEL II+III Date: February 28, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

**Moderator:** Matthias Gutberlet; Leipzig / Germany

**Chairperson's introduction** (5 min) Matthias Gutberlet; Leipzig / Germany

Success in cardiac imaging: a multimodality perspective (from CMR to CCTA) (15 min) Matthias Gutberlet; Leipzig / Germany

Success in cardiac imaging: a clinical perspective from Scandinavia (15 min) Anagha P. Parkar; Bergen / Norway

A split soul lives in my breast: an interdisciplinary perspective (from cardiologist to radiologist) (15 min) Gianluca Pontone; Milan / Italy

**An academic perspective: from a dedicated heart centre to a university hospital** (15 min) Pál Maurovich-Horvat; Budapest / Hungary

Panel discussion: Is there a single strategy for success in cardiac imaging across Europe? (25 min)









#### ST 3 - Insights into Imaging - Enhancing radiology through critical thinking

Categories: Education, Professional Issues, Research

Date: February 28, 2024 | 09:45 - 10:15 CET

The Editor-in-Chief of Insights into Imaging, Prof. Luis Marti-Bonmati (Valencia/ES) explains his concept of 'critical thinking', why evidence-based radiology is crucial, and his vision for the future of the journal.

**Moderator:** Mélisande Rouger; Bilbao / Spain

**Interview** (30 min) Luis Marti-Bonmati; Valencia / Spain









#### ST 4 - Be accepted the missing link between radiology and female cancer patients.

#### Date: February 28, 2024 | 10:30 - 11:00 CET

Be accepted was launched in cooperation with the ESR during ECR 2022 and has become a useful communication tool for radiologists, an appreciated guide for female cancer patients as it has lead to an optimization of the whole heathcare cain. It puts the focus on the important role of radiologists for patients and physisians and supports to increas their visibility. Be accepted is a success story that has some great news and developements to announce as you will be introduced to the projects in the pipeline. it has a 360 degree approach and unique compositon with the goal to provide a benefit to all stakeholders involved.

#### Moderator:

Mélisande Rouger; Bilbao / Spain

Interview (30 min) Sonja Wehsely Caroline Justich; Vienna / Austria Christian Loewe; Vienna / Austria Regina G. H. Beets-Tan; Amsterdam / Netherlands Bernd Ohnesorge









#### **CUBE 2** - Next-Gen peripheral interventions presented through cases

Categories: Interventional Radiology

Date: February 28, 2024 | 10:30 - 11:00 CET CME Credits: 0.5

#### Peripheral IR Day - Topic Coordinator: Dr. Raúl García Marcos

During the "What would you do?" sessions, an expert leads the audience through past interventions. At critical junctures in each of the cases, the audience is then asked about the course of action they would take, with the implications of different decisions then being explored.

#### Moderator:

Raúl García Marcos; Valencia / Spain

#### Chairperson's introduction (2 min)

Raúl García Marcos; Valencia / Spain

#### Next-Gen peripheral interventions presented through cases (28 min)

Adrián Picado Bermúdez; Valencia / Spain







#### **EFRS 1 - EFRS European Diploma**

Categories: Education, Professional Issues, Radiographers, Research, Students

ETC Level: LEVEL I

Date: February 28, 2024 | 11:00 - 12:00 CET

#### CME Credits: 1

This session aims to discuss the concept of shared learning across Europe, the consideration of European credit transfer system (ECTS) in the context of the European diploma, and to explore of the barriers and enablers of shared learning.

**Moderator:** Carst Buissink; Groningen / Netherlands

**Chairperson's Introduction** (2 min) Carst Buissink; Groningen / Netherlands

#### EFRS Diploma - Background (8 min)

Paul Bezzina; Msida / Malta

#### EFRS Educational Wing Perspectives (10 min)

Mark F. McEntee; Cork / Ireland

Discussion (35 min)

**Closing** (5 min) Carst Buissink; Groningen / Netherlands







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#### AI-SC 1 - Radiology with AI: a demonstration of (future) workflow using integration standards

Categories: Artificial Intelligence & Machine Learning, Imaging Informatics Date: February 28, 2024 | 11:15 - 12:15 CET CME Credits: 1

**Moderator:** Virginia Tsapaki; Vienna / Austria

**Chairperson's introduction** (3 min) Virginia Tsapaki; Vienna / Austria

#### Radiology with AI: a demonstration of (future) workflow using integration standards (57 min)

Peter Mildenberger; Mainz / Germany









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#### **BS 3b - Vascular**

Categories: Imaging Methods, Vascular ETC Level: LEVEL II+III Date: February 28, 2024 | 11:30 - 12:30 CET CME Credits: 1

**Moderator:** Valentin Евгеньевич Sinitsyn; Moscow / Russia

**Chairperson's introduction** (3 min) Valentin Евгеньевич Sinitsyn; Moscow / Russia

#### **Imaging of vasculitis** (19 min) Marco Francone; Milan / Italy

**Imaging of posttraumatic vascular lesions** (19 min) Hatem Alkadhi; Zürich / Switzerland

**Imaging of aneurysmal diseases** (19 min) Christian Loewe; Vienna / Austria







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#### OF 3T - Tackle twisted cases, win a must-have EDiR educational package (part 1)

Categories: Education, Professional Issues, Students ETC Level: LEVEL II Date: February 28, 2024 | 11:30 - 12:00 CET CME Credits: 0.5

**Moderator:** Laura Oleaga Zufiria; Barcelona / Spain

**Chairperson's introduction** (5 min) Laura Oleaga Zufiria; Barcelona / Spain

**Let the games begin** (20 min) Laura Oleaga Zufiria; Barcelona / Spain

Pooling of conclusions and perceptions (5 min)

Laura Oleaga Zufiria; Barcelona / Spain









#### HW 3Pb - Transition zone: how to detect typical and not-so-typical tumours

Categories: Genitourinary, Oncologic Imaging

ETC Level: LEVEL ||+|||

Date: February 28, 2024 | 11:30 - 12:30 CET

CME Credits: 1

# Registered participants are requested to arrive at the workshop room 20 minutes before the scheduled start of the session to complete their check-in.

We would like to thank our workshop sponsors. For more information click here.

Please note we will be utilising equipment from certain vendors during the workshop sessions; however, a wide range of alternative options from other vendors is also available.

In this session participants will be able:

- 1. To become familiar with the typical features of PI-RADS 4 and 5 lesions.
- 2. To understand how to make the differential diagnosis of benign hyperplastic nodules.
- 3. To develop practical skills in minimising PI-RADS 3 lesions.
- 4. To learn about the impact of PSA density in PI-RADS 1 and 2.

Instructors (60 min)

Ivo Gerardus Schoots; Rotterdam / Netherlands Tobias Penzkofer; Berlin / Germany







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#### BS 3a - Musculoskeletal: rheumatic diseases

Categories: Imaging Methods, Musculoskeletal ETC Level: LEVEL I+II Date: February 28, 2024 | 11:30 - 12:30 CET CME Credits: 1

**Moderator:** Magdalena Sylwia Posadzy; Poznan / Poland

**Chairperson's introduction** (3 min) Magdalena Sylwia Posadzy; Poznan / Poland

Imaging of rheumatoid arthritis (19 min) Julien Galley; Villars-Sur-Glâne / Switzerland

Imaging of seronegative spondyloarthropathies (19 min)

Christian W.A. Pfirrmann; Forch / Switzerland

Imaging of crystal deposition diseases (19 min)

Reto Sutter; Zürich / Switzerland







#### RPS 312 - Foetal and paediatric thoraco-abdominal imaging

Categories: Cardiac, Chest, GI Tract, Oncologic Imaging, Paediatric Date: February 28, 2024 | 11:30 - 12:30 CET CME Credits: 1

Moderator: Maria Rita Cabrita Carneiro; Lisboa / Portugal

Fractal analysis of perfusion in neuroblastoma using MRI predicts volumetric tumour response and outcome after induction chemotherapy (7 min)

Florian Michallek; Berlin / Germany

**Feasibility and diagnostic accuracy of early postoperative MRI after resection of neuroblastic tumours** (7 min) Maryanna Chaika; Tuebingen / Germany

Neonatal pulmonary MRI at term-equivalent age for defining bronchopulmonary dysplasia severity and its relationship with short-term respiratory outcomes (7 min) Gianluca Folco; Imperia / Italy

Applicability of the O-RADS scoring system in children and adolescents: results of a preliminary retrospective monocentric study (7 min) Elisa Mercanzin; Bergamo / Italy

The distal colostogram for anorectal malformation: considerations in low- and middle-income countries (7 min) Miriam Leiderer; Passau / Germany

**Evaluation of perfusion impairment in Kawasaki disease using fully quantitative cardiovascular magnetic resonance myocardial perfusion: correlation with left ventricular remodelling** (7 min) Zhongqin Zhou; Chengdu / China







#### HW 3Sa - The imaging dilemma in acute stroke: CT vs MR

Categories: Education, Emergency Imaging, Imaging Methods, Neuro, Vascular

ETC Level: LEVEL II+III

Date: February 28, 2024 | 11:30 - 12:30 CET

#### CME Credits: 1

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Please note we will be utilising equipment from certain vendors during the workshop sessions; however, a wide range of alternative options from other vendors is also available.

In this session participants will be able:

1. To become familiar with stroke and therapeutic decisions by investigating the role of MRI and CT in guiding therapeutic decisions related to strokes.

2. To learn about imaging techniques to differentiate stroke mimics from genuine stroke cases.

3. To develop practical skills in identifying stroke mimics by exploring conditions that resemble strokes but have different underlying causes.

4. To become familiar with identifying stroke mimics by exploring conditions that resemble strokes but have different underlying causes.

5. To understand the interventional-diagnostic correlation with the aim of a better prognostic outcome.

Instructors (60 min)

Jessica Jesser; Heidelberg / Germany Charlotte S. Weyland; Aachen / Germany









#### **RPS 314 - Research evidence to inform and shape the future**

Categories: Evidence-Based Imaging, Radiographers, Research Date: February 28, 2024 | 11:30 - 12:30 CET CME Credits: 1

**Moderators:** Jenny Gardling; Lund / Sweden Deniz Akata; Ankara / Turkey

An investigation into the knowledge, attitudes, and practice of lead shielding utilisation in interventional radiology departments and cath-labs across Europe (7 min) Andrew England; Cork / Ireland

Review of diagnostic reference levels (DRLs) in interventional neuroradiology (INR) (7 min) Marvin Grech; Ghaxaq / Malta

Public awareness and preferences for medical radiation risk information (7 min) Gráinne Alison Curran; Cork / Ireland

**Correlating breast lesion dimensions: imaging vs pathological results** (7 min) Laura Martins Segura de Jesus; Vila Real de Santo António / Portugal

Patients' experience to MRI examinations: a systematic qualitative review with metasynthesis (7 min) Isabel Nieto Alvarez; Waldkirch / Germany

Reporting radiographers in Europe: an online survey (7 min)

Malene Roland Vils Pedersen; Vejle / Denmark

Density bone evaluation by ECHOS: a pilot study (7 min)

Rute Santos; Coimbra / Portugal

Liver fibrosis and steatosis ultrasound screening: a FibroScan study (7 min) Rute Santos; Coimbra / Portugal







#### **RPS 304 - MRI in thoracic imaging**

Categories: Chest, Imaging Methods, Oncologic Imaging Date: February 28, 2024 | 11:30 - 12:30 CET CME Credits: 1

**Moderator:** Jürgen Biederer; Seeheim-Jugenheim / Germany

Elexacaftor/Tezacaftor/Ivacaftor improves bronchial artery dilatation detected by magnetic resonance imaging in patients with cystic fibrosis (7 min) Lena Wucherpfennig; Heidelberg / Germany

Magnetic resonance imaging detects delayed perfusion inside perfusion defects in patients with cystic fibrosis (7 min) Patricia Leutz-Schmidt; Heidelberg / Germany

**Delta-radiomics features of ADC maps as early predictors of treatment response in lung cancer** (7 min) Christian Marcel Heidt; Heidelberg / Germany

**3.0T MRI with functional sequences and respiratory motion-resolved compressed sensing reconstruction of freebreathing radial acquisition for immediate response assessment of lung tumour postablation (7 min)** Danyang Zhao; Shanghai / China

Feasibility of pulmonary MRI for lung nodule detection and quantification using Al-accelerated 3D gradient echo imaging (7 min) Alexander Wolfgang Marka; Munich / Germany

**Conjugate gradient reconstruction for pulmonary thin-section MRI with ultra-short TE: capability for acquisition time reduction while maintaining image quality and nodule detection** (7 min) Yoshiharu Ohno; Toyoake / Japan

Longitudinal morpho-functional MRI for the management of incidental pulmonary nodules in patients with COPD: a nationwide multicentre trial (7 min)

Lin Zhu; Shanghai / China







#### **RPS 308 - Temporal bone and dental imaging**

Categories: EuroSafe Imaging/Radiation Protection, Head and Neck, Imaging Methods Date: February 28, 2024 | 11:30 - 12:30 CET CME Credits: 1

Moderator:

Beatrix Kovacsovics; Linkoping / Sweden

Radiologic prevalence and distribution of otic capsule dehiscence in patients with third window syndrome symptoms and a new classification (7 min)

Yağmur Başak Polat; Istanbul / Turkey

**Diagnostic value of cochlear nerve characteristics for occupational noise-induced hearing loss** (7 min) Nan Wang; Tianjin / China

Temporal bone fractures and related complications in patients with cranio-facial trauma: assessment with MDCT in the acute emergency setting (7 min) Marcella Pucci; Geneva / Switzerland

**Deep learning reconstruction algorithm with ultra-high resolution CT of the temporal bone: initial experience** (7 min) Ulysse Puel; Nancy / France

Synthetic CT images of temporal, sinonasal and facial bones from MRI (7 min) Marlise Daniëlla Van der Veen; Amsterdam / Netherlands

Dental imaging in clinical photon-counting CT at a quarter of DVT dose (7 min)

Stefan Sawall; Heidelberg / Germany

**Assessment of dental pulp by T2 mapping in vivo is influenced by age** (7 min) Ksenija Cankar; Ljubljana / Slovenia







#### RPS 313 - What lies in store for us in CT or MR imaging

Categories: Imaging Methods, Physics in Medical Imaging, Research Date: February 28, 2024 | 11:30 - 12:30 CET CME Credits: 1

Moderator: Jonas Seth Andersson; Umeå / Sweden

Multi-spot source cone-beam CT toward quantitative image evaluations (7 min) Antonio Sarno; Naples / Italy

Image domain deep-learning low-dose CT simulator (7 min) Sjoerd A. M. Tunissen; Nijmegen / Netherlands

Anthropomophic 3D printed lung vessel phantoms combined with lung nodules for thorax CT imaging clinical performance evaluation (7 min) Irene Hernandez-Giron; Dublin / Ireland

Development of a breast perfusion phantom including in-line optical spectroscopy measurements for the validation and testing of dynamic contrast-enhanced dedicated breast CT (7 min) Liselot Goris; Hengelo / Netherlands

Model-based noise correction of CT perfusion blood flow measurements based on digital perfusion phantoms (7 min) Neha Vats; Mannheim / Germany

An update on iMet-MRI: a European project aimed at improving metrology for quantitative MRI (7 min) Matt G Hall; London / Ukraine

Magic angle Magnetic resonance imaging (maMRI): first in vivo study using a unique low field scanner: what can we see? (7 min) Dimitri Amiras; London / United Kingdom







#### RT 3 - Medical image perception: when we look but fail to see?

Categories: Education, General Radiology, Professional Issues, Students

ETC Level: ALL LEVELS

Date: February 28, 2024 | 11:30 - 12:30 CET

#### CME Credits: 1

The session aims to share the latest research and examples from everyday radiology practice on mechanisms underlying errors in medical image perception. Furthermore, the question of how the industry can be helpful with medical image perception is raised. The discussion at the end of the session will integrate the perspective of all participants and offer the take-home messages.

Moderator: Carlo Catalano; Roma / Italy

#### Chairperson's introduction (5 min)

Carlo Catalano; Roma / Italy

#### A trained eye: tips and tricks from an experienced radiologist (8 min)

Fleur Kilburn-Toppin; Cambridge / United Kingdom

#### An eye in training: challenges for trainees (8 min)

Emanuele Messina; Rome / Italy

#### A common mechanism underlying errors in medical image perception (8 min)

Jeremy Michael Wolfe; Boston / United States

#### How can industry and research help with medical image perception? (8 min)

Ioannis Sechopoulos; Nijmegen / Netherlands

Discussion (23 min)







#### OF 3R - Maximising the potential of CT technologies for enhanced patient safety

Categories: Education, EuroSafe Imaging/Radiation Protection, Evidence-Based Imaging, Imaging Methods, Radiographers

Date: February 28, 2024 | 11:30 - 12:30 CET CME Credits: 1

BY



In an era of rapidly evolving medical imaging technologies, ensuring patient safety remains a paramount concern. This session delves into the realm of Computed Tomography (CT) and its potential to enhance patient safety through advanced techniques, optimised radiation doses, and new skills and competencies. The aim of the session is to provide an update on the latest advancements and practices in CT imaging so as to better ensure that patients receive the highest quality care with minimal radiation exposure. The esteemed speakers will share their expertise and provide valuable insights for radiographers, radiologists and healthcare professionals committed to enhancing patient safety in diagnostic radiology.

#### **Moderator:**

Andrea Bellizzi; Mosta / Malta

Chairperson's introduction (5 min)

Andrea Bellizzi; Mosta / Malta

New skills and competencies for radiographers working with photon-counting CT (16 min)

Marcel L. Dijkshoorn; Rotterdam / Netherlands

#### Optimising radiation dose and image quality in cardiac CT (16 min)

Svea Deppe Moerup; Middelfart / Denmark

#### Opportunities for CT dose optimisation in paediatrics (16 min)

Shane J Foley; Dublin / Ireland

Open forum discussion (7 min)







#### **RC 307 - Prostate imaging-guided procedures**

Categories: Education, Genitourinary, Imaging Methods, Interventional Oncologic Radiology, Oncologic Imaging ETC Level: LEVEL III Date: February 28, 2024 | 11:30 - 12:30 CET CME Credits: 1

Moderator: Raphaele Marie Renard Penna; Paris / France

Chairperson's introduction (5 min) Raphaele Marie Renard Penna; Paris / France

Prostate "in-bore" MRI-guided biopsy (15 min)

Joan C. Vilanova; Girona / Spain

New generation focal therapies for prostate cancer (15 min)

Jurgen Fütterer; Nijmegen / Netherlands

MRI scoring for focal therapy response assessment (PI-FAB) (15  $\mbox{min})$ 

Francesco Giganti; London / United Kingdom

Panel discussion: How to avoid surgery for prostate disease? (10 min)







#### RC 308 - Imaging Menière disease

Categories: Education, Head and Neck, Imaging Methods ETC Level: LEVEL II+III Date: February 28, 2024 | 11:30 - 12:30 CET CME Credits: 1

**Moderator:** Bert De Foer; Antwerp / Belgium

**Chairperson's introduction** (5 min) Bert De Foer; Antwerp / Belgium

**Basics of Menière's imaging: when and how to do it** (15 min) Steve Connor; London / United Kingdom

Imaging of Menière disease: how to read it (15 min) Anja Bernaerts; Antwerp / Belgium

**Imaging of secondary hydrops and non-hydropic temporal bone diseases** (15 min) Anne Renée Juliette Péporté; Frauenfeld / Switzerland

Panel discussion: Recommendations for the radiological routine (10 min)







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# RC 302 - Pros and Cons: the follow-up of patients with a history of breast cancer should be performed with contrast-enhanced imaging

Categories: Breast, Imaging Methods ETC Level: LEVEL III Date: February 28, 2024 | 11:30 - 12:30 CET CME Credits: 1

Moderator: Silvia Perez Rodrigo; Madrid / Spain

**Chairperson's introduction** (5 min) Silvia Perez Rodrigo; Madrid / Spain

**Pro** (15 min) Elisabetta Giannotti; Cambridge / United Kingdom

**Con** (15 min) Matthew G. Wallis; Cambridge / United Kingdom

Panel discussion: Is there a role for contrast-enhanced imaging? (25 min)







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#### RC 301 - CEUS applications in abdominal and GI radiology: let the bubbles burst!

Categories: Abdominal Viscera, GI Tract, Imaging Methods ETC Level: LEVEL II+III Date: February 28, 2024 | 11:30 - 12:30 CET CME Credits: 1

Moderator: Paul S. Sidhu; London / United Kingdom

Chairperson's introduction (5 min) Paul S. Sidhu; London / United Kingdom

**CEUS in GI tract** (15 min) Polina Rudenko; Valencia / Spain

**CEUS in liver** (15 min) Maija Radzina; Riga / Latvia

**CEUS for interventional treatment guidance and follow-up in abdominal organs** (15 min) Dirk-André Clevert; Munich / Germany

Panel discussion: How can CEUS be integrated into daily practice? (10 min)







#### EF - Artificial intelligence (AI): what you need to know, do, and say?

**Categories:** Artificial Intelligence & Machine Learning, EuroSafe Imaging/Radiation Protection, General Radiology, Imaging Methods, Physics in Medical Imaging

ETC Level: LEVEL II+III

Date: February 28, 2024 | 11:30 - 12:30 CET CME Credits: 1



**Moderators:** Paddy Gilligan; Dublin / Ireland Lucie Sukupova; Prague / Czechia

**Chairpersons' introduction** (2 min) Paddy Gilligan; Dublin / Ireland Lucie Sukupova; Prague / Czechia

Introduction (5 min) Peter Joseph Macmahon; Dublin / Ireland

What you need to do: setting up a multidisciplinary AI evaluation service (15 min) Mika Kortesniemi; ESPOO / Finland

What you need to say: ethical, patient, and legal perspective (15 min) Mary Kirwan; Dublin / Ireland

What you need to know: setting up a syllabus for Al training (15 min) Irene Hernandez-Giron; Dublin / Ireland

Panel discussion: AI: do we know, do or say enough? (8 min)







#### **CUBE 3 - Preoperative embolization**

Categories: Interventional Radiology Date: February 28, 2024 | 12:00 - 12:30 CET CME Credits: 0.5 Peripheral IR Day - Topic Coordinator: Dr. Raúl García Marcos

The "Special Topic" sessions address rarer, more challenging interventions or topics of importance to daily practice.

**Moderator:** Adrián Picado Bermúdez; Valencia / Spain

**Chairperson's introduction** (2 min) Adrián Picado Bermúdez; Valencia / Spain

Preoperative embolization (28 min)

Raúl García Marcos; Valencia / Spain









#### ST 5 - European Radiology - Leading clinical research in medical imaging

Categories: Education, Professional Issues, Research

Date: February 28, 2024 | 12:45 - 13:15 CET

The new Editor-in-Chief of European Radiology, Prof. Bernd Hamm (Berlin/DE) explains his vision and aims for the ESR's flagship journal and the ESR Journal Family: which articles will be published, challenges and opportunities in an ever-changing landscape of radiology.

**Moderator:** Mélisande Rouger; Bilbao / Spain

Interview (30 min) Bernd Hamm; Berlin / Germany









#### RPS 415 - Examining portal venous thrombosis: diagnosis and management strategies

Categories: Abdominal Viscera, Imaging Methods, Interventional Radiology, Vascular Date: February 28, 2024 | 13:00 - 14:30 CET CME Credits: 1.5

## Moderator:

Andrea Mazzaro; Treviso / Italy

Vascular complications of liver transplantation in children, early diagnosis and management (7 min) Andrés Felipe Mejía León; Bogotá / Colombia

**Reliability and accuracy of tomographic 3D ultrasound for grading vessel stenosis: a phantom study** (7 min) Adel Ahmad Alzahrani; Jeddah / Saudi Arabia

Reducing the radiation doses and contrast volume in CT portal venography for patients with sinusoidal obstruction syndrome on a second-generation dual-layer spectral CT (7 min) Yiran Wang; Zhengzhou / China

Development and validation of a new score for selecting the best vascular access for liver cancer intra-arterial procedures (trans-femoral or trans-radial access score) (7 min) Alessandro Maresca; Rome / Italy

Direct Percutaneous Thrombolysis (DPT): an effective method of salvaging thrombosed native arteriovenous fistula (7 min) Vignesh Selvamurugan; Palakkad / India

Relevance of preoperative and early postoperative USG vascular assessment in predicting haemodialysis AV fistula failure in chronic kidney disease patients (7 min) Shikhar Gupta; Delhi / India

Imaging of abdominal arteries: intra-individual comparison of Relaxation-Enhanced Angiography without contrast and triggering (REACT) with 4D contrast-enhanced MR angiography at 3T (7 min)

Jan Paul Janssen; Cologne / Germany

Vascular access devices registry as a working tool to improve infection control and thromboembolism management in cancer patients (7 min)

Mikhail Cherkashin; Saint Petersburg / Russia

Diagnostic performance of angio-MRI in the evaluation of large vessel vasculitis: preliminary results (7 min)







Ejona Duka; Varese / Italy



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## Usefulness of low-energy virtual monochromatic CT imaging with deep-learning image reconstruction in the delineation of endoleaks after endovascular stent-graft placement (7 min)

Takatoshi Higashigawa; Tsu / Japan







#### **RPS 416 - Radiomics and artificial intelligence**

Categories: Artificial Intelligence & Machine Learning, Imaging Informatics, Oncologic Imaging Date: February 28, 2024 | 13:00 - 14:30 CET CME Credits: 1.5

#### Moderator:

Doris Leithner; New York / United States

Handcrafted radiomics, deep radiomics and transcriptomics data provide complementary and potentiating prognostic information in soft-tissue sarcoma patients (7 min)

Amandine Crombé; Talence / France

CT lung cancer screening: pricing and cost-saving potential for deep learning computer-aided lung nodule detection software (7 min) Mathias Prokop; Nijmegen / Netherlands

A fully automated deep learning model based on multiparametric imaging for predicting tumour recurrence of locally advanced rectal cancer after neoadjuvant chemoradiotherapy: a multicentre study (7 min)

Zonglin Liu; Shanghai / China

Prognostic value of the consensus molecular subtype 4 (CMS4) predicted by multiparametric radiomics-based machine learning in colorectal cancer: a multicentre retrospective study (7 min) Zonglin Liu; Shanghai / China

Interlesional morphological heterogeneity as a novel noninvasive prognostic biomarker (7 min) Zuhir Elkarghali; Amsterdam / Netherlands

Clinical assessment of deep learning reconstruction-based accelerated rectal MRI (7 min) Wenjing Peng; Beijing / China

Radiomic analysis of PI-RADS 4 and 5 lesions detected on 3T mpMRI: role in the diagnosis of clinically significant prostate cancer (7 min) Pietro Andrea Bonaffini; Monza / Italy

Imaging derived biomarkers integrated with clinical and laboratory values predict recurrence of hepatocellular carcinoma after liver transplantation (7 min)

Thi Phuong Thao Hoang; Ho Chi Minh / Vietnam

CT texture analysis as a predictor for the genetic profile of mass-forming intrahepatic cholangiocarcinoma (7 min)





Angela Ammirabile; Milan / Italy



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## CT-based radiomics of cholangiocarcinoma and peritumoural tissue improves survival prediction: development of a

clinical-radiomic model (7 min) Angela Ammirabile; Milan / Italy

## Radiomics in colon cancer: how to identify high-risk patients (7 min)

Michela Polici; Rome / Italy









## **RPS 407 - Kidney and bladder imaging**

Categories: Genitourinary, Imaging Methods, Oncologic Imaging Date: February 28, 2024 | 13:00 - 14:30 CET CME Credits: 1.5

**Moderator:** Rossano Girometti; Udine / Italy

Validation of the bladder cancer "MRI Pathway": results from a multicentre prospective study (7 min) Emanuele Messina; Rome / Italy

Contrast-enhanced CT radiomic analysis for the preoperative prediction of pathological T3a upstaging in renal cell carcinoma (7 min) Enyu Yuan; Chengdu / China

Neoadjuvant chemotherapy VI-RADS (nacVI-RADS) for the assessment of tumour response to neoadjuvant immunotherapy in muscle-invasive bladder cancer (7 min) Michele Cosenza; Vimodrone / Italy

Development and validation of a diagnostic model based on contrast-enhanced CT to identify clear cell renal cell carcinoma in solid small renal masses: a multicentre study (7 min) Jiayue Han; Zhuhai / China

Comparison of photon-counting and energy-integrating detector CT systems for the characterisation of cystic renal lesions on virtual non-contrast imaging (7 min) Ludovica Lofino; Milan / Italy

**Diagnostic accuracy and inter-reader agreement of nac-VIRADS scoring system: a prospective validation study** (7 min) Ailin Dehghanpour; Rome / Italy

**Novel CT-derived biomarkers for prediction of renal split function in preoperative nephrectomy planning** (7 min) Christopher Owen Page; London / United Kingdom

Is the R.E.N.A.L. nephrometry score useful for predicting outcomes in percutaneous ablation of renal masses? (7 min) Mihail Poida; Madrid / Spain

Sensing Ultrasound Localisation Microscopy for the visualisation of glomeruli in living humans (7 min) Sylvain Bodard; Paris / France









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**Multiparametric MRI to evaluate tumour response of locally advanced bladder cancer after radioimmunotherapy** (7 min) Stefan Reischl; Munich / Germany

Utilisation of lesion heterogeneity on plain CT imaging using standard deviation and mean HU values in differentiating between solid/complex cystic and benign cystic renal lesions (7 min)

Balqees Khamees Alabri; Muscat / Oman







#### S 4 - Students Session 1

Categories: Artificial Intelligence & Machine Learning, Chest, Genitourinary, Head and Neck, Students, Vascular Date: February 28, 2024 | 13:00 - 14:30 CET CME Credits: 1.5

Moderator: Ioana Andreea Gheonea; Craiova / Romania

Artificial intelligence in breast cancer screening: a retrospective analysis of breast cancer detection, breast cancer characteristics and workload reduction (8 min) Viktor Lu; Malmö / Sweden

Impact of an artificial intelligence (AI) software on the diagnostic performance of a junior radiologist in detecting prostate cancer on MRI (8 min) Ludwig Meinsohn; Rennes / France

Comparison of two software versions of a novel deep-learning algorithm for haemorrhage detection in non-contrast cranial CT in a real-world patient collective (8 min) Franziska Katharina Tombach; Würzburg / Germany

A retrospective multicentre research: development and validation of deep learning classifiers for detecting inner ear malformation on temporal bone CT (8 min)

Abdulrahman Alkojak Almasri; Pécs / Hungary

**Emergency stroke imaging: current challenges and potential solutions offered by artificial intelligence** (8 min) Ioana Erica Stanescu; Ploiesti / Romania

**CBCT imaging of intraosseous jaw bone lesions in children and adolescents** (8 min) Sara Alexia Roman; Cluj Napoca / Romania

CT-angiography (CTA) of deep inferior epigastric artery (DIEA) and its perforators in preoperative mapping for harvesting of deep inferior epigastric perforator (DIEP) flap (8 min) Evgeniia Zhigailova; Moscow / Russia

"Radiological Cases: Quiz Time!": a new approach for the education of radiology (8 min) Antonio Vitor Nascimento Martinelli Braga; Salvador / Brazil

Imaging in pulmonary embolism: a medical student's approach (8 min) Violetta Benedek; Debrecen / Hungary









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## Volume assessment of affected lung parenchyma in COVID-19 (8 min)

Peder Jørgensen Bruun; Bergen / Norway







#### RPS 401 - Diagnosis and response assessment in colorectal cancer

Categories: GI Tract, Imaging Methods, Nuclear Medicine, Oncologic Imaging Date: February 28, 2024 | 13:00 - 14:30 CET CME Credits: 1.5

Moderator: Sofia Gourtsoyianni; Athens / Greece

Value of Iodine uptake derived from DECT in differentiating malignant from benign colorectal wall thickening (7 min) Lucien Widmer; Villars-Sur-Glâne / Switzerland

Performance of CT in the locoregional staging of non-rectal colon cancer: detailed radiology-pathology correlation with a special emphasis on tumour deposits and extramural venous invasion (7 min) Duygu Karahacıoğlu; Istanbul / Turkey

Preoperative evaluating peritoneal cancer index in peritoneal metastatic colon cancer patients using CT-based deeplearning model (7 min) Shaoting Zhang; Jinan / China

Early regression index (ERI) on MR images predicts complete responders after neo-adjuvant chemo-radiotherapy (7 min) Martina Mori; Milan / Italy

Role of IVIM MRI in response assessment in colorectal carcinoma (7 min) Stuti Chandola; New Delhi / India

Can MRI accurately assess the TN staging of rectal cancer patients with local regrowth during watchful waiting? (7 min) Xinde Ou: Amsterdam / Netherlands

The involvement of mesorectal fascia by tumour deposits and extramural venous invasion predicts poor overall survival in locally advanced rectal cancer (7 min) Yaru Feng; Shanghai / China

Performance of dual-layer spectrum CT virtual monoenergetic images to assess early rectal adenocarcinoma T-stage: comparison with MR (7 min)

Ziqi Jia; Guangzhou / China









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## E<sup>3</sup> 426 - Imaging of the brachial plexus and nerves around the shoulder

Categories: Musculoskeletal ETC Level: LEVEL III Date: February 28, 2024 | 13:00 - 14:00 CET CME Credits: 1

**Moderator:** Paolo Simoni; Bruxelles / Belgium

**Chairperson's introduction** (5 min) Paolo Simoni; Bruxelles / Belgium

**Imaging of brachial plexus injury** (20 min) Hannes Platzgummer; Vienna / Austria

**Imaging of other small nerves around the neck and the shoulder** (20 min) Carlo Martinoli; Rapallo / Italy

Panel discussion: MR neurography: a game changer? (15 min)

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# CUBE 4 - Utility of augmented reality with computed tomography fusion in chronic occlusive femoral interventions

Categories: Interventional Radiology Date: February 28, 2024 | 13:00 - 13:30 CET CME Credits: 0.5 The "EFRS @ the Cube" sessions focus on current radiography topics in interventional radiology.

Utility of augmented reality with computed tomography fusion in chronic occlusive femoral interventions (30 min) Irene Nieri; Paris / France

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## E<sup>3</sup> 421a - Current issues in chest radiology

Categories: Chest, General Radiology, Imaging Methods ETC Level: LEVEL I+II Date: February 28, 2024 | 13:00 - 14:30 CET CME Credits: 1.5

#### Differences and overlap between pulmonary infections and non-infectious types of inflammations in HRCT (45 min)

Helmut Prosch; Vienna / Austria

**Imaging of thoracic vascular malformations** (45 min) Gianluca Milanese; Parma / Italy









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## Meets 4 - Radiology and Nuclear Medicine: opportunities for joint research

Categories: Imaging Methods, Interventional Radiology, Multidisciplinary, Research ETC Level: ALL LEVELS Date: February 28, 2024 | 13:00 - 14:00 CET CME Credits: 1

**Moderators:** Carlo Catalano; Roma / Italy Rudi Dierckx; Groningen / Netherlands

Introduction (5 min) Carlo Catalano; Roma / Italy Rudi Dierckx; Groningen / Netherlands

The beautiful world of radiopharmaceuticals (9 min) Verena Pichler: Vienna / Austria

Machine learning in hybrid imaging: the AutoPET challenge and beyond (9 min)

Clemens C. Cyran; München / Germany

**Theranostics: beyond imaging** (9 min) Ken Herrmann; Essen / Germany

Theranostics in interventional radiology (9 min) Gilles Soulez; Montreal / Canada

Nuclear medicine: interdisciplinarity and multidisciplinarity (9 min) Wim J.G. Oyen; Arnhem / Netherlands

Panel discussion (10 min)







## E<sup>3</sup> 421b - Neuroradiology: an update

Categories: Imaging Methods, Neuro, Oncologic Imaging, Paediatric, Vascular ETC Level: LEVEL III Date: February 28, 2024 | 13:00 - 14:30 CET CME Credits: 1.5

**Paediatric neuroimaging** (45 min) Daniela Prayer; Vienna / Austria

**Oncologic neuroimaging** (45 min) Julia Johanna Furtner; Vienna / Austria









## OF 4T - Radiology Trainees Forum (RTF): supporting young radiologists

Categories: Education, General Radiology, Management/Leadership, Professional Issues, Students ETC Level: ALL LEVELS Date: February 28, 2024 | 13:00 - 14:00 CET CME Credits: 1



**Moderators:** Saif Afat; Tübingen / Germany Judith Herrmann; Tübingen / Germany

**Chairpersons' introduction** (5 min) Saif Afat; Tübingen / Germany Judith Herrmann; Tübingen / Germany

Radiology Trainees Forum: who we are and our aims (10 min) Saif Afat; Tübingen / Germany

Radiology Trainees Forum: opportunities to collaborate (20 min) Viktoriia Pozdniakova; London / United Kingdom Isabel Molwitz; Hamburg / Germany

How trainees can influence next-generation radiology (10 min) Michail Klontzas; Heraklion / Greece

Open forum discussion: How to make the most of the radiology trainees' forum? (15 min)









## EU 4 - SAMIRA: a European Commission initiative to strengthen quality and safety in imaging

Categories: EuroSafe Imaging/Radiation Protection, Evidence-Based Imaging, Professional Issues ETC Level: LEVEL III Date: February 28, 2024 | 13:00 - 14:30 CET CME Credits: 1.5

Moderator: Georgi Simeonov; Luxembourg / Luxembourg

Chairperson's introduction and SAMIRA overview (8 min)

Georgi Simeonov; Luxembourg / Luxembourg

Update on EU-REST study on education, workforce and staffing issues (8 min) Boris Brkljačić; Zagreb / Croatia

Update on MARLIN: radiation incident reporting (8 min)

Carlos Prieto Martin; Madrid / Spain

Update on the BSS equipment study, Nucadvisor (15 min)

Jonas Seth Andersson; Umeå / Sweden

**Guidelines and recommendations for therapeutic radiopharmaceuticals from the SIMPLERAD project** (8 min) Michael Lassmann; Würzburg / Germany

Results of the EURAMED rocc'n'roll project and next steps in implementing the proposed strategic research agenda (15 min)

Christoph Hoeschen; Magdeburg / Germany

## Forthcoming opportunities under SAMIRA (8 min)

Georgi Simeonov; Luxembourg / Luxembourg

Panel discussion: How to improve the implementation of SAMIRA studies and guidance through professional initiatives? (20 min)







## PC 4 - Management of localised prostate cancer

Categories: Genitourinary ETC Level: LEVEL II+III Date: February 28, 2024 | 13:00 - 14:30 CET CME Credits: 1.5

**Moderator:** Harriet Thoeny; Bern / Switzerland

**Chairperson's introduction** (5 min) Harriet Thoeny; Bern / Switzerland

**Radiologist** (20 min) Geert M. Villeirs; Gent / Belgium

**Urologist** (20 min) Massimo Valerio; Lausanne / Switzerland

**Pathologist** (20 min) Eva Compérat; Vienna / Austria

**Patient perspective on prostate cancer and screening for prostate cancer** (15 min) Erik Briers; Hasselt / Belgium

Panel discussion: How to offer the best treatment to the individualised patient? (10 min)







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## SF 4 - The green hospital: enhancing sustainability

Categories: Education, Management/Leadership, Multidisciplinary, Radiographers, Students Date: February 28, 2024 | 13:00 - 14:30 CET CME Credits: 1.5

#### Moderators:

Jose Guilherme Couto; Msida / Malta Philipp Brantner; Rheinfelden / Switzerland

**Chairpersons' introduction** (5 min) Jose Guilherme Couto; Msida / Malta Philipp Brantner; Rheinfelden / Switzerland

**Tips for making more effective use of departmental resources** (16 min) Andrea Grace Rockall; Godalming / United Kingdom

Applicability of current green practices in healthcare facilities (16 min) Ana Luísa Ferreira Soares; Porto / Portugal

Safe and sustainable use of contrast media (16 min) Moreno Zanardo; Limbiate / Italy

**Reducing waste in imaging** (16 min) Elin Kjelle; Gjøvik / Norway

Panel discussion: How do we instil green skills in future healthcare professionals (21 min)







## OF 4R - A holistic approach to osteoporosis

Categories: Imaging Methods, Management/Leadership, Professional Issues, Radiographers

Date: February 28, 2024 | 13:00 - 14:00 CET

#### CME Credits: 1

This session delves into the multifaceted landscape of osteoporosis care, highlighting the pivotal role of radiographers in the assessment and management of this prevalent bone disorder. This session comprises three insightful talks that collectively contribute to a comprehensive understanding of osteoporosis, emphasising the significance of early detection and prevention. Furthermore, the session will highlight the pivotal role radiographers can play in early detection, accurate reporting, and proactive fracture prevention. Attendees of this session will gain a profound understanding of how radiographers may further develop and/or extend their role and make a difference in the fight against osteoporosis, ultimately contributing to better bone health and enhanced patient outcomes.

Moderator:

Maria Cauchi; Birkirkara / Malta

**Chairperson's introduction** (5 min) Maria Cauchi; Birkirkara / Malta

How radiographers can make a difference in DEXA patient pathways (16 min)

Eilish Mcdermott; Dublin / Ireland

**Optimised reporting for DEXA scanning: the vertebral fracture identification toolkit** (16 min)

Jill Griffin; Bath / United Kingdom

Radiographers as fracture prevention practitioners:a hybrid role model for the future? (16 min)

Rosemary James; Somerset / United Kingdom

Open forum discussion (7 min)







VIENNA / FEBRUARY 28 – MARCH 03

## RC 406 - Imaging-guided theranostics: current clinical practice and recent developments

Categories: Hybrid Imaging, Interventional Oncologic Radiology, Molecular Imaging, Nuclear Medicine, Oncologic Imaging ETC Level: LEVEL II Date: February 28, 2024 | 13:00 - 14:00 CET CME Credits: 1

Moderator: Jose Luis Vercher Conejero; Barcelona / Spain

**Chairperson's introduction** (5 min) Jose Luis Vercher Conejero; Barcelona / Spain

**Prostate-specific membrane antigen (PSMA)-based theranostics: prostate cancer and beyond** (15 min) Tobias Maurer; Hamburg / Germany

Somatostatin receptor (SSR)-based theranostics: neuroendocrine tumours and beyond (15 min) Irene Virgolini; Innsbruck / Austria

**Recent developments in the field of imaging-guided theranostics** (15 min) Désirée Deandreis; Villejuif / France

Panel discussion: The role of radiologists in oncologic therapy (10 min)







## E<sup>3</sup> 418 - Coronary heart disease: radiology is key

Categories: Cardiac, Emergency Imaging, Evidence-Based Imaging, Imaging Methods

ETC Level: ALL LEVELS

Date: February 28, 2024 | 13:00 - 14:30 CET

## CME Credits: 1.5

At the end of this session, participants will be able to determine which imaging modality is preferred for the specific patient. They should know how to assess the important imaging features in coronary heart disease, whether stable or acute, and they should learn to describe the imaging findings of (M)INOCA and coronary dissection.

#### Moderator:

Konstantin Nikolaou; Tuebingen / Germany

**Chairperson's introduction** (2 min) Konstantin Nikolaou; Tuebingen / Germany

**The patient with stable chest pain** (24 min) Michelle Claire Williams; Edinburgh / United Kingdom

**The patient with acute chest pain** (24 min) Christopher L. Schlett; Freiburg im Breisgau / Germany

## (M)INOCA and coronary dissection (24 min)

Maja Hrabak Paar; Zagreb / Croatia

Panel discussion: How do we ensure sufficient coverage? 24/7? (16 min)







## E<sup>3</sup> 420 - The future of oncologic and vascular interventional radiology

Categories: Interventional Oncologic Radiology, Interventional Radiology

ETC Level: LEVEL III

Date: February 28, 2024 | 13:00 - 14:30 CET

#### CME Credits: 1.5

The session gives an overview of the main novelties expected to be introduced and soon used in vascular and extra-vascular interventional radiology. The session intends to familiarise the audience with new technologies and clinical advancements that could be implemented in interventional radiology departments.

#### Moderator:

Christoph Binkert; zurich / Switzerland

Chairperson's introduction (5 min)

Christoph Binkert; Zurich / Switzerland

#### Evolution and perspective in oncological IR (18 min)

Laura Crocetti; Pisa / Italy

#### Multimodality and combined treatment in IR (18 min)

Roberto Luigi Cazzato; Stasbourg / France

## Perspective of vascular IR (18 min)

Heather Moriarty; Dublin / Ireland

#### Stereotactic and robotic interventions (18 min)

Brad J. Wood; Bethesda / United States

Panel discussion: How IR departments should integrate all these novelties (13 min)







## CUBE 5 - Endovascular bypass: natural evolution or science fiction?

Categories: Interventional Radiology Date: February 28, 2024 | 14:00 - 14:30 CET CME Credits: 0.5

## Advanced Session - Topic Coordinator: Prof. Miltiadis Krokidis

The "Advanced Session: The Extra Mile" introduces the audience to techniques and treatments offered for challenging cases where an out-of-the-box approach was required or where there has been an impactful learning point for clinical practice.

**Moderator:** Miltiadis Krokidis; Athens / Greece

**Chairperson's introduction** (2 min) Miltiadis Krokidis; Athens / Greece

## Endovascular bypass: natural evolution or science fiction? (28 min)

Fabrizio Fanelli; Roma / Italy







#### VIENNA / FEBRUARY 28 – MARCH 03

## ST 2 - The Perception Lab - Medical Image Perception at ECR

#### Categories: Research

Date: February 28, 2024 | 14:15 - 14:45 CET

The Perception Lab at ECR is a "pop-up" version of an academic research lab focused on medical image perception.

Led by Dr. Jeremy Wolfe from Harvard Medical School, several groups of researchers have come to Vienna to test radiologists and other experts during the meeting. This session will provide insights about medical image perception in general and Dr. Wolfe's studies on the "look but fail to see" errors in particular.

The Perception Lab is located on the first floor of the ACV, within the "Innovation in Focus" area. Be sure to stop by and learn more!

#### Moderator:

Mélisande Rouger; Bilbao / Spain

Interview (30 min) Jeremy Michael Wolfe; Boston / United States







## RC 502 - Alternative ways to MRI-guided breast biopsy

Categories: Breast, Interventional Radiology ETC Level: LEVEL III Date: February 28, 2024 | 15:00 - 16:00 CET CME Credits: 1

**Moderator:** Gordana Ivanac; Zagreb / Croatia

**Chairperson's introduction** (5 min) Gordana Ivanac; Zagreb / Croatia

**Targeted conventional breast imaging** (15 min) Panagiotis Kapetas; Vienna / Austria

**Volume navigation guided biopsy** (15 min) Mustafa Erkin Aribal; Istanbul / Turkey

**Contrast-enhanced mammography guidance: a new approach to image-guided procedures** (15 min) Rodrigo Alcantara Souza; Barcelona / Spain

Panel discussion: Challenges in the adoption of alternative ways to MRI-guided biopsy (10 min)

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## OF 5T - Career development: being a better next-generation radiologist

Categories: Education, General Radiology, Management/Leadership, Professional Issues, Research, Students ETC Level: ALL LEVELS Date: February 28, 2024 | 15:00 - 16:00 CET CME Credits: 1

**Moderator:** Michail Klontzas; Heraklion / Greece

**Chairperson's introduction** (5 min) Michail Klontzas; Heraklion / Greece

**Being a better clinician** (15 min) Adrian Brady; Cork / Ireland

**Being fit for practice** (15 min) Gennaro D'Anna; Legnano / Italy

Radiology for the long haul: avoiding burnout (15 min) Luis Curvo-Semedo; Coimbra / Portugal

Open forum discussion: How can a next-generation radiologist excel? (10 min)

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## MR 5 - MR quality: what, why, and how

Categories: Education, Evidence-Based Imaging, Management/Leadership ETC Level: LEVEL II Date: February 28, 2024 | 15:00 - 16:00 CET CME Credits: 1

**Moderators:** Vítor Manuel F. Silva; Porto / Portugal Johanna Maria Lieb; Basel / Switzerland

**Chairpersons' introduction** (3 min) Vítor Manuel F. Silva; Porto / Portugal Johanna Maria Lieb; Basel / Switzerland

What is MRI quality and how do you assess it? (19 min) Simone Busoni; Firenze / Italy

How to improve the quality and the value of the MR imaging process (19  $\mbox{min})$ 

Ruth Tuura O'Gorman; Zurich / Switzerland

#### Identifying imaging artefacts and optimising the acquisition (19 min)

Vítor Manuel F. Silva; Porto / Portugal









#### OF 5R - Playful imaging: where play meets care

Categories: Education, Imaging Methods, Multidisciplinary, Paediatric, Radiographers

Date: February 28, 2024 | 15:00 - 16:00 CET

#### CME Credits: 1

In the ever-evolving landscape of healthcare, the incorporation of innovative and compassionate approaches is paramount. This session embodies this ethos, exploring novel methodologies that infuse elements of play and empathy into healthcare practices within our radiology and radiotherapy departments. This session should be of interest to radiographers, radiologists, healthcare professionals, researchers, and educators as it will explore the confluence of advanced medical imaging, empathetic care, and the human spirit, showcasing how playful imaging can revolutionise healthcare, creating a brighter, more compassionate future and enhanced experiences for patients and health practitioners alike.

#### Moderator:

Berit Møller Møller Christensen; Jönköping / Sweden

Chairperson's introduction (5 min)

Berit Møller Møller Christensen; Jönköping / Sweden

Using play and child participation to support children in the radiology department (16 min)

Jannie Bøge Steinmeier Larsen; Aarhus V / Denmark

#### The use of VR and gaming to reduce patient anxiety (16 min)

Stefan Liszio; Essen / Germany

#### Embracing canine companions in orthopaedic and cancer care (16 min)

Martin Peyton; Cork / Ireland

Open forum discussion (7 min)







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# ESR/EFSUMB - Multiparametric ultrasound (MPUS) in small parts examinations: where are we standing?

Categories: Education, EuroSafe Imaging/Radiation Protection, Evidence-Based Imaging, Imaging Methods ETC Level: LEVEL III Date: February 28, 2024 | 15:00 - 16:00 CET CME Credits: 1





**Moderators:** Caroline Ewertsen; Copenhagen Oe / Denmark Paul S. Sidhu; London / United Kingdom

## **Chairpersons' introduction** (8 min) Caroline Ewertsen; Copenhagen Oe / Denmark

Paul S. Sidhu; London / United Kingdom

**MPUS of the thyroid** (13 min) Vito Cantisani; Roma / Italy

**MPUS of the breast** (13 min) Boris Brkljačić; Zagreb / Croatia

**MPUS of the testes** (13 min) Michele Bertolotto; Trieste / Italy

## Future perspectives of MPUS, including AI (13 min)

Maija Radzina; Riga / Latvia







## HW 5R - Dose management software in interventional radiology and cardiology

Categories: Cardiac, EuroSafe Imaging/Radiation Protection, Interventional Radiology, Radiographers

Date: February 28, 2024 | 15:00 - 16:00 CET

CME Credits: 1

## Registered participants are requested to arrive at the workshop room 20 minutes before the scheduled start of the session to complete their check-in.

We would like to thank our workshop sponsors. For more information click here.

Please note we will be utilising equipment from certain vendors during the workshop sessions; however, a wide range of alternative options from other vendors is also available.

In this session the participants will be able:

1. To describe best practices, tips and tricks for using dose management software in interventional radiology and cardiology. 2. To demonstrate and apply best practices, tips and tricks for using dose management software in interventional radiology and cardiology.

Minimising peak skin dose: presentation, live software demonstration, and Q&A (30 min)

Dania Kawood; France

Real-time dosimetry - managing occupational radiation exposure in IR and cath-labs: presentation, live software demonstration, and Q&A (30 min)

Maxime Denis; France







## HW 5Pa - Peripheral zone: how to detect typical and not-so-typical tumours

Categories: Genitourinary, Oncologic Imaging

ETC Level: LEVEL ||+|||

Date: February 28, 2024 | 15:00 - 16:00 CET

CME Credits: 1

Registered participants are requested to arrive at the workshop room 20 minutes before the scheduled start of the session to complete their check-in.

We would like to thank our workshop sponsors. For more information click here.

Please note we will be utilising equipment from certain vendors during the workshop sessions; however, a wide range of alternative options from other vendors is also available.

In this session participants will be able:

1. To understand the importance of optimal image quality for prostate MRI interpretation.

2. To become familiar with the typical features of PI-RADS 4 and 5 lesions.

3. To develop practical skills in minimising PI-RADS 3 lesions.

**Instructors** (60 min) Tristan Barrett; Cambridge / United Kingdom Francesco Giganti; London / United Kingdom







## RC 501 - What shall I quantify in abdominal organs?

Categories: Abdominal Viscera, Imaging Methods ETC Level: LEVEL II+III Date: February 28, 2024 | 15:00 - 16:00 CET CME Credits: 1

**Moderator:** Luis Marti-Bonmati; Valencia / Spain

**Chairperson's introduction** (5 min) Luis Marti-Bonmati; Valencia / Spain

Fat: liver, pancreas, visceral fat (15 min) Manuela M. França; Maia / Portugal

**Iron: liver, pancreas, spleen** (15 min) Benjamin Henninger; Innsbruck / Austria

Inflammation and fibrosis: liver, pancreas (15 min) Valérie Vilgrain; Clichy / France

Panel discussion: Integrating quantification of imaging biomarkers in clinical routine (10 min)

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## RPS 503 - Trials and meta-analyses: cardiac CT and MRI

Categories: Cardiac, Evidence-Based Imaging, Imaging Methods, Research Date: February 28, 2024 | 15:00 - 16:00 CET CME Credits: 1

Moderator: François Ascagne Pontana; Lille / France

Cardiovascular CT and MR imaging in Europe: insights from the ESCR registry (7 min)

Federica Catapano; Milan / Italy

**Cost-effectiveness of computed tomography in patients with atypical chest pain clinically referred for invasive coronary angiography: randomised controlled trial** (7 min) Mahmoud Mohamed; Berlin / Germany

Detection of calcified plaques on coronary CT angiography compared to thin-slice non-contrast CT; multicentre trial evaluation (7 min) Kenrick Schulze; Berlin / Germany

Dedicated cardiovascular screening in lung cancer screening: preliminary results from the European 4-IN-THE-LUNG-RUN trial (7 min) Daiwei Han; Groningen / Netherlands

Prognostic value of CT-derived myocardium-related parameters in patients with aortic stenosis: a systematic review and meta-analysis (7 min) ZiXian Chen; Lanzhou / China

Mitral annular disjunction: the boundary between normal and pathological. Results from a large multicentre National Register of the Section of Cardioradiology of the SIRM (7 min)

Elisa Bruno; Milan / Italy







## OF 5E - A glimpse inside the life of a journal

Categories: Education, Professional Issues, Research

ETC Level: ALL LEVELS

Date: February 28, 2024 | 15:00 - 16:00 CET

#### CME Credits: 1

In this session, organised by the ESR Journal Family, prominent editors from the ESR and other journals will give you an insight into editorial work. You will learn about the qualities of good reviewers, considerations of editors' decisions, and current challenges of scientific publishing.

**Moderator:** Yves Menu; Paris / France

## Chairperson's introduction (5 min)

Yves Menu; Paris / France

#### Do's and Don'ts when reviewing and commenting (15 min)

Rossano Girometti; Udine / Italy Jose Maria Garcia Santos; Murcia / Spain

#### A day in an editor's life and how not to get desk-rejected (15 min)

Helmut Prosch; Vienna / Austria Christian Loewe; Vienna / Austria

#### Challenges for journals in a fast-changing world (15 min)

Vicky Goh; London / United Kingdom

Open forum discussion (10 min)









VIENNA / FEBRUARY 28 - MARCH 03

## AI-SC 2 - Interoperability for AI in radiology: a collaborative approach between different stakeholders

Categories: Artificial Intelligence & Machine Learning, Imaging Informatics, Physics in Medical Imaging Date: February 28, 2024 | 15:00 - 16:00 CET CME Credits: 1

Moderator: Nadya Pyatigorskaya; Paris / France

**Chairperson's introduction** (3 min) Nadya Pyatigorskaya; Paris / France

Panel Discussion (57 min) David Goyard; Neuchâtel / Switzerland Benoît Rizk; Villars-sur-Glane / Switzerland Yannick Re; Berre L'Etang / France Andrea Grace Rockall; Godalming / United Kingdom Annalisa Trianni; Trento / Italy

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## RC 515 - Aortic aneurysm and dissection: classification, imaging, and management

Categories: Imaging Methods, Interventional Radiology, Multidisciplinary, Vascular ETC Level: LEVEL I+II Date: February 28, 2024 | 15:00 - 16:00 CET CME Credits: 1

**Moderator:** Luca Saba; Cagliari / Italy

**Chairperson's introduction** (5 min) Luca Saba; Cagliari / Italy

**Anatomy, classification, pathophysiology and clinical assessment** (12 min) Robert Anthony Morgan; Dorking / United Kingdom

**The role of aortic CTA** (12 min) Ruediger Schernthaner; Vienna / Austria

The role of aortic MRA (12 min) Ferenc Imre Suhai; Budapest / Hungary

**Role of interventional radiology in the management of aortic aneurysm and dissection** (12 min) Fabrizio Fanelli; Roma / Italy

Panel discussion: How best to perform and report my CTA and MRA study? (7 min)







# BS 5 - Embracing new techniques and technologies

Categories: Education, Imaging Methods, Nuclear Medicine, Radiographers, Research Date: February 28, 2024 | 15:00 - 16:00 CET CME Credits: 1

Moderator: Luís Pedro Vieira Pedro Vieira Ribeiro; Lagoa / Portugal

**Chairperson's introduction** (6 min) Luís Pedro Vieira Pedro Vieira Ribeiro; Lagoa / Portugal

**Dynamic PET using parametric imaging** (18 min) Christina Baun; Odense / Denmark

A radiographer's guide to functional MRI (18 min) Claude Portanier Mifsud; Msida / Malta

Exploring the potential benefits and ethical considerations of ChatGPT for radiography and scientific research (18 min) Moreno Zanardo; Limbiate / Italy







# RPS 505 - Optimising radiological excellence: the synergy of AI and quality in radiology

Categories: Artificial Intelligence & Machine Learning, Imaging Informatics, Physics in Medical Imaging Date: February 28, 2024 | 15:00 - 16:00 CET CME Credits: 1

Moderator: Nico Buls; Brussels / Belgium

**Assessing visual quality variability in deep learning reconstructed MRI: a focus on lesions** (7 min) Quintin Yves van Lohuizen; Groningen / Netherlands

Image quality and sharpness improvement in coronary CT angiography using a deep-learning super-resolution reconstruction algorithm: a phantom study (7 min) Amir Pourmorteza; Atlanta, GA / United States

**Elevating TIPSS procedures: AI denoising's impact on cone-beam CT image quality and diagnostic confidence** (7 min) Reza Dehdab; Tuebingen / Germany

**3D human reconstruction algorithm: a novel technique for prospective image quality control in chest radiography** (7 min) Yuqi Tan; Chengdu / China

MRI-radiomics for MGMT promoter methylation prediction in glioma: methodological quality, systematic review, and meta-analysis (7 min) Fabio Martino Doniselli; Milan / Italy

Automatic uncertainty-based quality controlled segmentation of multimodal cardiac MR images (7 min) Stéphanie Bricq; Dijon / France

The performance of a commercial artificial intelligence algorithm in an external quality assurance scheme regularly used by humans in the NHS breast screening programme (7 min)

Yan Chen; Nottingham / United Kingdom







# **RPS 516 - Whole-body MRI in oncology**

Categories: Hybrid Imaging, Imaging Methods, Molecular Imaging, Oncologic Imaging Date: February 28, 2024 | 15:00 - 16:00 CET CME Credits: 1

**Moderator:** Marta Zerunian; Rome / Italy

**Patients' selection for pelvic exenteration for gynaecologic neoplasm using whole-body MRI: preliminary results** (7 min) Salvatore Persiani; Rome / Italy

Performance comparison between whole body MRI and 18F-PSMA-1007 PET CT in the detection of tumour recurrence in prostate cancers (7 min) Margarita Garcia Fontes; Montevideo / Uruguay

Applying ONCO-RADS to whole-body MRI cancer screening in a retrospective cohort of asymptomatic subjects (7 min) Chung-Jung Lin; Taipei / Taiwan, Chinese Taipei

Predictive role of sustained imaging MRD negativity assessed by diffusion-weighted whole-body MRI in multiple myeloma (7 min) Barbara Frittoli; Brescia / Italy

Potential added value of whole-body DWI-MRI in the diagnostic workup of patients with adenocarcinoma of unknown primary (ACUP): a prospective pilot study (7 min)

Jeroen Willemse; Amsterdam / Netherlands

The impact of whole-body MRI for staging unfavourable intermediate- and high-risk prostate cancer prior to curativeintent surgery, radiotherapy, hormonal therapy: all-in-one MRI preliminary data (7 min) Cristiano Michele Girlando; Milan / Italy

**Whole-body MRI in staging of diffuse large B-cell lymphoma** (7 min) Monika Wagnerová; Praha / Czechia







# **RPS 510 - Upper extremities and tumours**

Categories: Imaging Methods, Musculoskeletal, Oncologic Imaging Date: February 28, 2024 | 15:00 - 16:00 CET CME Credits: 1

**Moderator:** Mitja Rupreht; Maribor / Slovenia

Deep-learning accelerated 3T MRI of the shoulder after rotator cuff repair: a comparison to standard 3T MRI (7 min) Roy P. Marcus; Zurich / Switzerland

Bone mineral density assessment from spectral localiser radiographs: proof-of-concept with clinical photon counting detector CT (7 min) Lukas Jakob Moser; Zürich / Switzerland

Automatic motion analysis of the wrist using dynamic CT imaging for diagnosis of scapholunate ligament injuries (7 min) Maranda Haenen; Nijmegen / Netherlands

Initial findings of IVIM-DWI validation using DCE-MRI in soft tissue sarcomas (7 min)

Gizem Timoçin Yığman; Istanbul / Turkey

Ultrasound-guided five per cent dextrose and corticosteroid injections in patients with carpal tunnel syndrome: oneyear follow-up (7 min) Žiga Snoj; Ljubljana / Slovenia

Bone lymphoma presenting with lower back pain: a case series (7 min)

Vito Di Martino; Siena / Italy







# **CUBE 6 - How to improve outcomes?**

Categories: Interventional Radiology

Date: February 28, 2024 | 15:30 - 16:00 CET CME Credits: 0.5

#### Advanced Session - Topic Coordinator: Prof. Gianpaolo Carrafiello

The "Advanced Session: Percutaneous Interventions" is aimed at a more advanced audience and covers percutaneous interventions in various areas of interventional radiology.

1. To learn about new tools of the trade.

2. To understand how to use them.

3. To discuss the advantages and improvements in clinical practice.

#### **Moderator:**

Gianpaolo Carrafiello; Milan / Italy

# Chairperson's introduction (2 min)

Gianpaolo Carrafiello; Milan / Italy

#### Imaging intra-operatorio: IVUS and perfusion angiography (14 min)

Matteo Stefanini; Roma / Italy

#### New tools and innovations in peripheral endovascular treatment (14 min)

Chiara Floridi; Perugia / Italy









# ETAP - Why choose an ETAP-certified centre for radiology training?

Categories: Education, Management/Leadership ETC Level: LEVEL I+II Date: February 28, 2024 | 16:30 - 17:30 CET CME Credits: 1

**Moderator:** Oğuz Dicle; Izmir / Turkey

**Chairperson's introduction** (2 min) Oğuz Dicle; Izmir / Turkey

Why certify your training programme? (15 min) Hanna Maria Nikkila; Tampere / Finland

**Can the assessment certificate enhance the selection of a radiology residency programme?** (15 min) Hanna Maria Nikkila; Tampere / Finland

**Practical tips and key concepts in the assessment process** (15 min) Dean Huang; London / United Kingdom

Panel discussion: Why is the ETAP certificate beneficial for a radiology training programme? (13 min)







# RC 610 - Imaging hip joint replacement

Categories: Imaging Methods, Musculoskeletal ETC Level: LEVEL III Date: February 28, 2024 | 16:30 - 17:30 CET CME Credits: 1

**Moderator:** Alberto Bazzocchi; Bologna / Italy

**Chairperson's introduction** (5 min) Alberto Bazzocchi; Bologna / Italy

Radiography and ultrasound: how far can you go? (15 min) Davide Orlandi; GENOVA / Italy

**CT: when should you do it, and how?** (15 min) Tobias Dietrich; St. Gallen / Switzerland

MRI: can it replace the above? (15 min) Amanda Isaac; London / United Kingdom

Panel discussion: Can we define an algorithm for the assessment of painful hip replacement? (10 min)

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# E<sup>3</sup> 626 - AI benefits and limits

Categories: Abdominal Viscera, Artificial Intelligence & Machine Learning, Musculoskeletal, Oncologic Imaging, Paediatric ETC Level: LEVEL III Date: February 28, 2024 | 16:30 - 17:30 CET CME Credits: 1

Moderator: Susan Cheng Shelmerdine; London / United Kingdom

**Chairperson's introduction** (5 min) Susan Cheng Shelmerdine; London / United Kingdom

Latest updates on Al for paediatric musculoskeletal diseases (10 min) Amaka Cynthia Offiah; Sheffield / United Kingdom

Latest updates on Al for paediatric abdominal imaging (10 min) Pietro Andrea Bonaffini; Monza / Italy

Latest updates on AI for paediatric oncological imaging (10 min) Luis Marti-Bonmati; Valencia / Spain

**Developing an Al tool for hip dysplasia US** (10 min) Thomas L. A. van den Heuvel; Nijmegen / Netherlands

Panel discussion: Which kind of radiology-based AI tool/use case would bring the most promise to paediatric healthcare? (15 min)







# RC 614 - Redeveloping the role of the radiographer in clinical audit

Categories: EuroSafe Imaging/Radiation Protection, Management/Leadership, Professional Issues, Radiographers Date: February 28, 2024 | 16:30 - 17:30 CET CME Credits: 1



**Moderators:** Eija Metsälä; Helsinki / Finland Patricia Cunningham; Dunshaughlin / Ireland

**Chairpersons' introduction** (5 min) Eija Metsälä; Helsinki / Finland Patricia Cunningham; Dunshaughlin / Ireland

**Requirements and best practices for radiographer-led clinical audit** (15 min) Matteo Migliorini; FERRARA / Italy

How to develop an effective clinical audit programme (15 min) Karen Borg Grima; Naxxar / Malta

Clinical governance in radiology departments: is audit enough? (15 min) Theophilus N Akudjedu; Bournemouth / United Kingdom

Panel discussion: What will clinical audit need to look like in the future to be fit for purpose? (10 min)







# RC 604 - A road less travelled: imaging the tracheobronchial tree

Categories: Chest ETC Level: LEVEL I+II Date: February 28, 2024 | 16:30 - 17:30 CET CME Credits: 1

Moderator: Benoit Ghaye; Brussels / Belgium

**Chairperson's introduction** (5 min) Benoit Ghaye; Brussels / Belgium

**Diseases involving the trachea** (15 min) Guillaume Chassagnon; Paris / France

Bronchial and bronchiolar diseases (15 min)

Arjun Nair; London / United Kingdom

**Assessment of emphysema** (15 min) Mariaelena Occhipinti; Pisa / Italy

Panel discussion: Potential use of quantification in diseases of the tracheobronchial tree (10 min)

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# OF 6R - Embracing generations: empowering elderly care in radiology

Categories: Education, Imaging Methods, Management/Leadership, Professional Issues, Radiographers

Date: February 28, 2024 | 16:30 - 17:30 CET

#### CME Credits: 1

This session is dedicated to the critical intersection of radiology and elderly patient care. In an era characterised by an ageing population, it is essential to address the unique challenges and opportunities that radiological practice offers in the realm of elder care. This session will feature three compelling talks that collectively contribute to a holistic understanding of the specialised care needed when imaging elderly patients. Attendees of this session will benefit from a better understanding of the critical importance of empowering radiological practice to meet the evolving needs of our ageing population. The talks will delve into practical solutions and best practices that bridge the generations, ensuring that elderly patients receive the compassionate and effective care they deserve in the realm of radiology and radiotherapy.

#### Moderator:

Jose Miguel Saude; Porto / Portugal

Chairperson's introduction (5 min)

Jose Miguel Saude; Porto / Portugal

**Tips to enhance the experience of radiological examinations in patients with cognitive impairment** (16 min) Mark F. McEntee; Cork / Ireland

**Overcoming image quality challenges when performing radiography in frail elderly patients** (16 min) Elona Dybeli; Elbasan / Albania

**Strategies to improve communication when imaging elderly patients** (16 min) Uffe Lindberg Wewer Jakobsen; Odense M / Denmark

Open forum discussion (7 min)









# BS 6 - Imaging of the upper abdominal viscera variants and congenital anomalies: from current to rare aspects

Categories: Abdominal Viscera, Education, Imaging Methods ETC Level: LEVEL II Date: February 28, 2024 | 16:30 - 17:30 CET CME Credits: 1

Moderator: Ioana Gabriela Lupescu; Bucharest / Romania

**Chairperson's introduction** (5 min) Ioana Gabriela Lupescu; Bucharest / Romania

Liver vascularisation variants and their clinical implications (15 min) Raffaella Basilico; Chieti / Italy

Anatomical variants and malformations of the biliary tree (15 min) Razvan Capsa; Bucuresti / Romania

Pancreas and spleen variants and malformations (15 min) Marc Zins; Paris / France

Panel discussion: Structured report and importance of the multidisciplinary team (10 min)







# IF 6 - Research in radiology: how much do we contribute to population health?

Categories: Education, Imaging Methods, Management/Leadership, Multidisciplinary, Research

ETC Level: LEVEL III

Date: February 28, 2024 | 16:30 - 17:30 CET

### CME Credits: 1

Radiology has always been an interdisciplinary speciality and was often crucial to progressing in treating and managing various conditions. Radiological screening - e.g., breast and lung cancer - has been established to improve overall population health. This session will discuss how research in radiology has impacted many patients' lives and how it contributed to population health. Past and current high-impact studies will be highlighted, and new frontiers will be explored on a European level.

Moderator:

Martina Pecoraro; Rome / Italy

Chairperson's introduction (5 min)

Martina Pecoraro; Rome / Italy

**Clinical trials in radiology: the impact on population health** (15 min) Florian Michallek; Berlin / Germany

EU-funded radiology research: what can we expect for the future? (15 min)

Monika Hierath; Vienna / Austria

The RTF perspective on radiology research and population health (15 min)

Michail Klontzas; Heraklion / Greece

Panel discussion: Research in radiology: where can we have the biggest impact? (10 min)







# OF 6T - The impact of emerging technologies on radiology education and practice

Categories: Artificial Intelligence & Machine Learning, Education, Imaging Methods, Interventional Radiology, Students

ETC Level: LEVEL I+II Date: February 28, 2024 | 16:30 - 17:30 CET CME Credits: 1

**Moderator:** Edith Vassallo; Imsida / Malta

**Chairperson's introduction** (5 min) Edith Vassallo; Imsida / Malta

How will artificial intelligence affect radiology? (15 min) Peter Mildenberger; Mainz / Germany

How will virtual reality and simulation affect radiology? (15 min) Jim Zhong; Leeds / United Kingdom

What will interventional radiology of the future look like? (15 min) Miltiadis Krokidis; Athens / Greece

Panel discussion: What does the future of radiology look like? (10 min)

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# HW 6R - Practical dose management in computed tomography

**Categories:** Contrast Media, EuroSafe Imaging/Radiation Protection, Radiographers

Date: February 28, 2024 | 16:30 - 17:30 CET

CME Credits: 1

# Registered participants are requested to arrive at the workshop room 20 minutes before the scheduled start of the session to complete their check-in.

We would like to thank our workshop sponsors. For more information click here.

Please note we will be utilising equipment from certain vendors during the workshop sessions; however, a wide range of alternative options from other vendors is also available.

In this session the participants will be able:

1. To describe best practices, tips and tricks for reducing contrast media dose and radiation exposure in CT using computer software. 2. To demonstrate and apply best practices, tips and tricks for reducing contrast media dose and radiation exposure in CT using computer software.

**Reducing CT radiation dose using dose management software: presentation, live software demonstration and Q&A** (30 min)

Michiel Heynderickx; Sint-Niklaas / Belgium

Software opportunities for optimising CT contrast media dose: presentation, live software demonstration, and Q&A (30 min)

Cristian Colmo; Padova / Italy









# RPS 602 - The role of breast imaging in breast cancer treatment

Categories: Breast, Contrast Media, Imaging Methods, Interventional Oncologic Radiology, Molecular Imaging Date: February 28, 2024 | 16:30 - 17:30 CET CME Credits: 1

### Moderator:

Nuala Healy; Cambridge / United Kingdom

Comparison of radiomics-based machine-learning classifiers for pretreatment prediction of pathologic complete response to neoadjuvant therapy in breast cancer (7 min)

Xue Li; Beijing / China

Ultrasound guided vacuum-assisted biopsy to assess pathological complete response to neoadjuvant therapy: a paradigm shift in breast cancer treatment (7 min) Elisa D'Ascoli; Milan / Italy

Unenhanced MRI for assessment of response to neoadjuvant therapy in patient with locally advanced breast cancer: diagnostic value of DWI/ADC (7 min)

Marcella Pasculli; Rome / Italy

Performance of the node-RADS scoring system for standardised magnetic resonance imaging assessment of lymph nodes in breast cancer (7 min) Roberto Maroncelli; Rome / Italy

Incorporating breast cancer molecular subtype rather than axillary disease extent on baseline 18F-FDG PET/CT in axillary treatment strategies (7 min) Thiemo van Nijnatten; Maastricht / Netherlands

MRI characteristics predicting recurrence/metastases in breast cancer patients receiving neoadjuvant chemotherapy (7 min) Aisha Syed; Cardiff / United Kingdom

Baseline MRI BI-RADS and breast oedema score features as predictors for axillary lymph node response to neoadjuvant chemotherapy in breast cancer (7 min)

Caroline Malhaire; Paris / France









# RPS 609 - New insights in interventional radiology above the neck

Categories: Head and Neck, Interventional Radiology Date: February 28, 2024 | 16:30 - 17:30 CET CME Credits: 1

**Moderator:** Franca Wagner; Bern / Switzerland

Predictors of parenchymal haematoma after mechanical thrombectomy in patients with large ischeamic core due to a large vessel occlusion in the anterior circulation (7 min) Davide De Leoni; Rome / Italy

**Emergency carotid artery stenting in endovascular stroke treatment: a feasible and relatively safe procedure** (7 min) Ruth Kaufmann; 's-Gravenhage / Netherlands

**Endovascular treatment of basilar artery occlusion: experience in a tertiary hospital** (7 min) Francisco Esteban Dianderas Gutiérrez; Sevilla / Spain

**Chronic subdural haematoma: is endovascular treatment a safe and effective alternative?** (7 min) Isabel Bermudez-Coronel; Madrid / Spain

**Endovascular management of post-irradiated carotid blowout syndrome in patients with lower neck cancers** (7 min) Feng-Chi Chang; Taipei / Taiwan, Chinese Taipei

**Efficacy and safety of use of flow diverting silk stents in endovascular treatment of intracranial aneurysms** (7 min) Ezgi Kara; Istanbul / Turkey

**Contour device implantation for treatment of intracranial aneurysms in the basilar tip** (7 min) Karim Mostafa; Kiel / Germany







# HW 6Pb - Transition zone: how to detect typical and not-so-typical tumours

Categories: Genitourinary, Oncologic Imaging

ETC Level: LEVEL ||+|||

Date: February 28, 2024 | 16:30 - 17:30 CET

CME Credits: 1

# Registered participants are requested to arrive at the workshop room 20 minutes before the scheduled start of the session to complete their check-in.

We would like to thank our workshop sponsors. For more information click here.

Please note we will be utilising equipment from certain vendors during the workshop sessions; however, a wide range of alternative options from other vendors is also available.

In this session participants will be able:

- 1. To become familiar with the typical features of PI-RADS 4 and 5 lesions.
- 2. To understand how to make the differential diagnosis of benign hyperplastic nodules.
- 3. To develop practical skills in minimising PI-RADS 3 lesions.
- 4. To learn about the impact of PSA density in PI-RADS 1 and 2.

Instructors (60 min)

Ivo Gerardus Schoots; Rotterdam / Netherlands Tobias Penzkofer; Berlin / Germany







#### **RPS 611 - Brain tumour imaging: advanced techniques**

Categories: Molecular Imaging, Neuro, Oncologic Imaging, Research Date: February 28, 2024 | 16:30 - 17:30 CET CME Credits: 1

Moderator:

Jasmina Boban; Novi Sad / Serbia

Amide proton transfer-weighted imaging (APT-wi) for molecular and survival prediction of diffuse adult gliomas: single-centre retrospective study (7 min)

Fabio Martino Doniselli; Milan / Italy

Decoding malignant glioma heterogeneity by PET-MRI habitat analysis of HYpoxia, PERfusion and DIffusion imaging: preliminary results of the HYPERDIrect study (7 min) Antonella Castellano; Milan / Italy

Vasari-based features nomogram to predict the tumour-infiltrating CD8+ T cell levels in glioblastoma (7 min) Caiqiang Xue; Lanzhou / China

Assessment of axonal fibre integrity using DWI MRI models in post-surgery low-grade glioma patients (7 min) Chris W.J. Van der Weijden; Groningen / Netherlands

Predictive value of cellular metabolism parameters derived from perfusion MRI for the overall survival of patients with glioblastoma (7 min) Chris WL Van der Weijden: Groningen (Netherlands

Chris W.J. Van der Weijden; Groningen / Netherlands

Selective vulnerability of cognitive networks in patients with glioma measured by resting-state fMRI (7 min) Luca Pasquini; Rome / Italy







# RC 605 - Quality control and post-market surveillance of AI medical software

Categories: Artificial Intelligence & Machine Learning, Evidence-Based Imaging, Imaging Informatics, Multidisciplinary ETC Level: LEVEL III Date: February 28, 2024 | 16:30 - 17:30 CET CME Credits: 1

Moderator: Charlotte L. Brouwer; Groningen / Netherlands

**Chairperson's introduction** (5 min) Charlotte L. Brouwer; Groningen / Netherlands

**Post-market surveillance of a software as a medical device** (15 min) Kicky Gerhilde van Leeuwen; De Bilt / Netherlands

How to confirm the effectiveness and safety of the use of an AI medical software? (15 min) Emilia Niemiec; Copenhagen / Denmark

An example of quality control of Al applications in imaging (15 min) Federica Zanca; Leuven / Belgium

Panel discussion: How to implement quality control and post-market surveillance of AI tools in daily practice? (10 min)







#### RPS 605 - Impact of AI on diagnosis of prostate cancer

Categories: Artificial Intelligence & Machine Learning, Genitourinary, Oncologic Imaging Date: February 28, 2024 | 16:30 - 17:30 CET CME Credits: 1

Moderator: Marie-France Bellin; Le Kremlin Bicêtre / France

Artificial intelligence and radiologists at prostate cancer detection in MRI: outcomes of the PI-CAI challenge (7 min) Anindo Saha; Nijmegen / Netherlands

Data integration using AI, PI-RADS, and clinical data to reduce false positives in prostate MRI (7 min) Antony William Rix; Cambridge / United Kingdom

DL algorithm for MRI prostate volume can automatically tailor the threshold of PSA density in combination with other risk factors for the prediction of clinically significant PCa (7 min) Alessandro Venturi; Florence / Italy

Impact of AI on the diagnosis of prostate cancer with mprMRI for novice radiologists: results of a single-centre study (7 min)

Tommaso Russo; Milan / Italy

Multireader evaluation of a deep learning computer-aided system for prostate MRI in men with prostate cancer being considered for active surveillance (7 min)

Laura Isabel Loebelenz; Bern / Switzerland

Assessing radiomic stability: impact of annotation variability on radiomics features consistency in different anatomical regions (7 min) Carmen Prieto-de-la-Lastra; Majadahonda / Spain

Deep learning-based risk estimation for personalised follow-up in low-risk prostate cancer surveillance (7 min) Christian Roest; Groningen / Netherlands

Development and external validation of PSMA-PET/MR based radiomics models to predict Gleason score in prostate cancer (7 min) Tianshuo Yang; Huai'an / China







# OC - S.H.O.C.K.

Date: February 28, 2024 | 17:45 - 19:00 CET

Join us for this exceptional highlight of ECR 2024 as Congress President Carlo Catalano invites attendees to experience the unlimited potential of Next Generation Radiology. In an ECR first, he will share the stage with a co-host, Ameca, the world's most advanced robotic humanoid. Representing the forefront of human-robotics technology, Ameca will share its unique view on the evolution of medical imaging from the perspective of an artificially intelligent being.

With many more extraordinary surprises awaiting attendees, the ECR 2024 Opening Ceremony S.H.O.C.K. will truly live up to its name.

#### Programme

Dance Performance Zurcaroh

Opening Speech Carlo Catalano & Ameca

Interlude: Act 1

The Next Generation of Radiologists *Nino Bogveradze* 

**Recognition of Honorary Members** 

Interlude: Act 2

Acrobatic Performance

**Recognition of Gold Medallists** 

Closing Words Carlo Catalano & Ameca

Interlude: Act 3

Moderator: Carlo Catalano; Roma / Italy

S.H.O.C.K. (75 min) Carlo Catalano; Roma / Italy







# ST 7 - Daily Wrap-up

Categories: General Radiology Date: February 28, 2024 | 17:45 - 18:00 CET Join our studio moderators as they look back on the day's highlights and offer a glimpse of what's still to come at ECR 2024.

**Moderator:** Mélisande Rouger; Bilbao / Spain

Interview (30 min)









# ST 8 - Morning Welcome with Carlo Catalano

Categories: Education, General Radiology, Multidisciplinary, Professional Issues

Date: February 29, 2024 | 07:50 - 08:00 CET

Grab your morning coffee and join our studio moderators as they discuss the most exciting highlights of the upcoming day with Congress President Prof. Carlo Catalano. Make a list of what not to miss and hear his insights on some of the biggest trends currently rocking the world of radiology.

# Moderators:

Ben Giese; Chicago / United States Mélisande Rouger; Bilbao / Spain

Interview (30 min) Carlo Catalano; Roma / Italy









# OF 7R - Keeping patients at the heart of radiography and radiotherapy practice

Categories: Evidence-Based Imaging, Imaging Methods, Management/Leadership, Professional Issues, Radiographers

Date: February 29, 2024 | 08:00 - 09:00 CET

#### CME Credits: 1

This session underscores the enduring commitment of radiographers and healthcare professionals to prioritise the well-being and experience of patients in the fields of medical imaging and radiotherapy. It will comprise three distinctive talks, each offering valuable insights and strategies that can be useful to achieving person-centred care in daily practice. In this session, radiographers and healthcare professionals will be reminded about the importance of centring their focus on the patient, acknowledging that amidst the ever-evolving landscape of radiography and radiotherapy, the human element remains paramount.

#### Moderator:

Laura Dolenc; Ljubljana / Slovenia

# Chairperson's introduction (5 min)

Laura Dolenc; Ljubljana / Slovenia

# Opportunities and challenges for person-centred radiography (16 min)

Susanne Holm; Faaborg / Denmark

#### Heartfelt conversations: the art of compassionate communication (16 min)

Emma Hyde; Derby / United Kingdom

# How technology and new devices can support care and practice in radiotherapy (16 $\min$ )

Claudio Votta; Roma / Italy

Open forum discussion (7 min)







# EIBIR 7 - Artificial intelligence (AI) for health imaging: pioneering cancer image repositories for diagnosis and analysis

Categories: Artificial Intelligence & Machine Learning, Imaging Informatics, Oncologic Imaging, Research ETC Level: LEVEL II Date: February 29, 2024 | 08:00 - 09:00 CET CME Credits: 1

**Moderator:** Luis Marti-Bonmati; Valencia / Spain

**Chairperson's introduction** (6 min) Luis Marti-Bonmati; Valencia / Spain

**CHAIMELEON: accelerating the lab to market transition of AI tools for cancer management** (12 min) Alejandro Vergara; Valencia / Spain

**EuCanImage: towards a European cancer imaging platform for enhanced AI in oncology** (12 min) Maciej Bobowicz; Gdansk / Poland

**INCISIVE: a federated data infrastructure enabling AI-supported cancer diagnosis and prediction** (12 min) Gianna Tsakou; Marousi / Greece

**ProCancer-I: AI models of prostate cancer diagnosis** (12 min) Nikolaos Papanikolaou; Lisbon / Portugal

**EUCAIM: integrating the AI for health imaging results into the European Cancer Imaging Initiative** (6 min) Luis Marti-Bonmati; Valencia / Spain







# **RC 712 - Bone marrow findings**

Categories: Musculoskeletal, Paediatric ETC Level: LEVEL II Date: February 29, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderator: Maria Beatrice Beatrice Damasio; Genoa / Italy

**Chairperson's introduction** (5 min) Maria Beatrice Beatrice Damasio; Genoa / Italy

Frequent and less frequent findings in healthy children (15 min)

**Optimal protocol: how to increase specificity and when to use extra sequences?** (15 min) Lil-Sofie Ording Müller; Oslo / Norway

When to biopsy, when to follow, when to ignore (15 min) Laura Tanturri De Horatio; Roma / Italy

Panel discussion: How to improve differential diagnosis between variants and pathology? (10 min)







# RC 715 - Imaging and interventional treatment of atherosclerotic lesions: old topic, new discoveries

Categories: Interventional Radiology, Multidisciplinary, Vascular ETC Level: LEVEL I+II Date: February 29, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderator: David Laszlo Tarnoki; Budapest / Hungary

**Chairperson's introduction** (5 min) David Laszlo Tarnoki; Budapest / Hungary

Modern ultrasound imaging of atherosclerotic lesions (15  $\mbox{min})$ 

Anita Hernyes; Budapest / Hungary

# Role of CTA and MRA in atherosclerosis imaging (15 min)

Luca Saba; Cagliari / Italy

Management of carotid and femoral stenosis: the role of interventional radiology (15 min)

Christoph Johannes Zech; Basel / Switzerland

Panel discussion: The radiologists in the multidisciplinary management of atherosclerotic lesions: what should we report, all plaques? How often should we control the non-significant stenosis? Should we screen atherosclerosis in the high-risk population? (10 min)







# HW 7Pc - Mimickers: not every lesion is a tumour

Categories: Genitourinary, Oncologic Imaging ETC Level: LEVEL II+III Date: February 29, 2024 | 08:00 - 09:00 CET CME Credits: 1 To participate, a pre-congress Hands-on Workshop registration is required.

Participants who have completed their workshop registration before ECR are requested to arrive at the workshop room 20 minutes before the scheduled start of the session to present their badge and complete their check-in.

**Instructors** (60 min) Geert M. Villeirs; Gent / Belgium Pieter Julien Luc De Visschere; Ghent / Belgium









# RC 708 - Imaging of the face

Categories: Head and Neck, Imaging Methods ETC Level: LEVEL I+II Date: February 29, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderator: Beatrix Kovacsovics; Linkoping / Sweden

**Chairperson's introduction** (5 min) Beatrix Kovacsovics; Linkoping / Sweden

Facial fractures (15 min) Elizabeth Loney; Bradford / United Kingdom

Facial pain (15 min) Christine Mary Glastonbury; San Francisco / United States

Facial cosmetic implants and grafts (15 min) Simonetta Gerevini; Cremona / Italy

Panel discussion: Recommendations for image optimisation (10 min)

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# MD 1 - Musculoskeletal disease: new developments in imaging and treatment - recommendations for clinical practice and directions for the future

Categories: General Radiology, Imaging Methods, Multidisciplinary, Musculoskeletal, Research ETC Level: ALL LEVELS Date: February 29, 2024 | 08:00 - 09:15 CET CME Credits: 1

# Moderators:

Regina G. H. Beets-Tan; Amsterdam / Netherlands Mario Maas; Amsterdam / Netherlands

Welcome and introduction to connAction (17 min) Regina G. H. Beets-Tan; Amsterdam / Netherlands

# Chairperson's introduction (2 min)

Mario Maas; Amsterdam / Netherlands

Bone marrow oedema detection with dual-energy CT: a role for radiologist or computer only? (12 min)

Mikael Boesen; København NV / Denmark

# Oedema and CT scanning: a clinical perspective (12 min)

Frank Bloemers; Amsterdam / Netherlands

**Expert panel discussion** (32 min) Mario Maas; Amsterdam / Netherlands







# E<sup>3</sup> 25B - The post-interventional aorta

Categories: Vascular ETC Level: LEVEL I+II Date: February 29, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderator: Justus Erasmus Roos; Luzern-16 / Switzerland

**Chairperson's introduction** (5 min) Justus Erasmus Roos; Luzern-16 / Switzerland

Chest (23 min) Nils Robrecht Planken; Amsterdam / Netherlands

Abdomen (23 min) François Ascagne Pontana; Lille / France

Panel discussion (9 min)









# E<sup>3</sup> 726 - Emerging non-surgical treatment complications in neuroradiology

Categories: Neuro, Oncologic Imaging ETC Level: LEVEL III Date: February 29, 2024 | 08:00 - 09:00 CET CME Credits: 1

**Moderator:** Sven Haller; Geneve / Switzerland

**Chairperson's introduction** (5 min) Sven Haller; Geneve / Switzerland

Radiotherapy-related side effects on the healthy brain (15 min)

Jasmina Boban; Novi Sad / Serbia

# Neurologic complications of immunotherapy (15 min)

Teresa Santos Nunes; Lisboa / Portugal

# Complications of new drug treatments in neurodegeneration (15 min)

Frederik Barkhof; Amsterdam / Netherlands

Panel discussion: Challenges in imaging interpretation of treatment-related complications (10 min)







# HW 7R - Exploring Al-powered learning in radiology and diagnostic radiography

Categories: Education, Imaging Methods, Radiographers Date: February 29, 2024 | 08:00 - 09:00 CET CME Credits: 1

To participate, a pre-congress Hands-on Workshop registration is required.

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We would like to thank our workshop sponsors. For more information click here.

Please note we will be utilising equipment from certain vendors during the workshop sessions; however, a wide range of alternative options from other vendors is also available.

In this session the participants will be able:

1. To gain experience of online technologies promoting improvements in image-based diagnosis.

2. To understand how online educational technologies can be used in radiography and radiology training and quality assurance.

#### Recent data on AI powered learning in radiology and diagnostic radiography (15 min)

Patrick Brennan; Sydney / Australia

Demonstration of how an on-line educational system (15 min)

Mo'ayyad E Suleiman; Sydney / Australia

Hands on live exercise in trauma interpretation (30 min)







# **ISRRT - Global education perspectives**

Categories: Education, Management/Leadership, Multidisciplinary, Professional Issues, Radiographers

Date: February 29, 2024 | 08:00 - 09:00 CET

#### CME Credits: 1

The session aims to showcase the appreciation of the benefits of multidisciplinary collaborative practice. The attendees will become familiar with the current global status of education in the medical radiation science professions and be introduced to the ISRRT global network of education and training for the medical radiation science professions.

#### Moderators:

Haakon H. Hjemly; Sorumsand / Norway Efthimios M. Agadakos; Athens / Greece

# Chairpersons' introduction (2 min)

Haakon H. Hjemly; Sorumsand / Norway Efthimios M. Agadakos; Athens / Greece

Multidisciplinary collaboration: the experience of an Australian paediatric hospital (25 min)

Stephen Lacey; Parkville / Australia

**Global network on education and training for radiographers and radiation therapists: ISRRT perspectives** (25 min) Napapong Pongnapang; Bangkok / Thailand

Questions and answers (8 min)







# IF 7 - The collection of high-quality data to benefit the patient, the radiologist, and at a multidisciplinary level

Categories: Audit, Education, Evidence-Based Imaging, Management/Leadership, Multidisciplinary

ETC Level: LEVEL III

Date: February 29, 2024 | 08:00 - 09:00 CET

### **CME Credits:** 1

Radiology is integral to most patients' journeys, from screening to diagnosis and treatment. More of these steps are guided by data clinical and imaging - that needs to be of the highest possible quality to ensure the best outcomes in more and more data-centric healthcare. In this session, these topics will be discussed by the patients and from the clinicians' and radiologists' points of view.

#### **Moderator:**

Caroline Justich; Vienna / Austria

# Chairperson's introduction (5 min) Caroline Justich; Vienna / Austria

# The role of Specialist Centres of Excellence for patient benefit (15 min)

Steve Ebdon-Jackson; Reading / United Kingdom Emanuele Neri; Pisa / Italy

### Radiology and MDTs: experience and benefits for the patients (15 min)

Isabel Molwitz; Hamburg / Germany

# Are we ready for novel screening programmes with advanced technology? (15 min)

Katharina Beyer; Rotterdam / Netherlands

# Panel discussion: How to integrate patients' associations and technology innovation? (10 min)









#### **RPS 709 - Novel treatment options for malformations and benign tumours**

Categories: Abdominal Viscera, Head and Neck, Interventional Oncologic Radiology, Interventional Radiology, Paediatric, Vascular Date: February 29, 2024 | 08:00 - 09:00 CET CME Credits: 1

#### Moderator:

Rok Dežman; Ljubljana / Slovenia

Polidocanol sclerotherapy of venous malformations in children- efficacy, safety, and predictors of outcome and complications (7 min) Niclas Schmitt; Heidelberg / Germany

Long-term outcomes of hand arteriovenous malformation management: single referral vascular anomalies centre over 25 years' experience (7 min) Yong Deok Lee; Seoul / Korea, Republic of

Analysis of adverse events after peripheral arteriovenous malformation embolisation: single Korean referral vascular anomalies centre experience (7 min) Jiyoon Ban; Gangnam-gu, Seoul / Korea, Republic of

**Ultrasound-guided ethanol ablation of medial and lateral neck cysts** (7 min) Katya M Duvivier; Amsterdam / Netherlands

Transarterial embolisation of renal angiomyolipomas: a prophylactic treatment for reducing myogenic components (7 min)

Lorenzo Braccischi; Bologna / Italy







#### **RPS 705 - Radiomics applications in MRI**

Categories: Artificial Intelligence & Machine Learning, Imaging Informatics, Physics in Medical Imaging Date: February 29, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderator: Angela Ammirabile; Milan / Italy

Magnetic resonance radiomics-derived sphericity correlates with seizure in brain arteriovenous malformations (7 min) Jih-Yuan Lin; Taipei / Taiwan, Chinese Taipei

MRI radiomics and machine learning: an innovative MRI radiomics and machine learning-based method to predict treatment response in MRI-guided HIFU ablation of bone metastasis (7 min) Valerio D'Agostino; Parete / Italy

Reproducible radiomics features from multi-MRI-scanner test-retest-study: influence on performance and generalisability of radiomics models (7 min) Markus Wennmann; Heidelberg / Germany

MRI-based radiomics analysis for prediction of treatment response to neoadjuvant chemoradiotherapy in patients with locally advanced rectal cancer: a large multicentric study (7 min) Yaru Feng; Shanghai / China

Prediction of the Ki-67 expression level for head and neck squamous cell carcinoma with machine learning-based multiparametric MRI radiomics (7 min)

Weiyue Chen; Lishui / China

Texture analysis and rectal cancer: correlation with histology and prognosis in patients with advanced rectal cancer (7 min) Ilaria Mariani; Lissone / Italy

Prediction of overall survival in paediatric neuroblastoma patients through machine learning in the large multiinstitutional PRIMAGE cohort (7 min)

Jose Lozano; Valencia / Spain

mp-MRI radiomic model predicts peri-tumour tertiary lymphoid structures in hepatocellular carcinoma: a multi-centre study (7 min) Shichao Long; Changsha / China









#### OF 7T - Next-generation diagnosis: working across radiology-pathology boundaries

Categories: Education, General Radiology, Oncologic Imaging, Professional Issues, Students ETC Level: ALL LEVELS Date: February 29, 2024 | 08:00 - 09:00 CET CME Credits: 1

**Moderator:** Vicky Goh; London / United Kingdom

**Chairperson's introduction** (5 min) Vicky Goh; London / United Kingdom

How imaging augments pathology diagnosis (30 min)

Dilani Lokuhetty; Lyon / France Ian A. Cree; Badby / United Kingdom

How imaging augments pathology diagnosis (15 min)

Regina G. H. Beets-Tan; Amsterdam / Netherlands

Open forum discussion: New ways of working towards improving patient diagnosis (10 min)







#### RC 717 - Pros and Cons: dual-energy/spectral CT in an emergency is helpful

Categories: Emergency Imaging, Imaging Methods, Multidisciplinary ETC Level: LEVEL III Date: February 29, 2024 | 08:00 - 09:00 CET CME Credits: 1

**Moderator:** Francesco Macri; Geneva / Switzerland

**Chairperson's introduction** (5 min) Francesco Macri; Geneva / Switzerland

**Pro** (15 min) Savvas Nicolaou; Vancouver / Canada

**Con** (15 min) Luis Curvo-Semedo; Coimbra / Portugal

Panel discussion: Dual-energy/spectral CT: a step towards an expanding future of CT imaging (25 min)









#### EIBALL 7 - Lung cancer screening: implementing quantitative imaging biomarker protocols

Categories: Chest, Imaging Methods, Oncologic Imaging, Physics in Medical Imaging, Radiographers ETC Level: LEVEL II Date: February 29, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderator: Aad Van Der Lugt; Rotterdam / Netherlands

**Chairperson's introduction** (5 min) Aad Van Der Lugt; Rotterdam / Netherlands

**Status of lung cancer screening in Europe** (15 min) Torsten Gerriet Blum; Berlin / Germany

**Protocol and quality control programmes in European lung cancer screening programmes** (15 min) Hans-Ulrich Kauczor; Heidelberg / Germany

**QIBA profile on small lung nodule volume assessment and monitoring in low-dose CT** (15 min) Gudrun Zahlmann; Oak Brook / United States

Panel discussion: How can we accelerate the implementation of robust QA programmes in lung cancer screening? (10 min)









#### RC 716 - Breast imaging: back to basics

Categories: Breast, Imaging Methods, Oncologic Imaging ETC Level: LEVEL I Date: February 29, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderator: Fiona J. Gilbert; Cambridge / United Kingdom

**Chairperson's introduction** (5 min) Fiona J. Gilbert; Cambridge / United Kingdom

**Breast MRI** (15 min) Isabelle Thomassin-Naggara; Paris / France

**CEM** (15 min) Elisabetta Giannotti; Cambridge / United Kingdom

**BIRADS** (15 min) Paola Clauser; Vienna / Austria

Panel discussion: Future development of breast imaging (10 min)

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#### RC 701 - Pancreatic IPMN: leave alone or when to be concerned?

Categories: Abdominal Viscera, Imaging Methods ETC Level: LEVEL II+III Date: February 29, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderator: Celso Matos; Lisbon / Portugal

**Chairperson's introduction** (5 min) Celso Matos; Lisbon / Portugal

Current strategies in detection and follow-up of IPMN (15 min)

Giulia Zamboni; Verona / Italy

#### Worrisome and high-risk features of IPMN (15 min)

Nikolaos Kartalis; Stockholm / Sweden

#### Indication and findings in EUS of IPMN (15 min)

Christian Jenssen; Strausberg / Germany

#### Panel discussion: What would be the justification for performing life-long follow-up? (10 min)







#### **RPS 710 - Sports imaging**

Categories: Emergency Imaging, Imaging Methods, Musculoskeletal Date: February 29, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderator: Philip Robinson; Leeds / United Kingdom

Assessing cartilage regeneration in a minipig model: cutting-edge MR techniques challenge the gold standard (7 min) Miriam Frenken; Düsseldorf / Germany

Limited magnetic resonance imaging in acute upper ankle injuries (7 min) Aynur Gökduman; Frankfurt a. Main / Germany

Surgical correlation of peroneal compartment pathology in 2D and 3D ankle MRIs with interreader reliability (7 min) Muhammad Rubeel Akram; Dallas / United States

**Shear-wave elastography for the evaluation of tendinopathies: a systematic review and meta-analysis** (7 min) Mariachiara Basile; Catania / Italy

**Muscle mapping evaluation in athletes with myocardial inflammation** (7 min) Mattia Tordin; Padova / Italy

**Rethinking the anatomical variants role in peroneal tendinopathy** (7 min) Pamela Soledad Perez; Lomas de Zamora / Argentina

Patients at risk of bone non-union in distal radius fractures: value of dual-energy CT-derived metrics (7 min) Leon David Grünewald; Frankfurt a. Main / Germany

Diagnostic accuracy of a fast deep learning-based MRI protocol in diagnosing meniscal and ligament tears of the knee: comparison with standard MRI protocol (7 min)

Fabio Lombardo; Negrar / Italy







#### **RPS 711 - Stroke: treatment and outcome**

Categories: Interventional Radiology, Neuro, Research, Vascular Date: February 29, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderator: Mohamed T. Tarek El-Diasty; Jeddah / Saudi Arabia

Cost-effectiveness of mobile stroke units in Germany: a perspective on catchment areas, operating modes, and staffing (7 min) Fabian Tollens; Mannheim / Germany

Set-up and planning of a MSU service in a medium-sized German urban area (7  $\min$ )

Johann S Rink; Mannheim / Germany

Clinical scores and imaging-based thrombus biomarkers for predicting recanalisation after stent-retriever mechanical thrombectomy (7 min)

Karina Janeth Gordillo Zabaleta; Barcelona / Spain

Haemodynamic consequences in endovascular treatment of symptomatic carotid stenosis: a comprehensive analysis (7 min) José Rodríguez Castro; Oviedo / Spain

Post-stroke cerebral blood flow derived from arterial spin labelling as a biomarker of clinical outcome following endovascular therapy (7 min) Nico Sollmann; Ulm / Germany

Automated MRI-based basal ganglia and thalamus assessment at the acute-subacute phase after middle cerebral cortical stroke can help predict the 3-month mRS shift (7 min)

Salim Zenkhri; Lausanne / Switzerland

Dual-energy computed tomography can detect subclinical abnormalities of high density in the gyrus in patients after neuro-endovascular treatment (7 min)

Sangil Suh; Seoul / Korea, Republic of









#### CUBE 7 - Heat or cold: drug-eluting beads or radioembolization - what is what

Categories: Interventional Radiology

Date: February 29, 2024 | 09:00 - 09:30 CET

CME Credits: 0.5

#### Oncologic IR Day - Topic Coordinator: Prof. Dr. Ralf-Thorsten Hoffmann

The "Tools of the Trade" session is an innovative session format that introduces the audience to the most important devices (tools) used in interventional radiology. A specialist leads these sessions, describing the devices and its use, and demonstrating its application on anatomical phantoms. Participants also have the opportunity to touch and explore these devices, which are circulated in the audience.

#### **Moderator:**

Maximilian De Bucourt; Berlin / Germany

Chairperson's introduction (2 min)

Ralf-Thorsten Hoffmann; Dresden / Germany

#### Heat or cold: drug-eluting beads or radioembolization - what is what (28 min)

Tobias Jakobs; München / Germany







#### OF 8R - Making strides towards person-centred imaging

Categories: Education, Evidence-Based Imaging, Imaging Methods, Management/Leadership, Professional Issues, Radiographers

Date: February 29, 2024 | 09:30 - 10:30 CET

#### CME Credits: 1

This session embodies the essence of modern healthcare and highlights a commitment to focussing on the unique needs, comfort, and dignity of individuals undergoing imaging procedures. This session will include three compelling talks that collectively illuminate the path towards achieving person-centred care in the realm of medical imaging. Indeed, apart from addressing the pressing need for greater inclusivity in imaging, the speakers will share innovative approaches and practical tools that can help empower radiographers and healthcare professionals to embrace diversity, foster inclusivity, and prioritise the unique needs of each individual, ultimately advancing the cause of compassionate and effective medical imaging.

#### **Moderator:**

Charlotte A. Beardmore; London / United Kingdom

Chairperson's introduction (5 min) Charlotte A. Beardmore; London / United Kingdom

Towards autism-friendly MRI (16 min) Nikolaos Stogiannos; Corfu / Greece

A conceptual toolkit for radiographers to care for persons experiencing psychosis (16 min)

Krzysztof M. Skuza; Lausanne / Switzerland

Delivering person-centred care to minimise discomfort and maximise safety in radiography (16 min)

Giuseppe Roberto Bonfitto; Milan / Italy

Open forum discussion (7 min)







#### TC 827 - The basics of neuroimaging in neurodegeneration

Categories: Hybrid Imaging, Molecular Imaging, Multidisciplinary, Neuro, Nuclear Medicine

ETC Level: LEVEL I+II

Date: February 29, 2024 | 09:30 - 10:30 CET

#### CME Credits: 1

Structural and molecular imaging techniques can demonstrate the onset of neurodegenerative and dementing disorders years before the onset of symptoms. This session will discuss the structural MRI changes that occur with normal aging, how to differentiate normal from abnormal and which MR imaging sequences to use for diagnostic assessment in the memory clinic. The basics of PET imaging in neurodegeneration will be discussed, including how/which tracers can dissect the molecular pathology associated with neurodegenerative diseases. The role of imaging biomarkers in clinical routine as well as in trials for neurodegenerative diseases is being demonstrated. At the end of the course, the participants will better understand available imaging techniques and biomarkers in diagnosis of neurodegenerative diseases.

#### Moderators:

Meike W. Vernooij; Rotterdam / Netherlands Frederik Barkhof; Amsterdam / Netherlands

**Chairpersons' introduction** (3 min) Meike W. Vernooij; Rotterdam / Netherlands Frederik Barkhof; Amsterdam / Netherlands

The basics of MR imaging in neurodegeneration (19 min)

Yoshimi Anzai; Salt Lake City / United States

The basics of molecular imaging in neurodegeneration (19 min)

Javier Arbizu; Pamplona / Spain

#### Role of imaging biomarkers for dementia in clinical routine and trials (19 min)

Frederik Barkhof; Amsterdam / Netherlands







#### E<sup>3</sup> 821c - Choice and use of contrast media in different clinical settings

Categories: Contrast Media, Emergency Imaging, General Radiology, Genitourinary, Medico-legal ETC Level: LEVEL II Date: February 29, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

Use of sonographic contrast media (30 min) Orlando Catalano; Napoli / Italy

**Choice and injection parameters using iodinated contrast media in CT** (30 min) Wolfgang Schima; Vienna / Austria

Choice and injection parameters of gadolinium-based contrast media (30 min)

Luigi Grazioli; Brescia / Italy







#### **ESR/EFRS** - Teleoperations in radiology

Categories: Education, Evidence-Based Imaging, Professional Issues, Radiographers, Research

Date: February 29, 2024 | 09:30 - 11:00 CET

CME Credits: 1.5

Opportunities for teleoperations are rapidly expanding within radiology. The aim of this session is to highlight the concept of teleoperations and to explore a range of real-world examples within clinical practice and education.

#### Moderators:

Tiina Pauliina Nousiainen; Jyväskylä / Finland Borut Marincek; Kilchberg / Switzerland

 $\label{eq:chairpersons'} \textbf{ introduction: what is the concept behind the teleoperations? (5 min)}$ 

Tiina Pauliina Nousiainen; Jyväskylä / Finland Borut Marincek; Kilchberg / Switzerland

#### Initial experiences of remote MRI scanning (15 min)

Anton Sheahan Quinsten; Bochum / Germany

Teleoperations in ultrasound: where are we now? (15 min)

Vito Cantisani; Roma / Italy

#### Teleoperations and methods to support the military (15 min)

David Muchena; Colchester / United Kingdom

**Remote imaging as a means to support radiographer and radiologist education** (15 min) Ricardo Silva Teresa Ribeiro; Lausanne / Switzerland

**Experiences of implementing a televisits system for cancer patients during the COVID-19 pandemic** (15 min) Patrizia Cornacchione; Rome / Italy

Panel discussion: How can we use teleoperation to maximise patient outcomes? (10 min)







#### US 8 - Advances in ultrasound imaging of transplantation

Categories: Education, EuroSafe Imaging/Radiation Protection, Evidence-Based Imaging, Imaging Methods, Paediatric ETC Level: LEVEL III Date: February 29, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

**Moderators:** Paul S. Sidhu; London / United Kingdom Thomas Fischer; Berlin / Germany

**Chairpersons' introduction** (10 min) Paul S. Sidhu; London / United Kingdom Thomas Fischer; Berlin / Germany

Renal transplantation (20 min)

Thomas Fischer; Berlin / Germany

Liver transplantation (20 min) Gibran Timothy Yusuf; London / United Kingdom

#### Combined kidney and pancreas transplantation (20 min)

Jose Ángel Jiménez-Lasanta; Barcelona / Spain

### Paediatric liver and multiorgan transplantation (20 min)

Annamaria Deganello; London / United Kingdom







#### EU 8 - What is appropriate image quality and how can or should it be used for optimisation?

Categories: EuroSafe Imaging/Radiation Protection, Evidence-Based Imaging, Physics in Medical Imaging

ETC Level: LEVEL II Date: February 29, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

**Moderator:** Christoph Hoeschen; Magdeburg / Germany

**Chairperson's introduction** (5 min) Christoph Hoeschen; Magdeburg / Germany

**Determine image quality based on reader studies scientifically** (15 min) Helle Precht; Middelfart / Denmark

**Determine image quality based on physical parameters** (15 min) Ehsan Samei; Durham, NC / United States

**Determine image quality using AI-based methods** (15 min) Mika Kortesniemi; ESPOO / Finland

**The concept of appropriate image quality as addressed by the ESI/AAPM paper** (10 min) Christoph Hoeschen; Magdeburg / Germany

**The concept of appropriate image quality assessment from the radiologists' point of view** (10 min) Franz Kainberger; Vienna / Austria

What to learn from appropriate image quality concept? (10 min) Ehsan Samei; Durham, NC / United States

Panel discussion: How to move forward and how to implement the concept in daily clinical practice for optimised safe imaging (10 min)







#### E<sup>3</sup> 821d - Family cancer syndromes

Categories: Abdominal Viscera, Breast, Imaging Methods, Oncologic Imaging ETC Level: LEVEL II+III Date: February 29, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

**HBOC syndrome and beyond** (45 min) Fiona J. Gilbert; Cambridge / United Kingdom

**Multiple endocrine neoplasia (MEN)** (45 min) Giulia Zamboni; Verona / Italy









#### E<sup>3</sup> 818 - Pre- and post-procedural cardiac imaging

Categories: Cardiac, Evidence-Based Imaging, Imaging Methods ETC Level: LEVEL II+III Date: February 29, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

**Moderator:** Gianluca Pontone; Milan / Italy

**Chairperson's introduction** (6 min) Gianluca Pontone; Milan / Italy

Known coronary disease: to revascularise or not? (28 min) Maja Pirnat; Maribor / Slovenia

Imaging before cardiac valve replacement (28 min) Jonathan R. Weir-Mccall; London / United Kingdom

After valve replacement: do-not-miss findings (28 min) Ricardo P. J. Budde; Rotterdam / Netherlands

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#### SA 8 - Imaging the anxious child

Categories: Imaging Methods, Multidisciplinary, Paediatric ETC Level: LEVEL I Date: February 29, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

Moderator: Laura Tanturri De Horatio; Roma / Italy

**Chairperson's introduction** (5 min) Laura Tanturri De Horatio; Roma / Italy

**Effective strategies for easing anxiety in paediatric radiology: tried and proven approaches** (18 min) Nanko De Graaf; Rotterdam / Netherlands

Increase your success rate for MRI in children without sedation (18 min) Bac Nguyen; Oslo / Norway

Using digital technology in interventional radiology: how to aid child co-operation in imaging (18 min) Elisa Aguirre Pascual; Madrid / Spain

When and how to use sedation? (18 min) Ignacio Malagon; Nijmegen / Netherlands

Panel discussion: Can we really leave children and parents with a positive memory of their experience in the radiology department? (13 min)







#### **RPS 801 - Liver steatosis and fibrosis quantification**

Categories: Abdominal Viscera, General Radiology, Imaging Methods Date: February 29, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

Moderator:

Tommaso Vincenzo Bartolotta; Palermo / Italy

Gravitational 2D/3D MR-elastography vs pneumatic 2D MR-elastography: prospective evaluation of a novel system (7 min) Vitali Koch; Frankfurt a. Main / Germany

Real-world risk-stratification of patients with chronic liver disease using quantitative magnetic resonance imaging (7 min) Sanjay M Parekh; Oxford / United Kingdom

MRI hepatic steatosis and sarcopenia in metabolic patients: a correlation prospective study (7 min) Benedetta Masci; Rome / Italy

Does meal or water intake affect ultrasound attenuation coefficient estimate of liver fat content? (7 min) Richard G. Barr; Canfield / United States

Non-invasive assessment of steatosis and fibrosis in patients with risk factors for NAFLD: agreement among quantitative US and multiparametric MRI (7 min)

Ilaria Nacci; Rome / Italy

Ultrasound-based steatosis grading system using 2D-attenuation imaging: an individual patient data meta-analysis with external validation (7 min) Marco Dioguardi Burgio; Clichy / France

Depth dependence of the backscatter coefficient measurement for ultrasound fat quantification (7 min) Giovanna Ferraioli; Pavia / Italy

Artificial intelligence-calculated hepatorenal index for quantitative evaluation of hepatic steatosis in metabolic dysfunction-associated steatotic liver disease (7 min) Pál N. Kaposi-Novák; Budapest / Hungary

Fatty liver disease in the adult population: new multiparametric ultrasound compared to magnetic resonance (7 min) Maurizio Renda; Rome / Italy







#### **Fully automated MRI-based convolutional neural network for noninvasive diagnosis of cirrhosis** (7 min) Tianying Zheng; Chengdu / China

Noninvasive assessment of liver segmental volumes and its relationship with 5-year prognostication (7 min) Damiano Catucci; Bern / Switzerland

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## PC 8 - EU-JUST-CT - European co-ordinated action on improving justification of computed tomography, an ESR lead project on behalf of the European Commission: project outcomes and implications

Categories: EuroSafe Imaging/Radiation Protection, Evidence-Based Imaging, Professional Issues ETC Level: LEVEL III Date: February 29, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

SESSION RECOMMENDED BY



**Moderator:** Boris Brkljačić; Zagreb / Croatia

**Chairperson's introduction** (6 min) Boris Brkljačić; Zagreb / Croatia

Methodology for the EU-JUST-CT project (16 min) Alexandra Karoussou-Schreiner; Luxembourg / Luxembourg

**Practical issues in carrying out co-ordinated pilot audits of CT examinations** (16 min) Jacob Sosna; Jerusalem / Israel

**Results of the audit of CT referrals in seven EU member states** (16 min) Boris Brkljačić; Zagreb / Croatia

**Guidance to assist radiology departments in improving justification** (16 min) Steve Ebdon-Jackson; Reading / United Kingdom

Panel discussion: Outcomes and implications of EU-JUST CT project - can the results influence the practice of the justification of CT examinations in Europe? (20 min)







#### **CTiR 8 - Clinical Trials in Radiology 1**

Categories: Cardiac, Genitourinary, GI Tract, Imaging Methods Date: February 29, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

**Moderators:** Marc Dewey; Berlin / Germany Monika Radikė; Liverpool / United Kingdom

Chairpersons' introduction (6 min) Marc Dewey; Berlin / Germany Monika Radikė; Liverpool / United Kingdom

Incidence of advanced adenoma and cancer after screening CT colonography versus three faecal immunochemical test rounds in the SAVE randomised trial (8 min) Lapo Sali; Florence / Italy

**Discussant** (4 min) Ciara O'Brien; Toronto / Canada

Multiparametric magnetic resonance imaging in prostate cancer screening at the age of 45: results from the first screening round of the PROBASE trial (8 min) Matthias Boschheidgen; Düsseldorf / Germany

**Discussant** (4 min) Vibeke Berg Logager; Herlev / Denmark

A randomised trial to assess the impact of preoperative MRI on oncological outcomes following radical prostatectomy: a 12-year follow-up (8 min) Daniyal Noor; Oslo / Norway

Discussant (4 min) Lorenzo E. Derchi; Genoa / Italy

Systematic review of data sharing models in published single- and multicentre medical imaging trials (8 min) Maria Bosserdt; Berlin / Germany

**Discussant** (4 min) Yves Menu; Paris / France









Medical imaging trial data for quantitative imaging and artificial intelligence methods: multicentre survey of data sharers and reusers and overview of existing data sharing platforms (8 min)

Melanie Estrella; Berlin / Germany

**Discussant** (4 min) Leonor Cerda Alberich; Valencia / Spain

The DISCHARGE pretest probability calculator for the presence of obstructive coronary artery disease (8 min)

Mahmoud Mohamed; Berlin / Germany

**Discussant** (4 min) Robert Manka; Zürich / Switzerland









#### ESR eHealth 8 - Is there a future for structured reporting?

Categories: Imaging Informatics, Management/Leadership, Professional Issues

ETC Level: LEVEL II

Date: February 29, 2024 | 09:30 - 10:30 CET

#### CME Credits: 1

This session should provide an overview on past developments, current trends and potential future developments in structured radiology reporting. Following up on the currently published Update on Structured Reporting by the ESR, the speakers will discuss where and how structured reporting is already being used and what constitutes a state-of-the-art radiological report that provides the most relevant items to the referring physicians in a usable and actionable format. Lastly, current developments in Natural Language Processing and Large Language Models are discussed as how those technologies will impact how we report and extract structured data from unstructured reports.

#### Moderator:

Merel Huisman; Nijmegen / Netherlands

Chairperson's introduction (5 min)

Merel Huisman; Nijmegen / Netherlands

#### Past and present of structured reporting (15 min)

Tobias Jorg; Mainz / Germany

Steps to success for a state-of-the-art radiology report (15 min)

Edith Vassallo; Imsida / Malta

Structuring free-text reports with NLP and large language models (15  $\mbox{min})$ 

Keno K. Bressem; Berlin / Germany

Panel discussion: When will we be able to produce reusable data in clinical routine? (10 min)







#### **RPS 802 - Applications of contrast-enhanced mammography (CEM)**

Categories: Breast, Contrast Media, Imaging Methods Date: February 29, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

Moderator: Eva Maria M. Fallenberg; München / Germany

A large-scale single-centre evaluation of enhanced mammography (CEM) in the pre-operative staging of breast cancer (7 min) Francesca Pugliese; Florence / Italy

Outcomes of surveillance using contrast-enhanced mammography in women with a personal history of breast cancer (7 min) Bruce Mann; Parkville / Australia

**Contrast-enhanced mammography in local staging of screen-detected breast cancer** (7 min) Allison Rose; Fitzroy / Australia

Comparison of the diagnostic accuracy of contrast-enhanced spectral mammography with delayed image and digital mammography in the diagnosis of breast cancer in BI-RADS 4 mammographic findings (7 min) Akmaral Ainakulova; Almaty / Kazakhstan

Diagnostic performance of lesion conspicuity and contrast-to-noise ratio (CNR) values on contrast-enhancedmammogram (CEM) recombined images in predicting malignancy (7 min) Iris Allajbeu; Cambridge / United Kingdom

Feasibility and performance of contrast-enhanced tomosynthesis compared to contrast-enhanced MRI (7 min) Paola Clauser; Vienna / Austria

**Preoperative contrast mammography vs MRI: which one is better?** (7 min) Carmen Mbongo; Pamplona / Spain

Tumour involvement of the nipple at preoperative contrast-enhanced mammography (CEM): preliminary results of a multicentre diagnostic accuracy study (7 min)

Thiemo van Nijnatten; Maastricht / Netherlands

**Nipple sparing mastectomy: can CEM predict the nipple-areola complex (NAC) involvement?** (7 min) Giuliano Migliaro; Florence / Italy







Is late-phase contrast-enhanced mammography after neoadjuvant therapy useful? (7 min) Dilşah Oral; Izmir / Turkey

Inter-reader agreement between breast imagers using the first version of the BI-RADS CEM lexicon (7 min) Calogero Zarcaro; Palermo / Italy

**Preoperative assessment of nipple-areolar complex infiltration: is CEM as reliable as breast MRI?** (7 min) Silvia Sanità; Udine / Italy









#### RPS 811 - Foetal and neonatal neuroimaging: epilepsy and the senses

Categories: Forensic Imaging, Imaging Methods, Multidisciplinary, Neuro, Paediatric, Research Date: February 29, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

Moderator:

Cornelius Deuschl; Essen / Germany

One-minute full brain multi-contrast MRI vs brain CT in paediatric patients in the elective setting: a prospective feasibility study (7 min)

Francesca De Luca; Solna / Sweden

Diffusion tensor magnetic resonance neuroimaging metrics of neonates with intraventricular haemorrhages predict neurodevelopmental outcome (7 min) Selina Seeliger; Vienna / Austria

Quantitative synthetic MRI- vs MR-fingerprinting-based relaxometry of foetal brainstem myelination: a post-mortem imaging study (7 min) Jakob Malik; Vienna / Austria

The visibility of the indusium griseum on foetal MRI postmortem and in vivo (7 min) Ivana Pogledic; Vienna / Austria

**Regional cortical thinning and aberrant cortical folding in sleep-related hypermotor epilepsy** (7 min) Huaxia Pu; Chengdu / China

Task-negative brain activity as an indicator of task engagement in preoperative temporal lobe epilepsy patients: a functional MRI study (7 min) Radheshyam Stepponat; Vienna / Austria

Altered neurovascular coupling in thyroid-associated ophthalmopathy: a combined resting-state fMRI and arterial spin labelling study (7 min) Wen Chen; Suzhou / China

Structural and functional brain changes after glucocorticoid therapy in thyroid-associated ophthalmopathy (7 min) Qian Wu; Nanjing / China

**The neural correlates of hearing loss-related distress: an fMRI study** (7 min) Faten Aldhafeeri; Hafar al-Batin / Saudi Arabia









# Causal associations of genetically determined tinnitus with neuroimaging traits: evidence from a Mendelian randomisation study (7 $\min$ )

Jing Sun; Beijing / China

### Multimodal quantitative magnetic resonance imaging of the thalamus supports distinct outcomes in tinnitus patients treated with sound therapy $(7\ min)$

Qian Chen; Beijing / China









#### **RPS 804 - Quantitative analysis of chest CT findings**

Categories: Artificial Intelligence & Machine Learning, Chest, General Radiology Date: February 29, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

#### Moderator:

Mariaelena Occhipinti; Pisa / Italy

Elexacaftor/ tezacaftor/ ivacaftor influences body tissue composition in adults with cystic fibrosis: a fully automated CT-based analysis (7 min)

Marcel Opitz; Essen / Germany

Association between altered subcutaneous adipose tissue and survival in a high-risk population of heavy smokers participating in lung cancer screening (7 min) Fabian Bernhard Pallasch; Freiburg im Breisgau / Germany

Assessment of chest wall muscle atrophy by computed tomography and correlation with cardiopulmonary function in systemic sclerosis (7 min) Martina Giannetti; Rome / Italy

Image registration enables quantitative regional correlation of structural and functional abnormalities assessed with CT and MRI in COPD (7 min) Yiling Xu; Heidelberg / Germany

Radiomic features changes of lung tissue in 1024 matrix CT images before the visualisation of pulmonary metastases: a preliminary study (7 min) Hua Ren; Shanghai / China

Associations of quantitative HRCT-derived scores of interstitial lung disease (ILD) extent with two-year transplant-free survival in patients with progressive fibrosing ILD in the ILD-PRO Registry (7 min) Grace Kim; Los Angeles / United States

Quantitative CT and computational fluid dynamics characterisation for subclinical structural-functional monitoring in humidifier disinfectant-associated lung injury (7 min)

Changhyun Lee; Seoul / Korea, Republic of

Multiparametric evaluation of radiomics features and dual-energy CT iodine maps for discrimination and outcome prediction of thymic masses (7 min) Simon Martin; Frankfurt a. Main / Germany









#### HW 8Ca - Coronary artery disease and myocardial ischaemia: imaging, diagnosis, and reporting

Categories: Cardiac, Imaging Methods, Vascular ETC Level: LEVEL III Date: February 29, 2024 | 09:30 - 11:00 CET CME Credits: 1.5 To participate, a pre-congress Hands-on Workshop registration is required.

Participants who have completed their workshop registration before ECR are requested to arrive at the workshop room 20 minutes before the scheduled start of the session to present their badge and complete their check-in.

#### Moderator:

James Shambrook; Winchester / United Kingdom

#### Chairperson's introduction (10 min) James Shambrook; Winchester / United Kingdom

Instructors (80 min) Marco Rengo; Roma / Italy Michelle Claire Williams; Edinburgh / United Kingdom Federica Catapano; Milan / Italy

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#### HW 8R - Framework for Online Radiographer Clinical Education (FORCE)

Categories: Education, Radiographers Date: February 29, 2024 | 09:30 - 10:30 CET CME Credits: 1

To participate, a pre-congress Hands-on Workshop registration is required.

Participants who have completed their workshop registration before ECR are requested to arrive at the workshop room 20 minutes before the scheduled start of the session to present their badge and complete their check-in.

We would like to thank our workshop sponsors. For more information click here.

Registered participants will need to have a Gmail account to use during the session. Please make sure to have it ready beforehand.

In this session the participants will be able:

1. To describe best practices, tips and tricks for using FORCE resources within radiography and radiology education.

2. To demonstrate and apply best practices, tips and tricks for using FORCE resources within education.

#### The FORCE Project: presentation, live software demonstration and Q&A (60 min)

Kate Matthews; Dublin / Ireland







#### E<sup>3</sup> 821b - Imaging evaluation of bone and soft tissue tumours: the most important findings

Categories: Abdominal Viscera, Imaging Informatics, Imaging Methods, Musculoskeletal, Oncologic Imaging

ETC Level: LEVEL II+III Date: February 29, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

**Bone tumours** (45 min) Radhesh Krishna Lalam; Pant / United Kingdom

**Soft tissue tumours** (45 min) Ana Navas Cañete; Leiden / Netherlands









#### E<sup>3</sup> 821a - Advances in imaging for prostate cancer

Categories: Genitourinary, Imaging Methods, Oncologic Imaging ETC Level: LEVEL II+III Date: February 29, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

**PI-RADS update: what is next?** (45 min) Anwar R. Padhani; Northwood / United Kingdom

Al in prostate imaging (45 min) Tobias Penzkofer; Berlin / Germany









#### OF 8T - Tackle twisted cases, win a must-have EDiR educational package (part 2)

Categories: Education, Professional Issues, Students ETC Level: LEVEL II Date: February 29, 2024 | 09:30 - 10:00 CET CME Credits: 0.5

**Moderators:** Laura Oleaga Zufiria; Barcelona / Spain Chantal Van Ongeval; Leuven / Belgium

**Chairpersons' introduction** (5 min) Laura Oleaga Zufiria; Barcelona / Spain Chantal Van Ongeval; Leuven / Belgium

Let the games begin (20 min) Chantal Van Ongeval; Leuven / Belgium

Pooling of conclusions and perceptions (5 min)

Chantal Van Ongeval; Leuven / Belgium







#### E<sup>3</sup> 819 - X-ray: still alive?

Categories: Artificial Intelligence & Machine Learning, Imaging Methods ETC Level: LEVEL III Date: February 29, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

**Moderator:** Ernst J. Rummeny; Munich / Germany

**Chairperson's introduction** (5 min) Ernst J. Rummeny; Munich / Germany

Dark-field radiography: an update (25 min) Franz Pfeiffer; Garching / Germany

Breast tomosynthesis: current technology and applications (25 min)

Francesca Galati; Rome / Italy

Al and x-ray: the perfect wedding? (25 min) Erik R. Ranschaert; Turnhout / Belgium

Discussion (10 min)

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## CUBE 8 - Liver/kidney/lung: tips and tricks in difficult cases

Categories: Interventional Radiology

Date: February 29, 2024 | 10:30 - 11:00 CET

CME Credits: 0.5

## Oncologic IR Day - Topic Coordinator: Prof. Dr. Ralf-Thorsten Hoffmann

The "Tools of the Trade" session is an innovative session format that introduces the audience to the most important devices (tools) used in interventional radiology. A specialist leads these sessions, describing the devices and its use, and demonstrating its application on anatomical phantoms. Participants also have the opportunity to touch and explore these devices, which are circulated in the audience.

#### **Moderator:**

Maximilian De Bucourt; Berlin / Germany

Chairperson's introduction (2 min) Ralf-Thorsten Hoffmann; Dresden / Germany

## Liver/kidney/lung: tips and tricks in difficult cases (28 min)

Osman Öcal; Munich / Germany







## EFRS 2 - Impact of simulation in education

Categories: Education, Professional Issues, Radiographers, Research, Students

ETC Level: LEVEL I

Date: February 29, 2024 | 11:00 - 12:00 CET

#### CME Credits: 1

This session aims to consider what simulation is currently used in education programmes across Europe and to explore what simulation is used in education and clinical practice.

#### Moderator:

Alexandra Partner; Leicester / United Kingdom

Chairperson's Introduction (5 min) Alexandra Partner; Leicester / United Kingdom

New options in simulation in diagnostic imaging in Europe (15 min)

Elaine Wilkinson; Bradford / United Kingdom

#### New options in simulation in radiotherapy in Europe (15 min)

Tom Welton; Wigan / United Kingdom

Discussion (20 min)

**Closing** (5 min) Alexandra Partner; Leicester / United Kingdom









VIENNA / FEBRUARY 28 - MARCH 03

## AI-SC 3 - An overview of key milestones in AI regulation

Categories: Artificial Intelligence & Machine Learning, Imaging Informatics, Professional Issues Date: February 29, 2024 | 11:15 - 12:15 CET CME Credits: 1

**Moderator:** Virginia Tsapaki; Vienna / Austria

**Chairperson's introduction** (3 min) Virginia Tsapaki; Vienna / Austria

An overview of key milestones in AI regulation (57 min)

Hugh Harvey; Banstead / United Kingdom







VIENNA / FEBRUARY 28 – MARCH 03

## MD 2 - Pancreatic cancer: new developments in imaging and treatment - recommendations for clinical practice and directions for the future

Categories: Abdominal Viscera, GI Tract, Multidisciplinary, Oncologic Imaging, Research ETC Level: ALL LEVELS Date: February 29, 2024 | 11:15 - 12:15 CET CME Credits: 1

Moderator: Riccardo Manfredi; Rome / Italy

**Chairperson's introduction** (2 min) Riccardo Manfredi; Rome / Italy

## The surgeon's perspective (8 min)

Roberto Salvia; Verona / Italy

## **The oncologist's perspective** (8 min) Michele Milella; Verona / Italy

The radiologist's perspective (8 min) Riccardo Manfredi; Rome / Italy

Expert panel discussion (34 min)







VIENNA / FEBRUARY 28 - MARCH 03

## PL 1 - Radiology, AI, and the Analog-Digital Frontier

Categories: Artificial Intelligence & Machine Learning, Professional Issues Date: February 29, 2024 | 11:30 - 12:00 CET CME Credits: 0.5

Moderator: Carlo Catalano; Roma / Italy

**Introduction** (2 min) Carlo Catalano; Roma / Italy

Radiology, AI, and the Analog-Digital Frontier (28 min)

Rick Abramson; Nashville / United States









## **CUBE 9 - Cryoablation - reloaded**

Categories: Interventional Radiology

Date: February 29, 2024 | 12:00 - 12:30 CET CME Credits: 0.5

#### Oncologic IR Day - Topic Coordinator: Prof. Dr. Ralf-Thorsten Hoffmann

The "Tools of the Trade" session is an innovative session format that introduces the audience to the most important devices (tools) used in interventional radiology. A specialist leads these sessions, describing the devices and its use, and demonstrating its application on anatomical phantoms. Participants also have the opportunity to touch and explore these devices, which are circulated in the audience.

#### **Moderator:**

Maximilian De Bucourt; Berlin / Germany

**Chairperson's introduction** (2 min) Ralf-Thorsten Hoffmann; Dresden / Germany

**Cryoablation - reloaded** (28 min) Matthias Fuerstner; Klagenfurt / Austria









## **EFRS 3 - MSK European Reporting Networking**

Categories: Musculoskeletal, Professional Issues, Radiographers, Research

ETC Level: LEVEL I

Date: February 29, 2024 | 12:15 - 12:45 CET

This session aims to present an overall picture of European Radiographers' perspectives on MSK Reporting, enhancing the importance of developing standards of practice for this field.

## Moderator:

Altino Jorge Conde Da Cunha; Cumieira / Portugal

**Chairperson's Introduction** (5 min) Altino Jorge Conde Da Cunha; Cumieira / Portugal

## Introduce Radiographers MSK European Reporting Networking (20 min)

Paul O'Riordan; Leicestershire / United Kingdom Janni Jensen; Odense / Denmark

**Closing** (5 min) Altino Jorge Conde Da Cunha; Cumieira / Portugal









#### **RPS 910 - Musculoskeletal ultrasound and ultrasound-guided intervention**

Categories: Imaging Methods, Interventional Radiology, Musculoskeletal Date: February 29, 2024 | 12:15 - 13:45 CET CME Credits: 1.5

Moderator: Magdalena Sylwia Posadzy; Poznan / Poland

High-resolution ultrasound of the postoperative flexor digitorum tendon of the fingers after zone-II reconstructive surgery (7 min) Michelle Pansecchi; Genova / Italy

Ultrasound-guided thread-release of the first extensor compartment of the hand: initial experience in the anatomical model (7 min) Lisa Lechner; Vienna / Austria

Ultrasound-guided thread-transection of the arcade of frohse is an effective and minimally-invasive method for posterior interosseus nerve release in the anatomical model (7 min) Lisa Lechner; Vienna / Austria

Evaluation of tibial and median nerves in patients with diabetic peripheral neuropathy using shear wave elastography (7 min)

Amandeep Singh; Amritsar / India

**Imaging features of hourglass constriction of the radial nerve with surgical correlation** (7 min) Juin Kim; Seoul / Korea, Republic of

**High-frequency ultrasound of pulleys of the flexor tendons of the toes** (7 min) Federico Pistoia; Genova / Italy

**Ultrasound-guided percutaneous irrigation of extra-shoulder calcific tendinopathy** (7 min) Francesca Serpi; Milan / Italy

Shear wave of patellar and Achilles tendon on healthy patients: intervendor intraobserver and interobserver comparison (7 min) Umberto Viglino; Genoa / Italy

**Establishing baseline enthesis stiffness range in a healthy adult population** (7 min) Mohammad Khairi Jahidi Mahazer; Terengganu / Malaysia







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High-resolution ultrasound of the anterior talofibular ligament: correlation between morphological and clinical features (7 min) Giovanni Marcenaro; Genova / Italy

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## RPS 901 - Inflammatory bowel disease (IBD): an ongoing challenge in imaging

Categories: GI Tract, Imaging Methods, Research Date: February 29, 2024 | 12:30 - 13:30 CET CME Credits: 1

Moderator: Isabelle De Kock; Ghent / Belgium

Multiparametric MRI in the assessment of CD transmural activity: a cluster analysis (7 min) Francesca Maccioni; Rome / Italy

Evaluation of body composition and bone density in human adults with inflammatory bowel diseases (7 min) Jessica Ritter; Munich / Germany

CT-based radiomics signature of visceral adipose tissue and bowel lesions for identifying patients with Crohn's disease resistant to infliximab (7 min) Yangdi Wang; Gangzhou / China

Integrating gut microbiota and metabolites to decode variations in magnetic resonance enterography features of bowel damage in Crohn's disease: development of a multi-scale diagnostic model (7 min) Lili Huang; Guangzhou / China

Comparison of findings on transabdominal ultrasound and magnetic resonance enterography with macroscopic changes on colonoscopy in patients with Crohn's disease (7 min) Vlastimil Válek; Brno / Czechia

A rare course of fistula and location of abscess in patients with perianal fistula: a sign for Crohn's disease? (7 min) Sezer Nil Yılmazer Zorlu; Ankara / Turkey

Changes in 3D volumetry of perianal fistulas can predict the clinical outcome in perianal fistulising Crohn's disease (7 min)

Jordi Rimola Gibert; Barcelona / Spain







## **RT 9 - Legal aspects of medical AI**

Categories: Artificial Intelligence & Machine Learning, EuroSafe Imaging/Radiation Protection

ETC Level: LEVEL III

Date: February 29, 2024 | 12:30 - 13:30 CET

#### CME Credits: 1

The session is an introduction to the legal framework surrounding the implementation of AI in clinical practice and radiology departments and what challenges are perceived by leaders in healthcare. The discussion will help us bridge the gaps and highlight pitfalls so that implementation can be as smooth as possible.

Moderator: Anagha P. Parkar; Bergen / Norway

Chairperson's introduction (5 min)

Anagha P. Parkar; Bergen / Norway

The imminent EU regulation, and what it means in practical solutions (10 min)

Mathias K. Hauglid; Oslo / Norway

How do we convert in-house AI research into a medical device? (10 min)

Filippo Pesapane; Milan / Italy

## Challenges and possibilities when implementing AI in healthcare (10 min)

Lena Petersson; Halmstad / Sweden

Discussion (25 min)







## EDiR 9 - The role of artificial intelligence (AI) in exam marking

Categories: Education, Management/Leadership, Professional Issues, Students

ETC Level: LEVEL II+III

Date: February 29, 2024 | 12:30 - 13:30 CET

#### CME Credits: 1

Al is increasingly having a major global impact on everyday life. There is a growing recognition of the importance of Al in education and academic research. The European Board of Radiology (EBR) has always embraced the potential of the latest technologies to enhance the conduction of the European Diploma in Radiology (EDIR). The EBR did not want to miss this opportunity to see if and to what extent Al could be applied in the EDIR. The EDIR has multiple free-text questions that require experts in the field to review the answers manually. This is a time-consuming task and error-prone. The EBR wanted to test whether natural language processing (NLP) can automatically analyse these free text answers to support the review process. Exams are a very important and indispensable part of education. Al for automatic evaluation of descriptive answers can improve the efficiency and accuracy of grading exams, reducing the time and effort required. Join us on this exciting journey, and let's unravel the ins and outs of Natural Language Processing (NLP) and exam marking with some of the brightest minds in the field.

#### **Moderator:**

Laura Oleaga Zufiria; Barcelona / Spain

Chairperson's introduction (5 min)

Laura Oleaga Zufiria; Barcelona / Spain

Can AI help in the correction of medical examinations? (15 min)

Peter Mildenberger; Mainz / Germany

What is natural language processing (NLP), and why is it so important nowadays? (15 min)

Benedikt Kämpgen; Würzburg / Germany

#### Is it possible to implement NLP in the EDiR? (10 min)

Laura Oleaga Zufiria; Barcelona / Spain

Discussion (15 min)







## RPS 917 - Optimising imaging in emergency radiology: current and future trends

**Categories:** Abdominal Viscera, Emergency Imaging, EuroSafe Imaging/Radiation Protection, General Radiology, Head and Neck, Management/Leadership

Date: February 29, 2024 | 12:30 - 13:30 CET CME Credits: 1

Moderator: Idil Güneş Tatar; Leuven / Belgium

An evaluation of multiple upper limb x-rays: is adjacent imaging necessary? (7 min)

Dania Abu Awwad; Camperdown / Australia

High-pitch head CT in uncooperative emergency department patients with acute head trauma: evaluation of image quality and detection of acute intracranial pathologies (7 min) Jan-Erik Scholtz; Frankfurt a. Main / Germany

A simple clinical algorithm for prediction of relevant CT findings could reduce the number of low-value cranial CT scans by more than 20% (7 min) Marta Sánchez Canales; Murcia / Spain

**Evaluation of low-dose whole brain CT perfusion-driven CT angiography utilising a deep learning image reconstruction algorithm** (7 min) Yuhan Zhou; Zhengzhou / China

Evaluation of an optimised CT protocol for the assessment of suspected cauda equina syndrome and nerve root compression (7 min) Philip Jude Dempsey; Dublin / Ireland

**Relevance of computed tomography for the detection of septic foci: a systematic review and meta-analysis** (7 min) Ann-Christine Stahl; Berlin / Germany

The problem-solving role of the 'wait and repeat CT' approach in the diagnosis and treatment of acute abdomen (7 min) Esra Akçiçek; Ankara / Turkey

The distribution of computed tomography findings for nonagenarians with acute abdominal conditions: a descriptive study for more than a decade of observation (7 min)

Ayse Nur Bolukcu; Ankara / Turkey









## **RPS 913 - Spectral imaging: quantification and performance evaluation**

Categories: Imaging Methods, Physics in Medical Imaging, Research Date: February 29, 2024 | 12:30 - 13:30 CET CME Credits: 1

### Moderator:

Osvaldo Rampado; Turin / Italy

Comparison of image quality of abdominal CT examinations and virtual noncontrast images between photon-counting and energy-integrating detector CT (7 min)

Ludovica Lofino; Milan / Italy

Assessment of artefacts, material identification, and quantification in the presence of metal objects using photoncounting spectral CT (7 min) Aamir Younis Younis Raja; Abu dhabi / United Arab Emirates

**Iodine quantification accuracy kVp-switching dual-energy CT** (7 min) Jan Heemskerk; Leiden / Netherlands

Performance of iodine quantification and monochromatic attenuation through high-pitch dual-source photon-counting CT: a phantom study (7 min) Peng Liu; Shanghai / China

Multi-contrast ultra-high-resolution K-edge imaging with edge-on deep-silicon photon-counting detectors: phantom evaluations of a clinical prototype scanner (7 min)

Amir Pourmorteza; Atlanta, GA / United States

**Dual-energy tomosynthesis of the chest using a triple-layer x-ray detector** (7 min) Steven Tilley; Waterloo / Canada

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## OF 9E - An infinite number of ways to design good studies

Categories: Education, Professional Issues, Research

ETC Level: ALL LEVELS

Date: February 29, 2024 | 12:30 - 13:30 CET

#### CME Credits: 1

In this session, organised by the ESR Journal Family, you will learn about key design elements of your research: sample size, bias, pvalue, data management and more. It will help you overcome obstacles and produce relevant and methodologically accurate studies that will move your research career forward.

#### Moderator:

Francesco Sardanelli; San Donato Milanese, Milan / Italy

## Chairperson's introduction (5 min)

Francesco Sardanelli; San Donato Milanese, Milan / Italy

#### How to care about sample size and biases: when is enough really enough? (15 min)

Caterina Beatrice Monti; Milan / Italy

## p-values: the good, the bad, and the ugly (15 min)

Nathaniel Mercaldo; Boston / United States

### Relevant issues on splitting, randomising and merging data 101 (15 min)

Luis Marti-Bonmati; Valencia / Spain

Open forum discussion (10 min)







## **RW 9 - How to improve PET-CT reports**

Categories: Nuclear Medicine, Professional Issues ETC Level: LEVEL I+II Date: February 29, 2024 | 12:30 - 13:30 CET CME Credits: 1

Moderator: Adrian Brady; Cork / Ireland

**Chairperson's introduction** (5 min) Adrian Brady; Cork / Ireland

**Tips on improving your PET-CT reports** (15 min) Thomas Wagner; London / United Kingdom

Short case review, interactive discussion and critiquing of reports (40 min)

Thomas Wagner; London / United Kingdom







## E<sup>3</sup> 22B - Shoulder injuries: beyond the cuff

Categories: Education, General Radiology, Musculoskeletal ETC Level: LEVEL I+II Date: February 29, 2024 | 12:30 - 13:30 CET CME Credits: 1

Moderator: Andrea B. Rosskopf; Zurich / Switzerland

**Chairperson's introduction** (2 min) Andrea B. Rosskopf; Zurich / Switzerland

Intraarticular lesions of the glenohumeral joint (25 min)

Christian W.A. Pfirrmann; Forch / Switzerland

Acromioclavicular (AC) joint and extraarticular lesions (25 min)

Frank W Roemer; Erlangen / Germany

Panel discussion (8 min)









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## E<sup>3</sup> 24B - Hybrid imaging in oncology (part 2): a universe beyond FDG!

Categories: Hybrid Imaging, Nuclear Medicine, Oncologic Imaging ETC Level: LEVEL II Date: February 29, 2024 | 12:30 - 13:30 CET CME Credits: 1

**Moderator:** Clemens C. Cyran; München / Germany

**Chairperson's introduction** (5 min) Clemens C. Cyran; München / Germany

**PSMA in prostate cancer management** (12 min) Alexander Walter Sauter; Baden / Switzerland

**Neuroendocrine tumours diagnostics and theranostics** (12 min) Wolfgang Fendler; Essen / Germany

**FAPI PET/CT: simply the new FDG?** (12 min) Frederik L Giesel; Düsseldorf / Germany

Patient's perspective on prostate cancer screening (9 min) Erik Briers; Hasselt / Belgium

Panel discussion: PSMA, DOTA, FAPI: theranostic rockstars on the rise? (10 min)







## TC 927 - Dementia: towards an aetiologic diagnosis

Categories: Hybrid Imaging, Molecular Imaging, Multidisciplinary, Neuro, Nuclear Medicine

ETC Level: LEVEL II+III

Date: February 29, 2024 | 12:30 - 13:30 CET

#### CME Credits: 1

This educational session will discuss how in current clinical practice imaging modalities such as MRI and molecular imaging techniques can be used to support an aetiologic diagnosis of dementia. This session will give general radiologists and those interested in neuroradiology and nuclear medicine/molecular imaging the knowledge needed for appropriate selection and structured assessment of imaging exams in diagnostic work-up of dementia. The session format consists of in part lectures, followed by an interactive case-based discussion.

#### Moderators:

Meike W. Vernooij; Rotterdam / Netherlands Alexander Drzezga; Cologne / Germany

#### Chairpersons' introduction (3 min)

Meike W. Vernooij; Rotterdam / Netherlands Alexander Drzezga; Cologne / Germany

## MR imaging in dementia aetiology: patterns of atrophy and vascular lesions (19 min)

Meike W. Vernooij; Rotterdam / Netherlands

#### Molecular imaging in dementia aetiology: current concepts (19 min)

Alexander Drzezga; Cologne / Germany

#### Dementia aetiology: interactive case discussion (19 min)

Meike W. Vernooij; Rotterdam / Netherlands Alexander Drzezga; Cologne / Germany







## RC 904 - Incidental findings on chest CT: to ignore or to act?

Categories: Breast, Cardiac, Chest, Musculoskeletal ETC Level: ALL LEVELS Date: February 29, 2024 | 12:30 - 13:30 CET CME Credits: 1

**Moderator:** Chiara Pozzessere; Lausanne / Switzerland

**Chairperson's introduction** (5 min) Chiara Pozzessere; Lausanne / Switzerland

Incidental findings in the breasts (15 min) Thomas Frauenfelder; Zurich / Switzerland

Incidental findings in the heart (15 min) Rodrigo Salgado; Antwerpen / Belgium

Incidental findings in the chest wall (15 min) Violeta Vasilevska Nikodinovska; Skopje / North Macedonia

Panel discussion: Structured reporting and good practices for reporting incidental findings on chest CT (10 min)







## OF 9R - Opportunities for change in nuclear medicine and PET imaging

Categories: EuroSafe Imaging/Radiation Protection, Hybrid Imaging, Nuclear Medicine, Radiographers

Date: February 29, 2024 | 12:30 - 13:30 CET CME Credits: 1

SESSION RECOMMENDED BY



This session is focused on the evolving landscape of nuclear medicine and Positron Emission Tomography (PET) imaging. Comprising three distinct talks, this session explores strategies to enhance safety, optimise practice, and leverage cutting-edge technology and data analysis in these critical areas of medical imaging. These talks offer invaluable knowledge, strategies, and insights to empower radiographers and healthcare professionals to navigate opportunities for positive and effective changes when utilising nuclear medicine and PET imaging, ensuring the highest quality patient care while enhancing safety and diagnostic precision.

#### Moderator:

Mélanie Champendal; Lausanne / Switzerland

Chairperson's introduction (5 min) Mélanie Champendal; Lausanne / Switzerland

#### Strategies to reduce staff doses in PET/CT (16 min)

Shauna Murphy; Dublin / Ireland

How can radiographers optimise practice whenusing a CZT camera? (16 min)

Iain Tabone; Msida / Malta

Radiomics in PET/CT (16 min) Pedro Silva Costa; Porto / Portugal

Open forum discussion (7 min)







## RC 914 - Justification of radiographic examinations: getting it right

Categories: EuroSafe Imaging/Radiation Protection, Imaging Methods, Professional Issues, Radiographers Date: February 29, 2024 | 12:30 - 13:30 CET CME Credits: 1



**Moderators:** Graciano Paulo; Coimbra / Portugal Aleksandar Gjoreski; Skopje / North Macedonia

**Chairpersons' introduction** (5 min) Graciano Paulo; Coimbra / Portugal Aleksandar Gjoreski; Skopje / North Macedonia

How can referral guidelines and clinical decision support tools support the justification processes? (15 min) Maryann Hardy; Bradford / United Kingdom

**Interventions to reduce the quantity of low-value radiographic examinations** (15 min) Catherine Chilute Chilanga; Drammen / Norway

**Can Al help to reduce inappropriate referrals?** (15 min) Jaka Potočnik; Dublin / Ireland

Panel discussion: How can radiographers successfully work within a multidisciplinary team to support effective justification? (10 min)

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## RC 907 - Bladder imaging

Categories: Education, Genitourinary, Imaging Methods, Oncologic Imaging, Research ETC Level: LEVEL III Date: February 29, 2024 | 12:30 - 13:30 CET CME Credits: 1

**Moderator:** Rossano Girometti; Udine / Italy

**Chairperson's introduction** (5 min) Rossano Girometti; Udine / Italy

**Conventional imaging strategy (US-CTU)** (15 min) Alberto Hebert Vargas; New York / United States

How to stage bladder cancer with VI-RADS? (15 min) Valdair Francisco Muglia; Ribeirao Preto / Brazil

Assessment of response to therapy using MRI (15 min) Martina Pecoraro; Rome / Italy

Panel discussion: What is the role of imaging in the haematuria pathway? (10 min)

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## RC 903 - Pros and Cons: photon-counting CT (PCCT): a game changer for cardiovascular imaging

Categories: Cardiac, Contrast Media, Imaging Methods, Vascular ETC Level: LEVEL II+III Date: February 29, 2024 | 12:30 - 13:30 CET CME Credits: 1

**Moderator:** Hatem Alkadhi; Zürich / Switzerland

**Chairperson's introduction** (5 min) Hatem Alkadhi; Zürich / Switzerland

**Pro** (20 min) Tilman Stephan Emrich; Mainz / Germany

**Con** (20 min) Pál Maurovich-Horvat; Budapest / Hungary

Panel discussion: Is PCCT a revolution or a step-change for cardiovascular imaging? (15 min)









## MS 9 - Which liver ablation technique is best?

Categories: Abdominal Viscera, Evidence-Based Imaging, Interventional Oncologic Radiology, Multidisciplinary

ETC Level: LEVEL III

Date: February 29, 2024 | 12:30 - 13:30 CET

#### CME Credits: 1

The session is focused on evaluating various liver ablation techniques to determine the best approach within the multidisciplinary framework of interventional oncologic radiology and radiation therapy. Experts from interventional radiology, radiation oncology, and oncology share their insights and review the available evidence on the most commonly utilised liver ablation techniques, and discuss the benefits and limitations of these techniques, considering factors such as tumour size, location, proximity to critical structures, but also efficacy, safety, treatment outcomes, and patient-specific considerations. The advancement in imaging-guided radiological ablation techniques as percutaneous thermal and transarterial chemo- and radio-ablative techniques, stereotactic body radiation therapy (SBRT), and image-guided radiation therapy (IGRT) are highlighted, also addressing the potential of combination therapies as an additional treatment arsenal for clinicians. The audience will recognise that integrating interventional oncologic radiology and radiation therapy into a comprehensive therapeutic framework will determine an optimisation of liver ablation techniques, tailor treatment strategies to individual patients, and consolidate evidence to refine treatment guidelines.

#### Moderator:

Thomas Karl Helmberger; Munich / Germany

**Chairperson's introduction** (10 min) Thomas Karl Helmberger; Munich / Germany

Multidisciplinary tumour board (50 min) Laura Crocetti; Pisa / Italy Thomas Karl Helmberger; Munich / Germany Roberto Luigi Cazzato; Stasbourg / France Elena Bozzi; Pisa / Italy Steve Ebdon-Jackson; Reading / United Kingdom









# **CUBE 10** - Treatment of recurrent malignant stenosis of the bile duct bifurcation: role of the radiographer

Categories: Interventional Radiology Date: February 29, 2024 | 13:00 - 13:30 CET CME Credits: 0.5 The "EFRS @ the Cube" sessions focus on current radiography topics in interventional radiology.

Treatment of recurrent malignant stenosis of the bile duct bifurcation: role of the radiographer (30 min) Lena Manzo; Torino / Italy

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# MD 3 - Current controversies in imaging and treatment of cerebral ischaemia: recommendations for clinical practice and directions for the future

Categories: Imaging Methods, Interventional Radiology, Multidisciplinary, Neuro, Research, Vascular ETC Level: ALL LEVELS Date: February 29, 2024 | 13:45 - 14:45 CET CME Credits: 1

Moderator: Wim van Zwam; Maastricht / Netherlands

**Chairperson's introduction** (4 min) Wim van Zwam; Maastricht / Netherlands

**The neurologist's perspective** (8 min) Diana Aguiar De Sousa; Lisbon / Portugal

The interventional neurologist's perspective (8 min) Marc Ribo; Barcelona / Spain

The interventional radiologist's perspective (8 min) Wim van Zwam; Maastricht / Netherlands

Expert panel discussion (32 min)

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## RTF Quiz - Mona Lisa smile: women's health imaging through the ages

Categories: Cardiac, Emergency Imaging, Genitourinary, Interventional Radiology, Multidisciplinary

ETC Level: LEVEL I+II Date: February 29, 2024 | 14:00 - 15:30 CET CME Credits: 1.5



Come and take part in this special quiz and support a noble cause! Every participant counts as the ESR will donate 1€ to Doctors Without Borders for each correct answer you give! Each case will give you an opportunity to show your knowledge, and the ESR will make sure that it gets rewarded by donating to the great Doctors Without Borders.

#### Moderators:

Marco Francone; Milan / Italy Alexis Jacquier; Marseille / France

**Quiz Masters** (90 min) Marco Francone; Milan / Italy Alexis Jacquier; Marseille / France









## TC 1027 - Neurodegeneration: movement disorders

Categories: Hybrid Imaging, Molecular Imaging, Multidisciplinary, Neuro, Nuclear Medicine

ETC Level: LEVEL II+III

Date: February 29, 2024 | 14:00 - 15:00 CET

#### CME Credits: 1

This educational session will discuss how MRI and molecular imaging techniques can be used to understand the underlying pathology in patients with neurodegenerative movement disorders such as Lewy body dementias, Parkinson's Disease, and atypical parkinsonism. This session will give general radiologists and those interested in neuroradiology and nuclear medicine/molecular imaging the knowledge needed for appropriate selection and structured assessment of imaging exams in diagnostic work-up of movement disorders. The session format consists of in part lectures, followed by an interactive case-based discussion.

#### Moderators:

Meike W. Vernooij; Rotterdam / Netherlands Kejal Kantarci; Rochester / United States

#### Chairpersons' introduction (3 min)

Meike W. Vernooij; Rotterdam / Netherlands Kejal Kantarci; Rochester / United States

## MR imaging in movement disorders (19 min)

Stephane Lehericy; Paris / France

#### Molecular imaging in movement disorders (19 min)

Kejal Kantarci; Rochester / United States

#### Movement disorders: interactive case discussion (19 min)

Stephane Lehericy; Paris / France Kejal Kantarci; Rochester / United States







## **CUBE 11 - Percutaneous Interventions for Malignant Biliary Disease**

Categories: Interventional Radiology Date: February 29, 2024 | 14:00 - 14:30 CET Advanced Session - Topic Coordinator: Prof. Miltiadis Krokidis

The "Advanced Session: The Extra Mile" introduces the audience to techniques and treatments offered for challenging cases where an out-of-the-box approach was required or where there has been an impactful learning point for clinical practice.

## Moderator:

Gianpaolo Carrafiello; Milan / Italy

**Chairperson's introduction** (2 min) Gianpaolo Carrafiello; Milan / Italy

#### Percutaneous Interventions for Malignant Biliary Disease (28 min)

Adam A. Hatzidakis; Heraklion, Crete / Greece







#### **RPS 1005 - Harnessing AI for enhanced reporting and workflow**

Categories: Artificial Intelligence & Machine Learning, Imaging Informatics, Physics in Medical Imaging Date: February 29, 2024 | 14:00 - 15:30 CET CME Credits: 1.5

**Moderator:** Elmar Kotter; Freiburg / Germany

**Does patient education level impact comprehension of radiology reports: can AI level the playing field?** (7 min) Mohammed Bilal Aziz; Blackburn / United Kingdom

ChatGPT-4 makes cardiac MRI reports easy to understand: a feasibility study (7 min) Babak Salam; Bonn / Germany

**Cost-consequence analysis of artificial intelligence-assisted image reading in lung cancer screening** (7 min) Harriet Louise Lancaster; Groningen / Netherlands

**Deep learning assisted curation of the CANDID-III dataset with free-text reports** (7 min) Sijing Feng; Melbourne / Australia

Sixteen thousand and counting: performance of an artificial intelligence tool for identifying common pathologies on chest radiographs and report prioritisation (7 min) Carolyn Horst; London / United Kingdom

**Glioblastoma patient monitoring using a large language model: accurate and effective summarisation of radiological reports with GPT-4** (7 min) Robert Angelo Terzis; Cologne / Germany

**Initial experience of a fully digital workflow for radiological evaluation in clinical trials** (7 min) Martin Scott; Uppsala / Sweden

Reshaping CT imaging workflow through intelligent AI orchestration using RAPID: radiologic automated processing for image distribution (7 min) René Hosch; Essen / Germany

A novel radiology communication tool to reduce workflow interruptions: clinical evaluation of RadConnect (7 min) Sandra Vosbergen; Eindhoven / Netherlands







**Enhancing radiology workflows through efficient x-ray image-based orchestration and classification** (7 min) 28 – MARCH 03 Judith Kohnke; Essen / Germany

## Diagnostic accuracy and time efficiency of a novel deep learning algorithm for the assessment of intracranial

haemorrhage: first results (7 min) Christian Booz; Frankfurt a. Main / Germany







## MS 10 - Critical leg ischaemia: the role of IR in limb salvage

Categories: Education, Interventional Radiology, Multidisciplinary, Research, Vascular

ETC Level: LEVEL II

Date: February 29, 2024 | 14:00 - 15:30 CET

#### CME Credits: 1.5

This interactive session will discuss recent advances in endovascular revascularisation of peripheral vascular disease. Contemporary evidence of best practices, technological developments and role of various tools and techniques will be discussed in depth to guide practitioners into safe and effective patient care in a multidisciplinary environment.

#### Moderator:

MohamadS. Hamady; London / United Kingdom

Chairperson's introduction (5 min)

MohamadS. Hamady; London / United Kingdom

#### Patient selection algorithm for open vs endovascular approach (15 min)

Sarah Onida; London / United Kingdom

#### Drug-eluting technology in infrapopliteal disease, evidence update (15 min)

Miltiadis Krokidis; Athens / Greece

## The role and evidence of new technology in heavily calcified lesions: atherectomy, shockwave (15 min)

Florian Wolf; Vienna / Austria

#### Multidisciplinary case presentation and discussion (35 min)

Conclusion and take-home message (5 min)

MohamadS. Hamady; London / United Kingdom







## RC 1012 - Imaging the preterm neonate

Categories: Abdominal Viscera, Chest, General Radiology, Neuro, Paediatric ETC Level: LEVEL I Date: February 29, 2024 | 14:00 - 15:00 CET CME Credits: 1

Moderator: Willemijn Margriet M. Klein; Arnhem / Netherlands

**Chairperson's introduction** (5 min) Willemijn Margriet M. Klein; Arnhem / Netherlands

Typical neuro diagnosis in the preterm neonate (15 min)

Vasileios G Xydis; Ioannina / Greece

Typical cardiothoracic diagnosis in the preterm neonate (15 min)

Baptiste Morel; Tours / France

Typical abdominal diagnosis in the preterm neonate (15 min)

Josephine Bomer; Oslo / Norway

Panel discussion: Should every general radiologist be able to recognise the typical preterm neonate diagnoses? (10 min)







## EIBIR 10 - Implementing lung cancer screening programmes in Europe (SOLACE Project)

Categories: Oncologic Imaging, Professional Issues, Research ETC Level: LEVEL I+II Date: February 29, 2024 | 14:00 - 15:30 CET CME Credits: 1.5

**Moderator:** Oyunbileg von Stackelberg; Heidelberg / Germany

**Chairperson's introduction** (5 min) Oyunbileg von Stackelberg; Heidelberg / Germany

**Evidence and bottlenecks of lung cancer screening: the vision of SOLACE** (10 min) Helmut Prosch; Vienna / Austria

**The Croatian experience** (10 min) Miroslav Samarzija; Zagreb / Croatia

The French experience focusing on women (10 min) Marie-Pierre Revel; Paris / France

The Hungarian experience focusing on deprived populations (10 min) Ildiko Horvath; Budapest / Hungary

**The Czech experience focusing on participants at very high risk** (10 min) Martina Koziar Vasakova; Praha 4 - Krc / Czechia

**Future impact of AI** (10 min) Colin Jacobs; Nijmegen / Netherlands

**Participant's perspective, outreach, and dissemination** (10 min) Pippa Powell; Sheffield / United Kingdom

Panel discussion: How to implement lung cancer screening successfully? (15 min)









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## RC 1010 - Muscle imaging

Categories: Musculoskeletal ETC Level: LEVEL II+III Date: February 29, 2024 | 14:00 - 15:00 CET CME Credits: 1

**Moderator:** Violeta Vasilevska Nikodinovska; Skopje / North Macedonia

**Chairperson's introduction** (5 min) Violeta Vasilevska Nikodinovska; Skopje / North Macedonia

**Grading muscle injury** (15 min) Jaime Isern Kebschull; Barcelona / Spain

**Myositis and myopathy** (15 min) Ana Isabel Garcia Diez; Barcelona / Spain

**Muscle tumours and pseudo-tumours** (15 min) Filip M. Vanhoenacker; Mechelen / Belgium

Panel discussion: What is the ideal imaging algorithm for muscle disorders? (10 min)

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#### **RPS 1001 - Characterisation of upper GI-tract malignancies and beyond**

Categories: GI Tract, Imaging Methods, Multidisciplinary, Oncologic Imaging Date: February 29, 2024 | 14:00 - 15:30 CET CME Credits: 1.5

Moderator: Dietmar Tamandl; Vienna / Austria

A proposal for a new fluoroscopy severity assessment in achalasia: the IVA score (7 min)

Giovanni Fontanella; Avellino / Italy

Early tumour shrinkage as a predictor of survival in patients with advanced esophageal squamous cell carcinoma treated with first-line checkpoint inhibitors (7 min) Mu Wan Ling; Zhengzhou / China

Radiographic characterisation of enlarged lymph nodes in locally advanced esophageal squamous cell carcinoma (ESCC) patients treated with neoadjuvant immunotherapy (7 min) Chenyi Xie; Guangzhou / China

**The significance of small lymph nodes on CT for poorly cohesive advanced gastric cancer** (7 min) Eun Sun Lee; Seoul / Korea, Republic of

Quantitative DCE parameters combined with apparent diffusion coefficient to evaluate molecular typing of gastric cancer (7 min) Yan Liangliang; Zhengzhou / China

Differential analysis of apparent diffusion coefficient values based on primary tumour and perigastric lymph node for distinguishing N stages of gastric cancer (7 min) Yan Liangliang; Zhengzhou / China

Predioction of the signet ring cells percentage in diffuse-type gastric carcinoma: comparison between morphological CT analysis and radiomics (7 min)

lacopo Capitoni; Siena / Italy

Mystery of lymphoma in gastrointestinal tract (7 min)

Farwa Mohsin; Karachi / Pakistan

Response to neoadjuvat treatment in metastatic gastric cancer: proposal of new radiological criteria from a prospective Italian registry (7 min)





Giulio Bagnacci; Siena / Italy



The utility of computed tomography features and histogram texture analysis parameters as diagnostic tool in preoperative differentiation of high-risk gastrointestinal stromal tumours (7 min)

Milica Mitrovic; Belgrade / Serbia

Percutaneous transhepatic balloon-assisted (PTB-A) embolisation with ethylene-vinyl alcohol copolymer (EVOH) of duodenal stump fistula after gastrectomy for benign and malignant disease (7 min)

Claudio Sallemi; Brescia / Italy







# E<sup>3</sup> 1018 - Cardiovascular radiology into the future

Categories: Cardiac, Imaging Methods, Vascular

ETC Level: LEVEL II+III

Date: February 29, 2024 | 14:00 - 15:30 CET

### CME Credits: 1.5

At the end of this session, participants will be able to know the current status of new developments in cardiovascular radiology. They should learn to name clinical indications where myocardial strain imaging or 4D flow can be of importance, and they should be able to reflect on the advantages of photon-counting CT technology for cardiovascular imaging.

### Moderator:

Rozemarijn Vliegenthart; Groningen / Netherlands

# Chairperson's introduction (2 min)

Rozemarijn Vliegenthart; Groningen / Netherlands

### Myocardial strain imaging (24 min)

Tilman Stephan Emrich; Mainz / Germany

### 4D flow for cardiovascular diseases (24 min)

Ursula Reiter; Graz / Austria

**Photon-counting CT** (24 min) Hatem Alkadhi; Zürich / Switzerland

### Panel discussion: What are the unmet needs in cardiovascular radiology? (16 min)







# RW 10 - How to improve MSK reports

Categories: Musculoskeletal, Professional Issues ETC Level: LEVEL I+II Date: February 29, 2024 | 14:00 - 15:00 CET CME Credits: 1

Tips on improving your MSK reports (15 min) James F. Griffith; Shatin / Hong Kong SAR China

Short case review, interactive discussion and critiquing of reports (45 min)

James F. Griffith; Shatin / Hong Kong SAR China







# SF 10 - Total-body PET: technical aspects and clinical applications

Categories: Hybrid Imaging, Molecular Imaging, Nuclear Medicine, Oncologic Imaging, Translational Imaging ETC Level: LEVEL III Date: February 29, 2024 | 14:00 - 15:30 CET CME Credits: 1.5

Moderator: Jose Luis Vercher Conejero; Barcelona / Spain

Chairperson's introduction (5 min) Jose Luis Vercher Conejero; Barcelona / Spain

A physicist's perspective (15 min) Thomas Beyer; Vienna / Austria

Impact on clinical PET workflow (15 min) Axel Rominger; Bern / Switzerland

**Clinical experience of an early adopter** (15 min) Lorenzo Nardo; Sacramento / United States

A quantum jump forward in imaging technology (15 min) Ronald Boellaard; Wilnis / Netherlands

Panel discussion: Total-body PET: why (not) everyone should get one? (25 min)









### RPS 1014 - Optimisation of practice, care and safety: tips and tricks

Categories: EuroSafe Imaging/Radiation Protection, Evidence-Based Imaging, Professional Issues, Radiographers Date: February 29, 2024 | 14:00 - 15:30 CET CME Credits: 1.5

### Moderators:

Tomislav Stankovic; Zagreb / Croatia Aart J. Van Der Molen; Leiden / Netherlands

A phantom image quality study comparing ultra-low and standard dose computed tomography protocols for the investigation of non-accidental injury (7 min) Niamh Moore; Cork / Ireland

**Evaluation of anatomical structures by pulmonary angio-CT in patients with PTE and COVID-19** (7 min) Ana Filipa Colucas; Olhão / Portugal

Ultra-low-dose CT protocol for left ventricular ejection fraction (LVEF) and combination with chest-abdomen-pelvis CT (7 min) Martin Weber Kusk; Esbjerg / Denmark

**Radiomic features of kidney stones with use of virtual non-contrast on photon counting CT: a phantom study** (7 min) Simon Lysdahlgaard; Esbjerg / Denmark

An investigation into the impact of radiation dose information on the subjective evaluation of CT image quality (7 min) Rena Young; Cork / Ireland

Implementation and standardisation of CT optimisation tools across Europe: results from the iViolin project survey (7 min) Nadin Jamal Abualroos; Dublin / Ireland

Evaluation of sexual dimorphism of paranasal sinus and sella turcica by computed tomography: a retrospective study of a Portuguese population (7 min) Rosa Ramos Gaspar; Coimbra / Portugal

The application of low-dose chest CT for the diagnosis and monitoring of pulmonary infections in neutropenic patients (7 min) Effhimios M. Agadakos; Athens / Greece









What radiographers need to know to identify optimised protocols for pulmonary embolism studies using computed tomography (7 min) Lucas Kozma; La Croix sur Lutry / Switzerland

Enhancing radiation safety for nuclear medicine radiographers: the impact of introducing the automated radiopharmaceutical preparation and administration system (7 min) Serena Pichierri; Milan / Italy

An investigation into radiographers' ability to identify developmental dysplasia of the hip (DDH) on radiographs and factors related to observer performance (7 min) Mark F. McEntee; Cork / Ireland

The impact and effect of imaging referral guidelines on patients and radiology services: a systematic review (7 min) Yi Xiang Tay; Singapore / Singapore









### RPS 1002 - What is new in breast ultrasound?

Categories: Breast, Imaging Methods, Interventional Radiology Date: February 29, 2024 | 14:00 - 15:30 CET CME Credits: 1.5

Moderator:

Andrew Evans; Dundee / United Kingdom

False negative and false positive cases after implementation of an automated breast ultrasound system for breast cancer screening: a retrospective study in 1219 women (7 min) Elizabet Nikolova: Zurich / Switzerland

Learning curve over three years after implementation of an automated breast ultrasound system in an academic radiology department (7 min) Elizabet Nikolova; Zurich / Switzerland

Added detection potential of ultrasound in the diagnostic assessment of breast cancer: results from personalised, integrated, network, knowledge (PINK) study: an Italian longitudinal multicentric study (7 min) Ludovica Anna Incardona; Florence / Italy

Can the application of the Koios decision support system optimise diagnostic performance of hand-held breast ultrasound? A prospective study (7 min) Giovanni Irmici; Milan / Italy

Management of radiological and histopathological discrepancies of breast lesions after US-guided biopsy (7 min) Vanessa Marisi; Vasto / Italy

Response prediction of neoadjuvant treatment in breast cancer patients at baseline ultrasound: comparison of B-mode and a deep-learning model (7 min)

Panagiotis Kapetas; Vienna / Austria

Ultrasound Doppler twinkling-guided identification of a breast biopsy marker after neoadjuvant systemic therapy: preliminary data from a phase one clinical trial (7 min) Christine Lee; Rochester / United States

Tanner stage and ultrasonographic breast development in girls diagnosed with premature thelarche and central precocious puberty; a prospective follow-up in CPP patients receiving "blocking" therapy (7 min) Roberta Dattoli; Rome / Italy









Invasive recurrence after breast conserving treatment of ductal carcinoma in situ of the breast between 1989 and 2021: time trends and the role of tumour grade (7 min) Lucien Duijm; Nijmegen / Netherlands







#### **RPS 1009 - New insights in percutaneous tumour ablation**

**Categories:** Abdominal Viscera, Chest, Imaging Methods, Interventional Oncologic Radiology, Interventional Radiology, Musculoskeletal

Date: February 29, 2024 | 14:00 - 15:30 CET CME Credits: 1.5

Moderator: Afshin Gangi; Strasbourg / France

Correlation between thermal dose in real-time thermometry and postprocedural ablation zone in MRI-guided microwave ablation of liver tumours (7 min)

Osman Öcal; Munich / Germany

Comparison of thermal ablation combined with synchronous TACE and TACE in liver metastasis of neuroendocrine tumours of different pathologic grades and different primary sites (7 min) Huiyi Sun; Shanghai / China

**3D fusion is superior to 2D point-to-point contrast-enhanced US to evaluate the ablative margin after RFA for hepatocellular carcinoma** (7 min)

Haiyi Long; Guangzhou / China

Gradual incremental high-power radiofrequency ablation with multi-electrodes for small hepatocellular carcinoma: a prospective study (7 min)

Sungjun Hwang; Seoul / Korea, Republic of

Microwave ablation for colorectal liver metastases with ultrasound fusion imaging assistance: a stratified analysis study based on tumour size and location (7 min)

Erjiao Xu; Shenzhen / China

**Microwave ablation in malignant liver lesions: extracellular vesicle surface expression as prognostic parameter** (7 min) Thomas J. Vogl; Frankfurt a. Main / Germany

Interventional treatment of unresectable pancreatic cancer: single-centre evaluation over 12 years using microwave ablation (MWA) and transarterial chemoembolisation (TACE) (7 min)

Thomas J. Vogl; Frankfurt a. Main / Germany

CT-based deep-learning radiomics nomogram for the prediction of immediate response in colorectal cancer lung metastases treated by radiofrequency ablation (7 min) Haozhe Huang; Shanghai / China







High-power (150W) microwave ablation (MWA) is as safe and effective as 100W MWA for the treatment of lung lesions (7 min) Lucilla Violetta Sciacqua; Milan / Italy

# Electrochemotherapy for the treatment of metastatic bone disease (7 min)

Nicolas Papalexis; Bologna / Italy

# Initial experience with Bleomycin Electroporation in locally advanced and metastatic tumour spread (7 min)

Irem Bayram; Halle a.d. Saale / Germany

Evone® flow-controlled ventilation during percutaneous interventional radiology procedures: a clinical feasibility and safety assessment (7 min) Genti Xhepa; Varese / Italy









# HW 10Cb - Exploring cardiomyopathies: imaging insights and reporting techniques

Categories: Cardiac, Imaging Methods, Multidisciplinary ETC Level: LEVEL III Date: February 29, 2024 | 14:00 - 15:30 CET CME Credits: 1.5 To participate, a pre-congress Hands-on Workshop registration is required.

Participants who have completed their workshop registration before ECR are requested to arrive at the workshop room 20 minutes before the scheduled start of the session to present their badge and complete their check-in.

#### **Moderator:**

James Shambrook; Winchester / United Kingdom

# Chairperson's introduction (10 min)

James Shambrook; Winchester / United Kingdom

Instructors (80 min) Guido Ligabue; Modena / Italy Jonathan R. Weir-Mccall; London / United Kingdom Maja Pirnat; Maribor / Slovenia







### HW 10Sb - Deciphering wake-up stroke: MRI and CT insights for diagnosis and treatment

Categories: Education, Emergency Imaging, Imaging Methods, Neuro, Vascular

ETC Level: LEVEL ||+|||

Date: February 29, 2024 | 14:00 - 15:00 CET

CME Credits: 1

To participate, a pre-congress Hands-on Workshop registration is required.

# Participants who have completed their workshop registration before ECR are requested to arrive at the workshop room 20 minutes before the scheduled start of the session to present their badge and complete their check-in.

We would like to thank our workshop sponsors. For more information click here.

Please note we will be utilising equipment from certain vendors during the workshop sessions; however, a wide range of alternative options from other vendors is also available.

In this session participants will be able:

- 1. To explore strokes that occur during sleep and their diagnostic and therapeutic implications using MRI.
- 2. To learn how to analyse strokes that occur during sleep and their impact on therapeutic decisions using CT.

Instructors (60 min) Aleksandra Zoran Aracki-Trenkic; Nis / Serbia Nadya Pyatigorskaya; Paris / France







### E<sup>3</sup> 1020 - Pain management

Categories: Interventional Oncologic Radiology, Interventional Radiology, Musculoskeletal

ETC Level: LEVEL III

Date: February 29, 2024 | 14:00 - 15:30 CET

### CME Credits: 1.5

The session gives an overview of the clinical and technical aspects of pain management in patients with benign and malignant conditions.

**Moderator:** Luca Maria Sconfienza; Milano / Italy

**Chairperson's introduction** (5 min) Luca Maria Sconfienza; Milano / Italy

Upper and lower limb joints: steroids and PRP (24 min)

Domenico Albano; Cefalu' / Italy

# Spine injections for benign low back pain (24 min)

Antoine Feydy; Paris / France

# Pain management in cancer patients (24 min)

Georgia Tsoumakidou; Lausanne / Switzerland

Panel discussion: How to establish the "IR pain clinic" (13 min)







# E<sup>3</sup> 1021 - Indeterminate retroperitoneal masses

Categories: Abdominal Viscera, Imaging Methods, Translational Imaging ETC Level: LEVEL II+III Date: February 29, 2024 | 14:00 - 15:30 CET CME Credits: 1.5

**Overview and diagnostic algorithms** (45 min) Dow-Mu Koh; London / United Kingdom

**Special cases and differential diagnosis** (45 min) Wolfgang Gerhard Kunz; Munich / Germany









# Meets 10 - Current developments in radiography and radiotherapy: an Italian perspective

Categories: Breast, Education, Interventional Radiology, Professional Issues, Radiographers Date: February 29, 2024 | 14:00 - 15:00 CET CME Credits: 1

Moderators:

Andrew England; Cork / Ireland Diego Catania; Milan / Italy

Chairpersons' introduction: radiography in Italy (10 min) Andrew England; Cork / Ireland

Diego Catania; Milan / Italy

**Improving patient experiences in breast imaging: experiences of Italian radiographers** (15 min) Chiara Martini; Parma / Italy

Education and training in interventional radiology: the evolving role of Italian radiographers (15 min) Lena Manzo; Torino / Italy

Innovation in personalised oncology and advanced skills in interprofessional settings: new perspectives of Italian radiographers (15 min) Patrizia Cornacchione; Rome / Italy

Panel discussion (5 min)







### **ESOR - Soft skills**

Categories: Education, Management/Leadership ETC Level: LEVEL II+III Date: February 29, 2024 | 14:00 - 15:30 CET

# CME Credits: 1.5

The session aims to bring an understanding of soft skills in radiology. Furthermore, the attendees should be made aware of the importance of soft skills in radiology leadership and their importance for education in radiology.

**Moderators:** Carlo Catalano; Roma / Italy Valérie Vilgrain; Clichy / France

**Chairpersons' introduction** (10 min) Carlo Catalano; Roma / Italy Valérie Vilgrain; Clichy / France

What are soft skills (15 min) Lennart K. Blomqvist; Stockholm / Sweden

Why soft skills are important in radiology clinical practice (15 min) Christian Loewe; Vienna / Austria

Why soft skills are important in radiology leaders (15 min)

Regina G. H. Beets-Tan; Amsterdam / Netherlands

My experience: Nicholas Gourtsoyannis Teaching Fellowship (10 min)

Hugo Alexandre Meireles Rio Rio Tinto; Lisbon / Portugal

Award of certificate of appreciation to ESOR training centre (5 min) Carlo Catalano; Roma / Italy

Valérie Vilgrain; Clichy / France

Award of certificates to ESOR scholars and fellows (20 min)

Carlo Catalano; Roma / Italy Valérie Vilgrain; Clichy / France









### IF 10 - Make radiology green again: can radiology be sustainable?

Categories: Contrast Media, Education, Imaging Methods, Management/Leadership, Physics in Medical Imaging

ETC Level: LEVEL III

Date: February 29, 2024 | 14:00 - 15:30 CET

### CME Credits: 1.5

Healthcare contributes substantially to the overall greenhouse gas emissions. Among all specialities, radiology is one of the most energy-intensive - despite the industry's efforts to provide lower-consumption devices. Furthermore, contrast media residuals in wastewater and medical waste in interventional radiology contribute to radiology's environmental footprint. This session will provide an overview of radiology's impact in those areas and discuss new approaches to mitigate them.

#### **Moderator:**

Andrea Grace Rockall; Godalming / United Kingdom

Chairperson's introduction (5 min) Andrea Grace Rockall; Godalming / United Kingdom

Switching off for the future: how to lower energy consumption (15 min)

Tobias Heye; Basel / Switzerland

Contrast media recycling: where are we at? (15 min)

Olivier Clément; Paris / France

Waste management in interventional radiology: can we do better? (15 min)

Mark C. Burgmans; Leiden / Netherlands

# Sustainability and AI in radiology: problem or solution? (15 min)

Daniel Truhn; Aachen / Germany

Panel discussion: How much impact does radiology have on global warming? (25 min)







### OF 10T - Career development: teaching smarter for the next generation

Categories: Education, General Radiology, Management/Leadership, Professional Issues, Research, Students ETC Level: ALL LEVELS Date: February 29, 2024 | 14:00 - 15:00 CET CME Credits: 1

**Moderator:** Viktoriia Pozdniakova; London / United Kingdom

**Chairperson's introduction** (5 min) Viktoriia Pozdniakova; London / United Kingdom

What makes a good radiology teacher? Trends and techniques (15 min) Cindy Chew; Glasgow / United Kingdom

What makes a good radiology teacher? Traits and training (15 min) Antonios Tzortzakakis; Stockholm / Sweden

**Teaching fellowships: a springboard to being a better educator** (15 min) Ivana Blazic; Belgrade / Serbia

Open forum discussion: Making the most of opportunities as a young radiologist (10 min)







# ST 9 - EFRS Activities within ECR 2024

**Categories:** Education, Professional Issues, Research **Date:** February 29, 2024 | 15:00 - 15:30 CET Overview of EFRS activities at ECR2024.

Moderator: Ben Giese; Chicago / United States

Interview (30 min) Andrew England; Cork / Ireland Louise A. Rainford; Dublin / Ireland Jonathan Loui Portelli; Msida / Malta









# AI-SC 4 - Building a compliant data registry for AI research: the way we do it

Categories: Artificial Intelligence & Machine Learning, Imaging Informatics, Physics in Medical Imaging Date: February 29, 2024 | 15:00 - 16:00 CET CME Credits: 1

**Moderator:** Virginia Tsapaki; Vienna / Austria

**Chairperson's introduction** (3 min) Virginia Tsapaki; Vienna / Austria

Panel Discussion (57 min) Emanuele Neri; Pisa / Italy Hanna Leisz; Heidelberg / Germany Esther Bron; Rotterdam / Netherlands







### **CUBE 12 - Ablation procedures: management**

Categories: Interventional Radiology Date: February 29, 2024 | 15:30 - 16:00 CET CME Credits: 0.5

### Advanced Session - Topic Coordinator: Prof. Gianpaolo Carrafiello

The "Advanced Session: Percutaneous Interventions" is aimed at a more advanced audience and covers percutaneous interventions in various areas of interventional radiology.

Moderator: Gianpaolo Carrafiello; Milan / Italy

**Chairperson's introduction** (2 min) Gianpaolo Carrafiello; Milan / Italy

Anaesthesiologic support for percutaneous tumor ablation (14 min)

Filippo Piacentino; Varese / Italy

The ideal environment for ablation procedures (14 min)

Elena Bozzi; Pisa / Italy







# EFRS 4 - Patient engagement & inclusion in Radiotherapy

Categories: Oncologic Imaging, Professional Issues, Radiographers

ETC Level: LEVEL I

Date: February 29, 2024 | 15:30 - 16:30 CET

### CME Credits: 1

This session aims to gain a clear definition of patient engagement in the context of radiotherapy and explore its impact on improving processes and infrastructure fostering person-centred care, to recognise the critical role of patient involvement in safety management and enhance radiographers' interaction with patients towards improving patient safety, and morover to highlight the importance of patient inclusion in radiographers' education and research and explore strategies for implementation.

#### **Moderator:**

Anastasia Sarchosoglou; Athens / Greece

# Chairperson's Introduction (5 min)

Anastasia Sarchosoglou; Athens / Greece Patrizia Cornacchione; Rome / Italy

### Patient involvement in process (re)design (10 min)

Ainars Bajinskis; Riga / Latvia

Patient involvement in decision making (10 min)

Theresa O'Donovan; Co. Cork / Ireland

# Patient involvement in safety management (10 min)

Valerio Pisoni; Giussano / Italy

# Patient involvement in radiographer education (10 min)

Jose Guilherme Couto; Msida / Malta

Discussion (10 min)

**Closing** (5 min) Anastasia Sarchosoglou; Athens / Greece









# E<sup>3</sup> 1121a - Emergency ultrasound: beware of pitfalls and artefacts!

Categories: Emergency Imaging, Genitourinary, Imaging Methods ETC Level: LEVEL II+III Date: February 29, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

**Gynaecological/obstetrical emergencies** (45 min) Marijana Basta Nikolic; Novi Sad / Serbia

### Acute scrotum: diagnosis is not always straightforward (45 min)

Paul S. Sidhu; London / United Kingdom









# RW 11 - How to improve abdominal imaging reports

Categories: Abdominal Viscera, Professional Issues ETC Level: LEVEL I+II Date: February 29, 2024 | 16:00 - 17:00 CET CME Credits: 1

# Tips on improving abdominal imaging reports (15 min)

Andrew Plumb; Esher / United Kingdom

# Short case review, interactive discussion and critiquing of reports (45 min)

Andrew Plumb; Esher / United Kingdom









# **OF 11T - Back to the basics: imaging for undergraduates**

Categories: EuroSafe Imaging/Radiation Protection, General Radiology, Imaging Methods, Physics in Medical Imaging, Students ETC Level: LEVEL I

Date: February 29, 2024 | 16:00 - 17:00 CET CME Credits: 1

**Moderator:** Edith Vassallo; Imsida / Malta

**Chairperson's introduction** (4 min) Edith Vassallo; Imsida / Malta

**Basics of x-ray imaging** (12 min) Anagha P. Parkar; Bergen / Norway

**Basics of US imaging** (12 min) Cindy Chew; Glasgow / United Kingdom

**Basics of CT imaging** (12 min) Giulia Zamboni; Verona / Italy

**Basics of MR imaging** (12 min) Sofia Gourtsoyianni; Athens / Greece

Panel discussion: Questions you wanted to ask about imaging (8 min)









### E<sup>3</sup> 1119 - CT: a multiparametric technique

Categories: Artificial Intelligence & Machine Learning, Imaging Methods ETC Level: LEVEL III Date: February 29, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

**Moderator:** Damiano Caruso; Roma / Italy

Chairperson's introduction (5 min) Damiano Caruso; Roma / Italy

Spectral CT: the new standard of care? (25 min)

Philippe Charles Douek; Lyon / France

Photon counting: where we are and where we will go? (25 min)

Victor Mergen; Zurich / Switzerland

Al for optimisation of image quality and contrast medium injection (25 min) Damiano Caruso; Roma / Italy

**Discussion** (10 min)







# RC 1110 - Update in imaging rheumatology

Categories: General Radiology, Imaging Methods, Musculoskeletal ETC Level: LEVEL II+III Date: February 29, 2024 | 16:00 - 17:00 CET CME Credits: 1

**Moderator:** Monique Reijnierse; Leiden / Netherlands

**Chairperson's introduction** (5 min) Monique Reijnierse; Leiden / Netherlands

How to avoid overdiagnosis of SpA on MRI (15 min) Antoine Feydy; Paris / France

New insights and developments in imaging of spondyloarthropathy (15 min) Winston Joseph Rennie; Leicester / United Kingdom

Advances in ultrasound of juvenile inflammatory arthropathies (15 min) Iwona Sudol-Szopinska; Warsaw / Poland

Panel discussion: The role of imaging in the diagnosis and characterisation of rheumatologic diseases (10 min)







# PC 11 - The radiologist of the future: between the digital twin and the human being

Categories: Imaging Informatics, Multidisciplinary, Professional Issues, Research, Translational Imaging ETC Level: LEVEL III Date: February 29, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

**Moderator:** Valeria Panebianco; Roma / Italy

**Chairperson's introduction** (5 min) Valeria Panebianco; Roma / Italy

The issue of prediction models in human beings (18 min) Andrew Julian Vickers; New York, NY / United States

Digital twin framework: technical implementation (18 min)

Huan Xuan Nguyen; London / United Kingdom

Radiology: bridging the gap between human beings and DT (18  $\mbox{min})$ 

Valeria Panebianco; Roma / Italy

**Ethical issues** (18 min) Ilenia Rapisarda; Aci Sant'Antonio, Catania, Sicilia / Italy

Panel discussion: Are we ready for the clinical implementation of digital twins? (13 min)







# RC 1102 - Personalised breast cancer screening: where do we stand today?

Categories: Breast ETC Level: LEVEL I Date: February 29, 2024 | 16:00 - 17:00 CET CME Credits: 1

**Moderator:** Sophia Zackrisson; Malmö / Sweden

**Chairperson's introduction** (5 min) Sophia Zackrisson; Malmö / Sweden

**Risk assessment models** (15 min) Fiona J. Gilbert; Cambridge / United Kingdom

**Personalised screening in intermediate risk** (15 min) Athina Vourtsis; Athens / Greece

**Personalised screening in high-risk women** (15 min) Pascal A.T. Baltzer; Vienna / Austria

Panel discussion: Feasibility and acceptability of personalised breast cancer screening into clinical practice (10 min)







# TC 1127 - The next frontier in imaging in neurodegeneration

Categories: Hybrid Imaging, Molecular Imaging, Multidisciplinary, Neuro, Nuclear Medicine ETC Level: LEVEL II+III Date: February 29, 2024 | 16:00 - 17:00 CET CME Credits: 1

**Moderators:** Alexander Drzezga; Cologne / Germany Yoshimi Anzai; Salt Lake City / United States

**Chairpersons' introduction** (3 min) Alexander Drzezga; Cologne / Germany Yoshimi Anzai; Salt Lake City / United States

The future of your dementia imaging practice: MRI (19 min) Yoshimi Anzai; Salt Lake City / United States

The future of your dementia imaging practice: PET (19 min) Javier Arbizu; Pamplona / Spain

**To infinity and beyond: disruptive software and hardware developments for imaging neurodegeneration** (19 min) Ciprian Catana; Charlestown / United States







# SF 11 - How to teach in an increasingly digital world?

Categories: Education, Professional Issues ETC Level: LEVEL I+II Date: February 29, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

**Moderator:** Laura Oleaga Zufiria; Barcelona / Spain

**Chairperson's introduction: transformation of radiology education, technology challenges, and opportunities** (5 min) Laura Oleaga Zufiria; Barcelona / Spain

Are books becoming obsolete? (15 min) Franz Kainberger; Vienna / Austria

Extended reality: gadget or tool for imaging education? (20 min)

Dimitri Amiras; London / United Kingdom

**Clinical diagnostic reasoning teaching using online platforms** (20 min) Berit Verbist; Leiden / Netherlands

Al in radiology: curse or threat for training radiology residents (20 min) Lorenzo Faggioni; Pisa / Italy

Panel discussion: What changes are the new educational platforms and AI bringing into the field of education in radiology? (10 min)







### Meets 11 - Changing times: adopt, adapt, improve

Categories: Education, Management/Leadership, Professional Issues ETC Level: LEVEL III Date: February 29, 2024 | 16:00 - 17:00 CET CME Credits: 1

**Moderators:** Carlo Catalano; Roma / Italy Andrea Giovagnoni; Ancona / Italy

**Introduction** (5 min) Carlo Catalano; Roma / Italy Andrea Giovagnoni; Ancona / Italy

From past to the future: new horizons for SIRM (12 min) Andrea Giovagnoni; Ancona / Italy

The SIRM journal, a success story (11 min) Antonio Barile; L'Aquila / Italy

**Diversity, equity, inclusion: a new project for Italian radiologists** (11 min) Stefania Anna Montemezzi; Verona / Italy

Radiology at the Italian Winter Olympic Games 2026: a SIRM project with the National Olympic Committee (11 min) Ettore Squillaci; Roma / Italy

Panel discussion (10 min)







# E<sup>3</sup> 1121b - Imaging of head and neck: focus on salivary glands and eye

Categories: Head and Neck, Imaging Methods, Oncologic Imaging ETC Level: LEVEL II+III Date: February 29, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

**Salivary glands** (45 min) Minerva Becker; Geneva / Switzerland

**Eye and orbit** (45 min) Katharina Erb-Eigner; Berlin / Germany







# BS 11 - Creating a thriving interdisciplinary team within a radiology department

Categories: Management/Leadership, Multidisciplinary, Professional Issues, Radiographers, Research Date: February 29, 2024 | 16:00 - 17:00 CET CME Credits: 1

Moderator: Joseph Castillo; Fgura / Malta

**Chairperson's introduction** (6 min) Joseph Castillo; Fgura / Malta

**Building bridges and exploring the value of other healthcare professionals within the radiology department** (18 min) Lyanne Molenaar; Amsterdam / Netherlands

**Interprofessional education to enhance patient-centred care** (18 min) Switinder Singh Ghotra; Lausanne / Switzerland

**The potential of interdisciplinary research to advance practice, care and safety** (18 min) Helle Precht; Middelfart / Denmark







# EU 11 - Computational tools for the establishment and use of diagnostic reference levels (DRLs)

Categories: EuroSafe Imaging/Radiation Protection, Physics in Medical Imaging ETC Level: LEVEL III Date: February 29, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

**Moderator:** John Damilakis; Iraklion / Greece

**Chairperson's introduction** (4 min) John Damilakis; Iraklion / Greece

Artificial intelligence (AI) for the establishment of DRLs (22 min) John Damilakis; Iraklion / Greece

The role of dose management systems in the establishment and use of DRLs (22 min)

Virginia Tsapaki; Vienna / Austria

**Challenges and solutions in using big data in establishing DRLs for medical imaging** (22 min) Hugues Brat; Sion / Switzerland

Panel discussion: Is the use of computational tools important for the implementation of DRLs in clinical practice? (20 min)







### RC 1105 - Structured reporting: ready for clinical routine?

Categories: General Radiology, Imaging Informatics, Interventional Radiology, Multidisciplinary, Professional Issues ETC Level: LEVEL II Date: February 29, 2024 | 16:00 - 17:00 CET

CME Credits: 1

**Moderator:** Elmar Kotter; Freiburg / Germany

**Chairperson's introduction** (5 min) Elmar Kotter; Freiburg / Germany

Why and how to integrate structured reporting in clinical routine? (15 min) Benoît Rizk; Villars-sur-Glane / Switzerland

**Structured reporting in the era of large language models** (15 min) Merel Huisman; Nijmegen / Netherlands

Is there a place for structured reporting in interventional radiology? (15 min) Irene Bargellini; Candiolo / Italy

Panel discussion: Where does the radiologist meet the clinician when it comes to structured reporting? (10 min)







#### **RPS 1107 - Female genitourinary imaging**

Categories: Genitourinary, Imaging Methods, Oncologic Imaging Date: February 29, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

Moderator: Ivana Blazic; Belgrade / Serbia

Early regression index (ERI) for the prediction of local control in locally advanced cervical cancer (7 min) Luca Russo; Roma / Italy

The performance of the node reporting and data system 1.0 (Node- RADS) in staging patients with cervical carcinoma according to the new FIGO classification (2018) (7 min) Roberta Valerieva Ninkova; Rome / Italy

CT-derived radiomics analysis helps to identify ovarian clear cell carcinoma subtype in epithelial ovarian cancer: a multicentre study (7 min) Jing Ren; Beijing / China

**Diagnostic performance and accuracy of the O-RADS MRI scoring system in adnexal masses** (7 min) Sena Bozer; Ankara / Turkey

Thrombohaematoma-associated placentomegaly: opening the "black box" of pregnancy (7 min) Elizaveta Aleksandrovna Kirillova; St. Petersburg / Russia

Magnetic resonance protocol without contrast to characterise adnexal masses indeterminate at ultrasonography: a multicentre study (7 min) Camilla Panico; Rome / Italy

Diagnostic value of magnetic resonance imaging with diffusion-weighted imaging for differentiating low-grade endometrial stromal sarcoma from benign atypical leiomyoma (7 min) Soomin Park; Seoul / Korea, Republic of

The peripheral cysts sign of ovarian fibroma and fibrothecoma: incidence and diagnostic value (7 min) Chang Li; Guangzhou / China

Hybrid F18-FDG PET/MRI in endometrial cancer: staging accuracy, quantitative analysis, and imaging characteristics of histological subtypes (7 min) Diğdem Kuru Öz; Ankara / Turkey









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Imaging of peritoneal metastases in ovarian cancer using MDCT, MRI and FDG PET/CT: a systematic review and metaanalysis (7 min) Martha Tzoumpa; Ioannina / Greece

The pattern of radiological first relapse in ovarian cancer differs between different maintenance therapies: a retrospective analysis of a tertiary referral centre (7 min)

Giacomo Avesani; Rome / Italy







#### RPS 1106 - Advances in hybrid, molecular and translational imaging

Categories: Hybrid Imaging, Molecular Imaging, Nuclear Medicine, Oncologic Imaging, Research, Translational Imaging Date: February 29, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

#### Moderator:

Antonio Esposito; Milano / Italy

Assessment of hypoxia-induced neoangiogenesis in breast cancer xenografts using non-contrast-enhanced multiparametric MRI and fluorescent multiplexed immunohistochemistry (7 min) Silvester Julian Bartsch; Vienna / Austria

Avoiding anaesthesia in oncologic paediatric patients using short acquisition times with FDG total-body PET/CT (7 min)

Clemens Mingels; Sacramento / United States

Characterisation of international metabolic prognostic index (IMPI) and in its components in CAR T-cell treatment of lymphoma (7 min) Michael Winkelmann; Munich / Germany

First report of 23Na-MRI in kidney cancer to detect differential sodium-accumulation in benign vs malignant tumours (7 min) Ines Horvat Menih; Cambridge / United Kingdom

Validation of the standardisation framework SSTR-RADS 1.0 for neuroendocrine tumours using the novel SSTR-targeting peptide [18F]SiTATE (7 min)

Ricarda Ebner; Munich / Germany

First application of novel human granzyme B imaging agent in a humanised melanoma mouse model treated with immune checkpoint inhibitor therapy (7 min) Priska Summer; Vienna / Austria

Assessment of CAR T-cell therapy response in mice with melanoma using Granzyme B PET imaging (7 min) Priska Summer; Vienna / Austria

Are we ready for novel radionuclides in nuclear medicine in Europe: PRISMAP survey perspective (7 min) Maija Radzina; Riga / Latvia

**Micro-CT vs conventional CT: preliminary results of comparing radiomic features in vivo and ex vivo in lung cancer** (7 min)





Leonardo Brizzi; Milan / Italy



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Preoperative FDG uptake is associated with histopathological response in patients with operable NSCLC patients receiving neo-adjuvant immuno-chemotherapy: a prospective single-centre study (7 min) Daria Kifjak; Vienna / Austria

**Size matters when distinguishing ATTR and AL cardiac amyloidosis on PiB PET/CT** (7 min) Anthony Chuprin; Jacksonville / United States







# HW 11Cc - Cardiac inflammation: imaging insights and reporting strategies

Categories: Cardiac, Imaging Methods ETC Level: LEVEL III Date: February 29, 2024 | 16:00 - 17:30 CET CME Credits: 1.5 To participate, a pre-congress Hands-on Workshop registration is required.

Participants who have completed their workshop registration before ECR are requested to arrive at the workshop room 20 minutes before the scheduled start of the session to present their badge and complete their check-in.

Moderator: lacopo Carbone; Roma / Italy

Chairperson's introduction (10 min)

lacopo Carbone; Roma / Italy

Instructors (80 min) Davide Farina; Brescia / Italy Ausami Abbas; Sherbourne st.john / United Kingdom Luigia D'Errico; Cambridge / United Kingdom







#### HW 11Sb - Deciphering wake-up stroke: MRI and CT insights for diagnosis and treatment

Categories: Education, Emergency Imaging, Imaging Methods, Neuro, Vascular

ETC Level: LEVEL II+III

Date: February 29, 2024 | 16:00 - 17:00 CET

CME Credits: 1

To participate, a pre-congress Hands-on Workshop registration is required.

# Participants who have completed their workshop registration before ECR are requested to arrive at the workshop room 20 minutes before the scheduled start of the session to present their badge and complete their check-in.

We would like to thank our workshop sponsors. For more information click here.

Please note we will be utilising equipment from certain vendors during the workshop sessions; however, a wide range of alternative options from other vendors is also available.

In this session participants will be able:

- 1. To explore strokes that occur during sleep and their diagnostic and therapeutic implications using MRI.
- 2. To learn how to analyse strokes that occur during sleep and their impact on therapeutic decisions using CT.

Instructors (60 min) Aleksandra Zoran Aracki-Trenkic; Nis / Serbia Nadya Pyatigorskaya; Paris / France







# **AWARDS - Abstract Award Ceremony**

**Date:** February 29, 2024 | 16:00 - 17:30 CET During the ceremony, the most exceptional Abstracts and Posters will be offered an award.

**Presenting EPOS Poster Awards** (45 min) Ioana Gabriela Lupescu; Bucharest / Romania

Presenting Radiographers awards (15 min) Andrew England; Cork / Ireland

Presenting Research Presentation Abstract Awards (30 min)

Marion Smits; Rotterdam / Netherlands







#### **RPS 1105 - Novel AI models redefining radiology diagnostics**

Categories: Artificial Intelligence & Machine Learning, General Radiology, Imaging Methods, Multidisciplinary Date: February 29, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

#### Moderator:

Leonor Cerda Alberich; Valencia / Spain

The use of large language models for first triage decisions for patients at risk for reaction during intravenous contrast administration: a proof of concept (7 min)

Miriam Dolciami; Rome / Italy

Enhancing quick-acquired MRI scans with the DL-based Aikenist framework: a clinical assessment (7 min) Bhanu K. N. Prakash; Singapore / Singapore

Frameworks for artificial intelligence research in medical image analyses: a systematic review (7 min) Manjunath Kanabagatte Nanjundappa; Manipal / India

Energy-optimised scheduling of CT examinations through mathematical modelling (7 min) Martin Segeroth; Basel / Switzerland

medBERT.de: a German BERT model tailored for the medical domain: insights into the results of radiological text classification and entity recognition (7 min) Felix Busch; Berlin / Germany

Image fusion using pixelwise gradient model for image fusion (PGMIF) (7 min) Ka-Hei Cheng; Hong Kong / Hong Kong SAR China

Recurrence-free survival prediction in head and neck cancers using deep learning: a multicentre, multimodal approach harnessing uncertainty estimation and counterfactual explainability (7 min) Zohaib Salahuddin; Maastricht / Netherlands

A unified transformer-based model for characterisation and diagnosis of focal liver lesions on multiparametric MRI images (7 min) Zhehan Shen; Shanghai / China

Establishing robust ground truth labels to create machine learning response assessment models using an innovative fusion technique of rectal MRI and whole mount histopathologic specimens (7 min) Josip Ninčević; New York / United States









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**External validation of Alzheimer's disease machine-learning models: generalisability and clinical features** (7 min) Helena Rico Pereira; Lisbon / Portugal

Towards safer imaging: a comparative study of deep learning-based denoising and iterative reconstruction in intraindividual low-dose CT scans using an in-vivo large animal model (7 min)

Jonas Mück; Tübingen / Germany









### **RPS 1103 - Evolving cardiac MRI techniques: development and clinical applications**

Categories: Cardiac, Imaging Methods, Research Date: February 29, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

**Moderator:** Dietrich Beitzke; Vienna / Austria

Blood native T1 time for estimating synthetic haematocrit and extracellular volume: derivation of a conversion formula at 3T (7 min) Johannes Schmid; Graz / Austria

A novel approach to measuring synthetic extracellular volume without invasive blood sampling: the sheva-3t cmr study (7 min) Cesare Mantini; Chieti / Italy

**T1 mapping and extracellular volume for predicting pre-heart failure in children with Duchenne Muscular Dystrophy** (7 min) Xinyuan Zhang; Chengdu / China

Joint bright- and black-blood late gadolinium enhancement and T1-rho mapping for robust myocardial scar imaging (7 min) Victor De Villedon De Naide; Pessac / France

Cardiac magnetic resonance in infarct-like myocarditis: transmural late gadolinium enhancement is associated with long-term outcome (7 min) Alexander Isaak; Bonn / Germany

Non-invasive diagnosis of pulmonary hypertension: a comparison between MR 4D flow and echocardiography (7 min) Gert Reiter; Graz / Austria

Left ventricular diastolic dysfunction grading from a single MR 4D flow measurement (7 min) Clemens Reiter; Graz / Austria

Quantitative perfusion CMR with adenosine for the assessment of coronary microvascular disease in heart failure with preserved ejection fraction patients (7 min)

Ana Ezponda Casajus; Pamplona / Spain

Residual myocardial hyperaemia in regadenoson stress/rest quantitative perfusion CMR (7 min)







Ana Ezponda Casajus; Pamplona / Spain



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spCMR as a predictor validity for MACE (7 min)

Pierpaolo Palumbo; L'Aquila / Italy







# ST 10 - Daily Wrap-up

Categories: General Radiology Date: February 29, 2024 | 17:15 - 17:30 CET Join our studio moderators as they look back on the day's highlights and offer a glimpse of what's still to come at ECR 2024.

#### Moderators:

Ben Giese; Chicago / United States Mélisande Rouger; Bilbao / Spain

Interview (30 min)









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# MD 4 - Ovarian cancer: new developments in imaging and treatment - recommendations for clinical practice and directions for the future

Categories: Genitourinary, Multidisciplinary, Oncologic Imaging, Research ETC Level: ALL LEVELS Date: February 29, 2024 | 17:45 - 18:45 CET CME Credits: 1

Moderator: Andrea Grace Rockall; Godalming / United Kingdom

**Chairperson's introduction** (2 min) Andrea Grace Rockall; Godalming / United Kingdom

The gyno-oncological surgeon's perspective (8 min) Stacey Bryan; London / United Kingdom

**The medical oncologist's perspectives** (8 min) Stacey Bryan; London / United Kingdom

The radiologist's perspective (8 min) Andrea Grace Rockall; Godalming / United Kingdom

Expert panel discussion (34 min)







### ST 11 - Morning Welcome with Carlo Catalano

Categories: Education, General Radiology, Multidisciplinary, Professional Issues

Date: March 1, 2024 | 07:50 - 08:00 CET

Grab your morning coffee and join our studio moderators as they discuss the most exciting highlights of the upcoming day with Congress President Prof. Carlo Catalano. Make a list of what not to miss and hear his insights on some of the biggest trends currently rocking the world of radiology.

#### Moderators:

Ben Giese; Chicago / United States Mélisande Rouger; Bilbao / Spain

Interview (30 min) Carlo Catalano; Roma / Italy









### RC 1207 - Female pelvic oncology: an update

Categories: Education, Genitourinary, Imaging Methods, Oncologic Imaging, Research ETC Level: LEVEL II Date: March 1, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderator: Milagros Otero Garcia; Vigo / Spain

**Chairperson's introduction** (5 min) Milagros Otero Garcia; Vigo / Spain

**Endometrial cancer** (15 min) Lucia Manganaro; Rome / Italy Olivera Nikolic; Novi Sad / Serbia

**Cervical cancer** (15 min) Lucia Manganaro; Rome / Italy

**Vulvar cancer** (15 min) Olivera Nikolic; Novi Sad / Serbia

Panel discussion: How does imaging influence the management of patients? (10 min)







### RC 1215 - Diagnosis and management of portal venous thrombosis

Categories: GI Tract, Interventional Radiology, Multidisciplinary, Vascular ETC Level: LEVEL II+III Date: March 1, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderator: Pedro Filipe Goncalves Teixeira Sousa; Porto / Portugal

**Chairperson's introduction** (5 min) Pedro Filipe Goncalves Teixeira Sousa; Porto / Portugal

Clinics of portal venous thrombosis (15 min) Pál Ákos Deák; Budapest / Hungary

**Diagnostic imaging of portal venous thrombosis** (15 min) Pedro Cabral de Melo Pereira; Vila Nova de Gaia / Portugal

Management of portal venous thrombosis: the role of interventional radiology (15 min)

Charlotte Ebeling Barbier; Uppsala / Sweden

Panel discussion: The radiologists in the multidisciplinary management of portomesenteric venous thrombosis: are we sufficiently involved in the decision process? (10 min)







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### E<sup>3</sup> 22C - The traumatic ankle

Categories: Education, General Radiology, Musculoskeletal ETC Level: LEVEL I Date: March 1, 2024 | 08:00 - 09:00 CET CME Credits: 1

**Moderator:** Andrea B. Rosskopf; Zurich / Switzerland

**Chairperson's introduction** (2 min) Andrea B. Rosskopf; Zurich / Switzerland

**Tendon and ligament injuries** (25 min) Violeta Vasilevska Nikodinovska; Skopje / North Macedonia

**Osteochondral lesions: pre- and postoperative findings** (25 min) Iris Melanie Noebauer-Huhmann; Vienna / Austria

Panel discussion (8 min)









### RC 1212 - Musculoskeletal and soft tissue tumours in children

Categories: Musculoskeletal, Oncologic Imaging, Paediatric ETC Level: LEVEL I Date: March 1, 2024 | 08:00 - 09:00 CET CME Credits: 1

**Moderator:** Sandra Diaz; Solna / Sweden

**Chairperson's introduction** (5 min) Sandra Diaz; Solna / Sweden

**Typical paediatric bone tumours** (15 min) Pier Luigi Di Paolo; Rome / Italy

Typical paediatric soft tissue tumours (15 min)

Emilio Jose Inarejos Clemente; Esplugues de Llobregat, Barcelona / Spain

**Tumour mimics** (15 min) Janina Maria Patsch; Vienna / Austria

Panel discussion: If imaging cannot always make a definite diagnosis, when should you opt for a biopsy? (10 min)







#### **RPS 1209 - New insights in musculoskeletal interventional radiology**

Categories: Artificial Intelligence & Machine Learning, Interventional Oncologic Radiology, Interventional Radiology, Musculoskeletal, Vascular

Date: March 1, 2024 | 08:00 - 09:00 CET CME Credits: 1

#### Moderator: Evangelos Petsatodis; THESSALONIKI / Greece

Usefulness of augmented reality with computed tomography fusion in chronic total occlusion percutaneous femoral interventions (7 min)

Irene Nieri; Paris / France

Study protocol: percutaneous treatment in patients with lumbar spinal stenosis. Rationale and design of a phase III, multicentre, randomised, controlled trial (7 min)

Alessandro Napoli; Rome / Italy

**Percutaneous computer tomography (CT): guided treatment of lumbar joint synovial cysts** (7 min) Sonia Triggiani; Milan / Italy

**Genicular artery embolisation for the treatment of symptomatic knee osteoarthritis** (7 min) Florian Nima Nima Fleckenstein; Berlin / Germany

**Patellar tendinopathy: a promising treatment approach with stromal vascular fraction (SVF)** (7 min) Nicolas Papalexis; Bologna / Italy

The performance of non-contrast magnetic resonance angiography using cardiac-gated 3D fast spin-echo for 3D fusion guidance in transarterial embolisation for refractory shoulder pain (7 min) Yi-Chih Hsu; Taipei / Taiwan, Chinese Taipei

Intra-articular hyaluronic acid and platelet-rich plasma as monotherapy or combination therapy, what is the evidence? (7 min) Sheng-Fei Oon; Melbourne / Australia







# RC 1216 - Artificial intelligence implementation in clinical routine: are we ready?

Categories: Artificial Intelligence & Machine Learning, Imaging Informatics, Oncologic Imaging

ETC Level: LEVEL II Date: March 1, 2024 | 08:00 - 09:00 CET CME Credits: 1

**Moderator:** Luis Marti-Bonmati; Valencia / Spain

**Chairperson's introduction** (5 min) Luis Marti-Bonmati; Valencia / Spain

Image acquisition and reconstruction (15 min) Damiano Caruso; Roma / Italy

**Clinical application** (15 min) Georg Langs; Vienna / Austria

**Business solutions** (15 min) Kicky Gerhilde van Leeuwen; De Bilt / Netherlands

Panel discussion: Advantages and barriers (10 min)







# RW 12 - How to improve head and neck cancer staging reports

Categories: Head and Neck, Professional Issues ETC Level: LEVEL I+II Date: March 1, 2024 | 08:00 - 09:00 CET CME Credits: 1

# Tips on improving head and neck CT reports and MRI reports (15 min)

Ann Dorothy King; Hong Kong / China

Short cases review, interactive discussion and critiquing of reports  $(45 \mbox{ min})$ 

Ann Dorothy King; Hong Kong / China









# RC 1211 - Spine imaging: painful dilemmas

Categories: Interventional Radiology, Musculoskeletal, Neuro ETC Level: LEVEL II+III Date: March 1, 2024 | 08:00 - 09:00 CET CME Credits: 1

**Moderator:** Alexis Kelekis; Athens / Greece

**Chairperson's introduction** (5 min) Alexis Kelekis; Athens / Greece

**Osteoporotic fracture or metastasis?** (15 min) mario muto; Naples / Italy

**Do these imaging findings explain this patient's pain?** (15 min) Johan Van Goethem; Antwerpen / Belgium

Pain management spine treatment: what to expect from imaging (15 min) Luigi Manfré; Catania / Italy

Panel discussion: How to improve reports of the spine: structured reports according to pathology? (10 min)







#### **RPS 1205 - Recent development in AI for lung nodule detection**

Categories: Artificial Intelligence & Machine Learning, Chest, Imaging Methods Date: March 1, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderator:

Giuseppe Cicchetti; Roma / Italy

External validation of the Sybil risk model as a tool to identify low-risk individuals eligible for biennial lung cancer screening (7 min)

Fennie Van der Graaf; Nijmegen / Netherlands

Artificial intelligence: the key to significant reduction in baseline LDCT lung cancer screening associated workload when used as a first-read filter (7 min) Harriet Louise Lancaster; Groningen / Netherlands

**Can an Al-driven decision aid reduce the time between chest x-rays and treatment for lung cancer patients?** (7 min) Lorna Cameron; Aberdeen / United Kingdom

Comparison of the impact of reconstruction kernels on pulmonary nodule volumetry in low-dose CT with iterative vs deep learning image reconstruction (7 min) Louise D'hondt; Ghent / Belgium

**Improving image quality of sparse-view lung cancer CT images using convolutional neural networks** (7 min) Tina Dorosti; Neuried / Germany

Head-to-head validation of AI software for the detection of lung nodules in chest radiographs: Project AIR (7 min) Steven S Schalekamp; Nijmegen / Netherlands

Autonomous algorithmic monitoring of a deep-learning chest radiograph AI model using temporal divergences, in a clinical real-world setting (7 min) Charlene JY Liew; Singapore / Singapore

A deep learning module for automated detection and reporting of clinically significant lung nodules on low-dose chest CT scans (7 min) Veljko Popov; Wenham / United States







#### RPS 1202 - Artificial intelligence (AI) in breast imaging

Categories: Artificial Intelligence & Machine Learning, Breast, Imaging Methods Date: March 1, 2024 | 08:00 - 09:00 CET CME Credits: 1

#### Moderator:

Henrik Wethe Koch; Stavanger / Norway

Adding artificial intelligence (AI) case malignancy scoring in a breast screening programme to reduce screen-reading workload: a retrospective study (7 min)

Andrea Nitrosi; Reggio Emilia / Italy

An artificial intelligence tool to empower junior radiologists in breast cancer screening; Al as a second pair of eyes in mammography reading (7 min) Mehran Arab Ahmadi: Tehran / Iran

Is it worth reading low-risk breast cancer screening mammograms as determined by an artificial intelligence (AI) system? A prospective, population-based study for DM and DBT (AITIC trial) (7 min) Esperanza Elías Cabot; Cordoba / Spain

Correlating breast lesions in tomosynthesis CC and MLO views using artificial intelligence (AI) (7 min) Sarah Maier Friedewald; Chicago / United States

Evaluating performance of an artificial intelligence (AI) detection system on prior screening tomosynthesis studies of breast cancer patients (7 min) Sarah Maier Friedewald; Chicago / United States

Al detection of interval cancers: does size, grade, and time since screening affect sensitivity? (7 min) Muzna Nanaa; Cambridge / United Kingdom

How much has AI improved over the last five years? A benchmark evaluation of different versions of an AI mammography interpretation system (7 min) Alejandro Rodriguez Ruiz; Nijmegen / Netherlands







# RPS 1203 - Spectral CT: new developments and clinical applications (part 1)

Categories: Cardiac, Imaging Methods, Research Date: March 1, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderator: Nils Robrecht Planken; Amsterdam / Netherlands

Iodine quantification with a CdZnTe clinical prototype photon-counting scanner at reduced radiation dose: initial cardiac phantom results and reproducibility analysis (7 min) Amir Pourmorteza; Atlanta, GA / United States

Impact of photon-counting detector CT-based calcium removal algorithm on coronary stenosis grading and CT-FFR values (7 min) Zsofia Jokkel; Budapest / Hungary

**Stenosis quantification on virtual non-calcium images from photon-counting detector CT** (7 min) Victor Mergen; Zurich / Switzerland

**Improvement of the visualisation of coronary stents by ultra-high-resolution photon-counting detector CT** (7 min) Le Qin; Shanghai / China

Photon-counting CT angiography in pre-TAVR aortic annulus sizing: high-pitch spectral vs low-pitch ultra-high-resolution CT-angiography (7 min)

Muhammad Taha Hagar; Freiburg im Breisgau / Germany

First clinical experience with a novel reconstruction algorithm to reduce stair-step artefacts in step-and-shoot cardiac photon-counting detector CT (7 min) Lukas Jakob Moser; Zürich / Switzerland







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# RC 1201 - Clinical guidelines for the management of primary focal liver tumours: lost in translation?

Categories: Abdominal Viscera, Multidisciplinary ETC Level: LEVEL II+III Date: March 1, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderator: Maria Carmen Ayuso Colella; Barcelona / Spain

**Chairperson's introduction** (5 min) Maria Carmen Ayuso Colella; Barcelona / Spain

**Diagnosis and management of benign liver lesions** (15 min) Cäcilia Reiner; Zürich / Switzerland

**Diagnosis and management of HCC and indeterminate lesions in the cirrhotic liver** (15 min) Maxime Ronot; Paris / France

Management of HCC: interventional or surgical treatment (EASL) (15 min) Thomas Karl Helmberger; Munich / Germany

Panel discussion: The benefit of clinical guidelines in the MDT discussion (10 min)







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# PA 12 - Next-generation radiology: life well spent with good communication is long for radiologists and patients

Categories: Artificial Intelligence & Machine Learning, Breast, Education, Oncologic Imaging, Professional Issues ETC Level: ALL LEVELS Date: March 1, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderator: Carlo Catalano; Roma / Italy

**Chairperson's introduction** (2 min) Carlo Catalano; Roma / Italy

The view of the President of the European Society of Radiology on next-generation communication (10 min) Carlo Catalano; Roma / Italy

**360-degree approach radiology: communication best practice example** (10 min) Michael Fuchsjäger; Graz / Austria

**Responsibility and opportunity for next generation of radiologists and patients: tools in use, Be accepted** (10 min) Caroline Justich; Vienna / Austria

**Next-generation radiology: future communication in progress** (10 min) Elisabetta Giannotti; Cambridge / United Kingdom

**Preparing and educating the patient for shared decision-making** (10 min) Fiona J. Gilbert; Cambridge / United Kingdom

Panel discussion (8 min)









# IF 12 - Changing the game: interventional radiology's growing impact on imaging

**Categories:** Artificial Intelligence & Machine Learning, General Radiology, Interventional Oncologic Radiology, Interventional Radiology, Management/Leadership

ETC Level: LEVEL III

Date: March 1, 2024 | 08:00 - 09:00 CET

#### CME Credits: 1

Since the first applications of image-guided minimally-invasive treatment, interventional radiology has seen tremendous developments. In many cases, it transformed how patients are treated by either providing additional therapeutic options or even replacing surgery in some cases. This session will discuss interventional radiology from its humble beginnings to the newest developments and future directions. New potential applications of image guided-therapy and new approaches to training are highlighted to provide the best possible education to the next generation of interventional radiologists.

#### Moderator:

Jurgen Fütterer; Nijmegen / Netherlands

Chairperson's introduction (5 min)

Jurgen Fütterer; Nijmegen / Netherlands

From past to present: the evolution of interventional radiology (15 min)

Gilles Soulez; Montreal / Canada

**New technologies in interventional procedures: which surgeries will be replaced next?** (15 min) Roberto Luigi Cazzato; Stasbourg / France

The future of training in interventional radiology: simulators and virtual reality (15 min) Elif Can; Freiburg / Germany

Panel discussion: How will interventional radiology impact patients' health in the next 10 years? (10 min)







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# BS 12 - Caring for and maximising the profile of the radiography profession

Categories: Education, Management/Leadership, Multidisciplinary, Professional Issues, Radiographers Date: March 1, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderator: Dávid Sipos; Pécs / Hungary

**Chairperson's introduction** (6 min) Dávid Sipos; Pécs / Hungary

**Putting care under pressure: the need to care for our profession** (18 min) Jonathan McNulty; Dublin / Ireland

**Maximising the potential of the modern radiographer workforce** (18 min) Julie Michelle Nightingale; Sheffield / United Kingdom

**Building relationships and becoming a valued team member** (18 min) Patrizia Cornacchione; Rome / Italy







### E<sup>3</sup> 24C - Infection and inflammation

Categories: Hybrid Imaging, Molecular Imaging, Nuclear Medicine ETC Level: LEVEL I Date: March 1, 2024 | 08:00 - 09:00 CET CME Credits: 1

**Moderator:** Clemens C. Cyran; München / Germany

**Chairperson's introduction** (5 min) Clemens C. Cyran; München / Germany

Hybrid imaging of infection and inflammation in paediatric patients (15 min) Ora Israel; Haifa / Israel

Inflammation of orthopaedic prosthesis (15 min) Jose Luis Vercher Conejero; Barcelona / Spain

**FDG PET/CT in patients with signs and symptoms of GCA and PMR** (15 min) Riemer Slart; Groningen / Netherlands

Panel discussion: Is hybrid imaging troubleshooter or standard of care in infection and inflammation? (10 min)







#### OF 12R - Enhancing service and care for cases of suspected physical abuse

Categories: Forensic Imaging, Management/Leadership, Medico-legal, Paediatric, Professional Issues, Radiographers

Date: March 1, 2024 | 08:00 - 09:00 CET

#### CME Credits: 1

This session spotlights the imperative of a comprehensive and meticulous approach to radiography in cases involving Suspected Physical Abuse. This session comprises three distinctive talks, each addressing pivotal aspects of radiological practice in safeguarding the welfare of vulnerable individuals. The session is therefore aimed to equip radiographers and health professionals with a better understanding of best practices, guidelines, practical strategies, as well as potential pitfalls so as to ultimately enhance the service and care for individuals facing suspected physical abuse. The session will also highlight the pivotal role of radiography in safeguarding the well-being and justice of vulnerable populations.

#### **Moderator:**

Vassilis Georgios Syrgiamiotis; Goudi / Greece

Chairperson's introduction (5 min) Vassilis Georgios Syrgiamiotis; Goudi / Greece

A radiographer's guide for suspected physical abuse examinations (16 min)

Jessica Eaton; London / United Kingdom

Tips for radiographers to safeguard the chain of evidence (16 min)

Michaela Dawn Davis; Dublin / Ireland

The benefits of a specialised team approach to imaging cases of suspected physical child abuse (16 min)

Jannie Bøge Steinmeier Larsen; Aarhus V / Denmark

Open forum discussion (7 min)







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# RC 1204 - Chameleons in thoracic radiology

Categories: Chest, Oncologic Imaging ETC Level: LEVEL II+III Date: March 1, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderator: Nicholas J. Screaton; Cambridge / United Kingdom

**Chairperson's introduction** (5 min) Nicholas J. Screaton; Cambridge / United Kingdom

**Atypical manifestations of lung cancer** (15 min) Danielle Byrne; Dublin / Ireland

Lung metastases: not always as it seems (15 min) Cornelia M. Schaefer-Prokop; Amersfoort / Netherlands

**Benign diseases mimicking a thoracic malignancy** (15 min) Lucio Calandriello; Roma / Italy

Panel discussion: How to approach uncertainties in thoracic oncology (10 min)







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# OF 12T - Tackle twisted cases, win a must-have EDiR educational package (part 3)

Categories: Education, Professional Issues, Students ETC Level: LEVEL II Date: March 1, 2024 | 08:00 - 08:30 CET CME Credits: 0.5

**Moderators:** Laura Oleaga Zufiria; Barcelona / Spain Wolfgang Schima; Vienna / Austria

**Chairpersons' introduction** (5 min) Laura Oleaga Zufiria; Barcelona / Spain Wolfgang Schima; Vienna / Austria

Let the games begin (20 min) Wolfgang Schima; Vienna / Austria

Pooling of conclusions and perceptions (5 min)

Wolfgang Schima; Vienna / Austria







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# MD 5 - Cholangiocarcinoma: new developments in imaging and treatment - recommendations for clinical practice and directions for the future

Categories: Abdominal Viscera, GI Tract, Multidisciplinary, Oncologic Imaging, Research ETC Level: ALL LEVELS Date: March 1, 2024 | 08:15 - 09:15 CET CME Credits: 1

**Moderator:** Valérie Vilgrain; Clichy / France

**Chairperson's introduction** (2 min) Valérie Vilgrain; Clichy / France

**The surgeon's perspective** (8 min) Ailton Sepulveda; Saint Maur des Fosses / France

**The hepatologist's perspective** (8 min) Mohamed Bouattour; Clichy / France

**The radiologist's perspective** (8 min) Valérie Vilgrain; Clichy / France

Expert panel discussion (34 min)







### **CUBE 13 - Aortic soup**

Categories: Interventional Radiology Date: March 1, 2024 | 09:00 - 09:30 CET CME Credits: 0.5

#### Central IR Day - Topic Coordinator: Dr. Mohammad Tariq Ali

The "Tools of the Trade" session is an innovative session format that introduces the audience to the most important devices (tools) used in interventional radiology. A specialist leads these sessions, describing the devices and its use, and demonstrating its application on anatomical phantoms. Participants also have the opportunity to touch and explore these devices, which are circulated in the audience.

#### **Moderator:**

Kelvin Tan; Norwich / United Kingdom

**Chairperson's introduction** (2 min) Miltiadis Krokidis; Athens / Greece

Aortic soup (28 min) Mohammad Tariq Ali; Norwich / United Kingdom









#### OF 13E - Leave a lasting impression with your work

Categories: Education, Professional Issues

ETC Level: ALL LEVELS

Date: March 1, 2024 | 09:30 - 10:30 CET

#### CME Credits: 1

In this session, organised by the ESR Journal Family, you will learn about boosting your work through the smart use of AI assistance in the writing process, presenting it successfully, and disseminating it through social media.

#### Moderator:

Doenja Marina Johanna Lambregts; Amsterdam / Netherlands

#### Chairperson's introduction (5 min)

Doenja Marina Johanna Lambregts; Amsterdam / Netherlands

#### How to make your paper sound intelligent, not artificial (15 min)

Daniel Pinto Dos Santos; Frankfurt / Germany

#### How to shine when presenting your work (10 min)

Gennaro D'Anna; Legnano / Italy

#### How to grow your audience and build a scientific network using social media (15 min)

Brendan S Kelly; Dublin / Ireland Roberto Cannella; Palermo / Italy

Open forum discussion (15 min)







#### **RPS 1304 - Advanced imaging of thoracic oncologic patients**

Categories: Chest, Interventional Oncologic Radiology, Interventional Radiology, Oncologic Imaging Date: March 1, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

#### Moderator:

Rok Cesar; Golnik / Slovenia

DEB-BACE followed by systemic chemotherapy vs systemic chemotherapy alone for advanced lung adenocarcinoma: a propensity score match study (7 min)

Linqiang Lai; Lishui / China

Tree-based models for predicting clinically significant pneumothorax in patients undergoing percutaneous coaxial core lung biopsy: a retrospective cohort study (7 min) Miguel Emilio Chevasco Hanze; Barcelona / Spain

CT-guided core needle biopsy is safe and accurate for the assessment of pulmonary lesions associated with cystic airspaces (7 min) Maurizio Balbi; Turin / Italy

Haemorrhage risk prediction after computed tomography-guided lung biopsy: combining clinical parameters and quantitative pulmonary vascular analysis (7 min) Keng-Chian Lin; Taipei / Taiwan, Chinese Taipei

De novo low-dose CT-guided lung biopsy technique: minimising radiation with maintained safety and diagnostic yield rates (7 min) Avik Banerjee; Leicester / United Kingdom

Adherence to CT surveillance guidelines in early stage post-treatment lung cancer recurrence (7 min) Sian Kneafsey; Dublin / Ireland

Coronary calcification and interstitial lung disease are both independently associated with increased mortality in patients undergoing radiotherapy for stage 3 non-small cell lung cancer (7 min) Emily Hughes; Glasgow / United Kingdom

Radiogenomics relationship of non-small cell lung cancer: preliminary results (7 min) Maria Paola Belfiore; Naples / Italy

A decade of image-guided pleural biopsies: a multicentre retrospective study examining diagnostic yield and complications (7 min)





Liam Peng; Glasgow / United Kingdom



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# Structured reporting quality of chest CT for lung cancer staging: a double cohort study involving radiology residents (7 min)

Valeria Peruzzi; Udine / Italy







#### RC 1303 - Imaging of microvascular dysfunction

Categories: Cardiac, Contrast Media, Hybrid Imaging, Imaging Methods ETC Level: LEVEL II+III Date: March 1, 2024 | 09:30 - 10:30 CET CME Credits: 1

**Moderator:** Rodrigo Salgado; Antwerpen / Belgium

**Chairperson's introduction** (5 min) Rodrigo Salgado; Antwerpen / Belgium

Invasive assessment of microvascular dysfunction (15 min) Tommaso Gori; Mainz / Germany

**PET/CT and SPECT imaging of microvascular dysfunction** (15 min) Thomas Schindler; Villach / Austria

**MRI imaging of microvascular dysfunction** (15 min) Monika Radikė; Liverpool / United Kingdom

Panel discussion: When to think about microvascular dysfunction: who should we image and when? (10 min)







#### E<sup>3</sup> 1318 - Cardio-oncology

Categories: Cardiac, Imaging Methods, Oncologic Imaging ETC Level: LEVEL II+III Date: March 1, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

**Moderator:** Giuseppe Muscogiuri; Roma / Italy

**Chairperson's introduction** (6 min) Giuseppe Muscogiuri; Roma / Italy

**Cardiac tumours** (28 min) Luigi Natale; Anguillara Sabazia / Italy

Cancer treatment effect on the heart (28 min)

Alexis Jacquier; Marseille / France

Myocarditis in immune checkpoint inhibitor treatment (28 min)

Bernd J. Wintersperger; Toronto / Canada









#### E<sup>3</sup> 1320 - Organ biopsy

Categories: Abdominal Viscera, Chest, Head and Neck, Interventional Oncologic Radiology, Musculoskeletal

ETC Level: LEVEL II

Date: March 1, 2024 | 09:30 - 11:00 CET

#### CME Credits: 1.5

The session summarises indications, techniques and results of percutaneous imaging-guided biopsies in the most common target organs. The audience will also familiarise themselves with how to deal with the increasing number of biopsy procedures coming to the interventional radiology department.

#### Moderator: Roberto Luigi Cazzato; Stasbourg / France

Chairperson's introduction (5 min)

Roberto Luigi Cazzato; Stasbourg / France

Neck organs (18 min) Daniele Maiettini; Perugia / Italy

Thoracic organs (18 min) Paul Habert; MARSEILLE / France

**Abdominal organs** (18 min) Ciara O'Brien; Toronto / Canada

Bone and soft tissues (18 min) Richard Fawcett; Leeds / United Kingdom

Panel discussion: How can the IR clinic deal with the increasing number of biopsies? (13 min)







#### RC 1313 - High-field and low-field MRI: what is the difference?

Categories: Imaging Methods, Multidisciplinary, Physics in Medical Imaging ETC Level: LEVEL II+III Date: March 1, 2024 | 09:30 - 10:30 CET CME Credits: 1

**Moderator:** Ioannis Seimenis; Athens / Greece

**Chairperson's introduction** (5 min) Ioannis Seimenis; Athens / Greece

**High-field MRI** (15 min) Siegfried Trattnig; Vienna / Austria

Low-field MRI (15 min) Andrew G. Webb; Leiden / Netherlands

Panel discussion: High-field vs low-field: room for both? (25 min)

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#### SF 13 - The future is here: scales and numbers in neuroimaging

Categories: Neuro ETC Level: LEVEL II

Date: March 1, 2024 | 09:30 - 11:00 CET

#### CME Credits: 1.5

The session will include an overview of quantitative neuroimaging biomarkers currently used for diagnostic purposes, treatment decision and prognosis. The lectures intend to familiarise the audience with these scales and numbers derived from structural MRI, molecular imaging or perfusion MRI or CT in clinical setting, and how they should be presented in neuroradiology reports.

**Moderator:** Catherine Oppenheim; Paris / France

**Chairperson's introduction** (5 min) Catherine Oppenheim; Paris / France

#### Scales and numbers in stroke imaging (20 min)

Pedro Vilela; Lisbon / Portugal

#### Scales and numbers in brain tumour imaging (20 min)

Marion Smits; Rotterdam / Netherlands

#### Scales and numbers in neurodegeneration (20 min)

Sven Haller; Geneve / Switzerland

#### Panel discussion: Quantification in neuroradiology reports: does it impact patient management? (25 min)







#### RC 1314 - Pros and Cons: simulators will replace traditional clinical placements

Categories: Education, Imaging Methods, Professional Issues, Radiographers, Students Date: March 1, 2024 | 09:30 - 10:30 CET CME Credits: 1

#### Moderators:

Carst Buissink; Groningen / Netherlands Asuncion Torregrosa Andres; Valencia / Spain

**Chairpersons' introduction** (5 min) Carst Buissink; Groningen / Netherlands Asuncion Torregrosa Andres; Valencia / Spain

**Pro** (15 min) Naomi Shiner; Nottingham / United Kingdom

**Con** (15 min) Paul Bezzina; Msida / Malta

Panel discussion: What does an optimum radiographer clinical training curriculum look like? (25 min)







#### HW 13Cd - Which cardiac findings every general radiologist should know

Categories: Cardiac, Chest, General Radiology, Imaging Methods ETC Level: LEVEL II Date: March 1, 2024 | 09:30 - 11:00 CET CME Credits: 1.5 To participate, a pre-congress Hands-on Workshop registration is required.

Participants who have completed their workshop registration before ECR are requested to arrive at the workshop room 20 minutes before the scheduled start of the session to present their badge and complete their check-in.

Moderator: lacopo Carbone; Roma / Italy

Chairperson's introduction (10 min)

lacopo Carbone; Roma / Italy

Instructors (80 min) Marco Rengo; Roma / Italy Sue Thomas; Bournemouth / United Kingdom Nicola Galea; Roma / Italy

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#### HW 13Sc - Imaging strategies in acute stroke

Categories: Education, Emergency Imaging, Imaging Methods, Neuro, Vascular

ETC Level: LEVEL II+III Date: March 1, 2024 | 09:30 - 10:30 CET

CME Credits: 1

To participate, a pre-congress Hands-on Workshop registration is required.

### Participants who have completed their workshop registration before ECR are requested to arrive at the workshop room 20 minutes before the scheduled start of the session to present their badge and complete their check-in.

We would like to thank our workshop sponsors. For more information click here.

Please note we will be utilising equipment from certain vendors during the workshop sessions; however, a wide range of alternative options from other vendors is also available.

In this session participants will be able:

- 1. To become familiar with imaging algorithms for a selection of acute stroke patients for IVT and EVT.
- 2. To learn about imaging protocols based on different imaging modalities.
- 3. To develop practical skills in detecting haemorrhage and large vessel occlusion.
- 4. To develop practical skills in detecting non-salvageable infarct "core" and potentially viable brain tissue.
- 5. To become familiar with treatment strategies for stroke following the latest research guidelines.

Instructors (60 min) Myriam Edjlali-Goujon; Paris / France

Karl-Olof Loevblad; Geneva / Switzerland









#### **CTiR 13 - Clinical Trials in Radiology 2**

Categories: Breast, Cardiac, Chest, Genitourinary, Oncologic Imaging Date: March 1, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

**Moderators:** Marc Dewey; Berlin / Germany Ferdia Aidan Gallagher; Cambridge / United Kingdom

**Chairpersons' introduction** (6 min) Marc Dewey; Berlin / Germany Ferdia Aidan Gallagher; Cambridge / United Kingdom

Digital breast tomosynthesis with advanced reading methods for the Dutch national breast cancer screening program (STREAM): design and rationale of a prospective non-randomised screening trial (8 min)

Leonardus Bernardus van den Oever; 's-Hertogenbosch / Netherlands

**Discussant** (4 min) Eva Maria M. Fallenberg; München / Germany

**European lung cancer screening implementation: 4-IN-THE-LUNG-RUN trial** (8 min) Mario Silva; Parma / Italy

**Discussant** (4 min) Constance De Margerie-Mellon; Paris / France

Artificial intelligence as concurrent reader in prospective European Lung Cancer Screening (4-IN-THE-LUNG-RUN) trial (8 min) Mario Silva; Parma / Italy

**Discussant** (4 min) Constance De Margerie-Mellon; Paris / France

Diagnostic performance of DW-MRI in advanced ovarian cancer: first results of the Dutch prospective multicentre MISSION trial (8 min) Max Lahaye; Amsterdam / Netherlands

**Discussant** (4 min) Evis Sala; Rome / Italy









#### **Deep learning-aided classification of disease distribution patterns in metastatic ovarian cancer** (8 min) Cathal McCague; Cambridge / United Kingdom

Discussant (4 min)

Renato Cuocolo; Napoli / Italy

Sharing clinical and medical imaging data from the multicentre SCOT-HEART and DISCHARGE trials on coronary CT angiography: first experience using the open-source medical image management system XNAT (8 min) Michelle Claire Williams; Edinburgh / United Kingdom

**Discussant** (4 min) Karl-Friedrich Kreitner; Mainz / Germany









#### **RPS 1305 - Strategic deployment of AI**

Categories: Artificial Intelligence & Machine Learning, Medico-legal, Research Date: March 1, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

**Moderator:** Daniela Baditescu; Bucuresti / Romania

Early platform release of the federated European cancer imaging infrastructure (7 min) Ignacio Blanquer; Valencia / Spain

Radiology AI deployment and assessment rubric (RADAR) for value-based AI in radiology (7 min) Jacob Johannes Visser; Rotterdam / Netherlands

Knowledge of AI governance, perceived challenges, opportunities, and suggestions for AI implementation by UK radiographers (7 min) Nikolaos Stogiannos; Corfu / Greece

Black box no more: a survey to explore Al adoption and governance in medical imaging and radiation therapy in the UK (7 min) Nikolaos Stogiannos; Corfu / Greece

Radiographer education and learning in artificial intelligence (REAL-AI) (7 min) Geraldine Doherty; Belfast / United Kingdom

International medical students' perceptions towards artificial intelligence in medicine: a multicentre, cross-sectional survey among 192 universities (7 min) Felix Busch; Berlin / Germany

Al in routine teleradiology use: results of a large-scale test across Germany and Austria (7 min)

Torsten Bert Thomas Moeller; Dillingen / Germany

Artificial intelligence should only read a mammogram when it is certain: a hybrid breast cancer screening reading strategy (7 min)

Sarah Delaja Verboom; Nijmegen / Netherlands

Setting up a complaint data registry for research on the human: a Swiss experience (7 min) Benoît Dufour; Sion / Switzerland









### Advancements in generative AI for radiological imaging (7 min)

Can Ozan Tan; Enschede / Netherlands

### Improving CT justification practices with machine learning and deep learning: a multi-site study (7 min)

Jaka Potočnik; Dublin / Ireland

#### Artificial Intelligence in automated protocolling for Finnish brain MRI referrals (7 min)

Heidi Huhtanen; Turku / Finland









#### **RPS 1312 - Neuro- and skeletal-paediatric radiology**

Categories: Head and Neck, Musculoskeletal, Neuro, Oncologic Imaging, Paediatric Date: March 1, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

Moderator:

Ignasi Barber; EspluguesdeLlobregat / Spain

Evaluating AI and human-derived tumour volume estimations in paediatric osteosarcoma: association with histological response and survival predictions (7 min)

Lisa C. Adams; München / Germany

Intracranial haemorrhage detected with prenatal MRI in foetuses with Chiari II malformation: indication or contraindication for foetal surgery (7 min) Marlene Stuempflen; Vienna / Austria

Using 'fast' MRI head scan to improve paediatric patient experience for investigation of headaches (7 min) Laura Christine Walker; Pathhead / United Kingdom

Reference values for knee ultrasound in children and adolescents: thickness of intercondylar cartilage, and length of ossified patella (7 min) Sílvia Costa Dias; Porto / Portugal

The diagnostic performance of magnetic resonance imaging in the categorisation of paediatric neck lymph nodes: radiological and pathological correlations (7 min) Naz Paytoncu; Istanbul / Turkey

Glymphatic system dysfunction and white matter connectivity alterations for diagnosing autism spectrum disorder in children (7 min) Miaoyan Wang; Wuxi / China

Microstructural white matter change, emotional dysfunction and visual working memory in adolescents with borderline personality disorder (7 min) Xiaoping Yi; Changsha / China

Lesion volume and spike frequency impact perfusion in focal cortical dysplasia: a paediatric arterial spin labelling study (7 min) Antonio Giulio Gennari; Zurich / Switzerland









Assessing the validity of MR imaging severity score for predicting the clinical outcome in acute necrotising encephalopathy of childhood (7 min) Kumail Khandwala; Karachi / Pakistan

Bone involvement in children with lymphoma: results of a PET/MR study (7 min)

Lucia Pilati; Teolo / Italy

Pre- and postoperative foetal MRI for the evaluation of foetoscopic hybrid surgery in foetuses with spina bifida aperta (7 min)

Maximilian Schulze; Marburg / Germany







#### OF 13T - Tackling inequality in radiology

Categories: Education, General Radiology, Management/Leadership, Professional Issues, Students ETC Level: ALL LEVELS Date: March 1, 2024 | 09:30 - 10:30 CET CME Credits: 1

Moderator: Cindy Chew; Glasgow / United Kingdom

**Chairperson's introduction** (5 min) Cindy Chew; Glasgow / United Kingdom

The need for diversity in radiology (10 min) Judy Yee; New York / United States

**Tackling gender disparities** (10 min) Merel Huisman; Nijmegen / Netherlands

#### Tackling inequality from the perspective of young radiologists (20 min)

Lorraine Murray; Limerick City / Ireland Martina Pecoraro; Rome / Italy

#### Open forum discussion: Tackling inequality from the perspective of young radiologists (15 min)

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#### **RPS 1317 - Hot topics in emergency radiology**

Categories: Abdominal Viscera, Artificial Intelligence & Machine Learning, Chest, Contrast Media, Emergency Imaging, Head and Neck

Date: March 1, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

**Moderator:** Maria Antonietta Mazzei; Siena / Italy

Automated torso CT haemorrhage burden: a novel precision-medicine decision support tool for transfusion in trauma patients (7 min)

Nathan Sarkar; Baltimore / United States

Coronary calcification score in polytrauma CT of severely injured polytrauma patients as a prognostic factor for hospital mortality and intensive care unit treatment (7 min)

Hans-Jonas Meyer; Leipzig / Germany

Prevalence and extent of blunt cervical vascular injury (BCVI): a longitudinal single-centre study over 19 years (7 min) Bianca Mazini; Lausanne / Switzerland

Computed tomography imaging in earthquake trauma patients with crush syndrome and different levels of creatine kinase: is there a correlation with renal enhancement? (7 min) Sezer Nil Yılmazer Zorlu; Ankara / Turkey

**Portal venous contrast enhancement ratio of the adrenal glands and spleen as prognostic marker of mortality in patients with acute mesenteric ischaemia** (7 min) Felix Alexander Pfister; Leipzig / Germany

Tenx Alexander Frister, Leipzig / Germany

**Comparison of brain injury in patients with and without facial fractures** (7 min) Iulia Tatiana Lupașcu; Bucharest / Romania

Assessment of Syngo.CT LVO: detection in photon counting CT and conventional CT (7 min) Jan Boriesosdick; Porta Westfalica / Germany

Incidence of contrast-induced acute kidney injury (CI-AKI) in trauma patients undergoing contrast-enhanced computed tomography using iso-osmolar contrast agent (7 min) Minji Gim; Suwon-si, Gyeonggi-do / Korea, Republic of

Utilising dual-layer detector spectral CT to predict clinical risk stratification in the diagnosis of acute pulmonary embolism (7 min)





Yuhan Zhou; Zhengzhou / China



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### BRIXIA score, laboratory findings and vaccination status for prediction of mortality in severe COVID-19 pneumonia (7 min) Valentina Opancina; Kragujevac / Serbia







#### RC 1308 - Imaging of the skull base and cranial nerves

Categories: Head and Neck, Imaging Methods, Oncologic Imaging ETC Level: LEVEL II+III Date: March 1, 2024 | 09:30 - 10:30 CET CME Credits: 1

**Moderator:** Agnieszka Trojanowska; Lublin / Poland

**Chairperson's introduction** (5 min) Agnieszka Trojanowska; Lublin / Poland

**Updates in cranial nerve imaging** (15 min) Christoph Kenis; Bruges / Belgium

New and advanced MRI techniques for the diagnosis of skull base lesions (15 min)

Philip Touska; London / United Kingdom

**Skull base after treatment** (15 min) Davide Farina; Brescia / Italy

Panel discussion: Clinical applications, tips, and tricks? (10 min)







#### E<sup>3</sup> 1323 - Gynaecology and obstetrics

Categories: Genitourinary ETC Level: LEVEL I+II Date: March 1, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

Moderator: Vlad Mr. Bura; Cluj-Napoca / Romania

**Chairperson's introduction** (6 min) Vlad Mr. Bura; Cluj-Napoca / Romania

**Imaging of the uterus** (28 min) Ramona Anna Woitek; Wiener Neustadt / Austria

**Disorders of the adnexa** (28 min) Rosemarie Forstner; Salzburg / Austria

Acute gynaecological and obstetric disorders (28 min) Lucia Manganaro; Rome / Italy

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## EIBIR 13 - Innovative tools for comprehensive risk assessment in radiology: insights from the SINFONIA Project

Categories: Artificial Intelligence & Machine Learning, EuroSafe Imaging/Radiation Protection ETC Level: LEVEL II+III Date: March 1, 2024 | 09:30 - 11:00 CET CME Credits: 1.5



Moderator: John Damilakis; Iraklion / Greece

**Chairperson's introduction** (5 min) John Damilakis; Iraklion / Greece

**Innovative tools for the accurate estimation of organ doses from radiological examinations** (25 min) John Damilakis; Iraklion / Greece

Al-based algorithms for dose optimisation in CT (25 min) Habib Zaidi; Genève / Switzerland

A novel software tool for risk appraisal (25 min)

Christoph Hoeschen; Magdeburg / Germany

Discussion (10 min)









#### RC 1310 - Imaging of the shoulder

Categories: Musculoskeletal ETC Level: LEVEL I+II Date: March 1, 2024 | 09:30 - 10:30 CET CME Credits: 1

**Moderator:** Chiara Giraudo; Padova / Italy

**Chairperson's introduction** (5 min) Chiara Giraudo; Padova / Italy

**Shoulder instability** (15 min) Christoph Schäffeler; Chur / Switzerland

Rotator cuff pathology (15 min) Philip Robinson; Leeds / United Kingdom

**Other causes of shoulder pain** (15 min) Marco Zanetti; Baden / Switzerland

Panel discussion: What are the challenges in evaluating various disorders of the shoulder? (10 min)

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#### NH 13 - Cancer screening and detection: can AI change the game?

Categories: Artificial Intelligence & Machine Learning, Oncologic Imaging, Research

ETC Level: LEVEL II+III

Date: March 1, 2024 | 09:30 - 11:00 CET

#### CME Credits: 1.5

The session will include a brief overview of the role of AI in the screening of several cancer tumours. Cancer prevention, screening and early detection offer the best chance of beating cancer and saving lives. The extension of screening programmes and shortage of radiologists are jeopardising elements for the fully implementing of population-based cancer programmes. The lectures will focus on the feasibility, testing and planning of innovative AI solutions, with the identification of and addressing barriers and facilitators for the utilisation of AI in screening services within the different health systems.

#### Moderator:

Luis Marti-Bonmati; Valencia / Spain

#### Chairperson's introduction: AI and screening (5 min)

Luis Marti-Bonmati; Valencia / Spain

Al and breast cancer screening (18 min) Sarah Vinnicombe; Cheltenham / United Kingdom

Al and lung cancer screening (18 min) Bram Van Ginneken; Nijmegen / Netherlands

Al and pancreas cancer detection (18 min) Vincenza Granata; Vitulazio / Italy

Al and prostate cancer detection (18 min) Olivier Rouviere; Lyon / France

Panel discussion: Are we prepared to lead early preclinical cancer diagnosis? (13 min)







# RC 1304 - From pulmonary nodule detection to histopathological diagnosis and treatment: which route to choose?

Categories: Chest, Interventional Radiology ETC Level: LEVEL I+II Date: March 1, 2024 | 09:30 - 10:30 CET CME Credits: 1

**Moderator:** Anna Rita Larici; Rome / Italy

**Chairperson's introduction** (5 min) Anna Rita Larici; Rome / Italy

#### The endobronchial route (15 min)

Arschang Valipour; Vienna / Austria

#### The transthoracic route (15 min) Peter Beddy; Dublin / Ireland

Thermal ablation of malignant pulmonary nodules (15 min) Carole Ridge; Dublin / Ireland

Panel discussion: Building bridges between radiologists and pulmonologists in the interventional approach of pulmonary nodules (10 min)







#### RW 13 - How to improve chest CT reports

Categories: Chest, Professional Issues ETC Level: LEVEL I+II Date: March 1, 2024 | 09:30 - 10:30 CET CME Credits: 1

**Tips on improving chest CT reports** (15 min) Joe Barnett; St Albans / United Kingdom

Short cases review, interactive discussion and critiquing of reports (45 min)

Joe Barnett; St Albans / United Kingdom







#### OF 13R - Optimising practice in interventional radiology

Categories: EuroSafe Imaging/Radiation Protection, Evidence-Based Imaging, Interventional Radiology, Radiographers

Date: March 1, 2024 | 09:30 - 10:30 CET

CME Credits: 1



This session will be dedicated to providing a comprehensive exploration of key aspects in the field of interventional radiology. With four insightful talks, this session aims to enhance practice, improve safety, and elevate the quality of care in interventional radiology procedures. Whether you are an experienced practitioner or new to the field, this session offers a wealth of knowledge and practical strategies to elevate and optimise the quality of care, improve safety, and enhance patient outcomes in interventional radiology procedures.

#### Moderator:

Silvia Svetlic; Milan / Italy

#### Chairperson's introduction (5 min)

Silvia Svetlic; Milan / Italy

Bridging the gap: dose considerations in interventional radiology (12 min)

Lee O'Hora; Letterkenny / Ireland

#### How do we enhance safety in interventional imaging? (12 min)

Andrea Roletto; Milan / Italy

Top tips for radiographers performing paediatric interventional radiology procedures (12 min)

Emma Rose; London / United Kingdom

#### Strategies to enhance acute stroke patient pathways (12 min)

Lara Marie Deguara; St Pauls Bay / Malta

Open forum discussion (7 min)









# MD 6 - Advanced prostate cancer (APC): new developments in imaging and treatment - recommendations for clinical practice and directions for the future

Categories: Abdominal Viscera, Genitourinary, Multidisciplinary, Oncologic Imaging, Research ETC Level: ALL LEVELS Date: March 1, 2024 | 10:15 - 11:15 CET CME Credits: 1

Moderator: Carlo Catalano; Roma / Italy

**Chairperson's introduction** (2 min) Carlo Catalano; Roma / Italy

**The imaging specialist's perspective** (8 min) Anwar R. Padhani; Northwood / United Kingdom

**The urologist's perspective** (8 min) Francesco Sanguedolce; Barcelona / Spain

**The oncologist's perspective** (8 min) Maria De Santis; Milan / Italy

**Expert panel discussion** (34 min) Valeria Panebianco; Roma / Italy

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#### CUBE 14 - The Good, the Bad and the Ugly' - case studies in aorto-iliac intervention

Categories: Interventional Radiology Date: March 1, 2024 | 10:30 - 11:00 CET

**CME Credits:** 0.5

#### CME Credits: 0.5

#### Central IR Day - Topic Coordinator: Dr. Mohammad Tariq Ali

During the "What would you do?" sessions, an expert leads the audience through past interventions. At critical junctures in each of the cases, the audience is then asked about the course of action they would take, with the implications of different decisions then being explored.

#### Moderators:

Mohammad Tariq Ali; Norwich / United Kingdom Miltiadis Krokidis; Athens / Greece

#### Chairperson's introduction (2 min)

Mohammad Tariq Ali; Norwich / United Kingdom Miltiadis Krokidis; Athens / Greece

#### The Good, the Bad and the Ugly' - Case studies in aorto-iliac intervention (28 min)

Frank Carey; Norwich / United Kingdom







#### EFRS 6 - Collaboration and shared resources of EFRS

Categories: Management/Leadership, Multidisciplinary, Professional Issues, Radiographers

ETC Level: LEVEL I

Date: March 1, 2024 | 10:30 - 11:30 CET

#### CME Credits: 1

This session aims to gain greater knowledge of EFRS related projects and to share resources and the impacting of the development of our profession.

Moderator: Karoliina Paalimäki-Paakki; Oulu / Finland

Chairperson's Introduction (5 min) Karoliina Paalimäki-Paakki; Oulu / Finland

#### Highlights on the ECSO MRI project (10 min)

Andrew England; Cork / Ireland

#### Highlights on the EU JUST CT project (10 min)

Shane J Foley; Dublin / Ireland

#### Highlights on the EU REST project (10 min)

Francis Zarb; Msida / Malta

Discussion (20 min)

**Closing** (5 min) Karoliina Paalimäki-Paakki; Oulu / Finland









#### AI-SC 5 - Quality assurance of AI applications: which role for the medical physicist?

Categories: Artificial Intelligence & Machine Learning, Imaging Informatics, Physics in Medical Imaging Date: March 1, 2024 | 11:15 - 12:15 CET CME Credits: 1

Moderator: Hilde Bosmans; Leuven / Belgium

**Chairperson's introduction** (3 min) Hilde Bosmans; Leuven / Belgium

#### Quality assurance of AI applications: which role for the medical physicist? (57 min)

Charlotte L. Brouwer; Groningen / Netherlands









## MD 7 - Rectal cancer: new developments in imaging and treatment - recommendations for clinical practice and directions for the future

Categories: Abdominal Viscera, GI Tract, Multidisciplinary, Oncologic Imaging, Research ETC Level: LEVEL II+III Date: March 1, 2024 | 11:30 - 12:30 CET CME Credits: 1

**Moderator:** Regina G. H. Beets-Tan; Amsterdam / Netherlands

**Chairperson's introduction** (2 min) Regina G. H. Beets-Tan; Amsterdam / Netherlands

**The radiation oncologist's perspective** (8 min) Vincenzo Valentini; Rome / Italy

**The surgeon's perspective** (8 min) Geerard L. Beets; Amsterdam / Netherlands

**The radiologist's perspective** (8 min) Regina G. H. Beets-Tan; Amsterdam / Netherlands

Expert panel discussion (34 min)

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#### PL 2 - Radiology's transformation: new roles for talent and technology

Categories: Management/Leadership, Professional Issues Date: March 1, 2024 | 11:30 - 12:00 CET CME Credits: 0.5

Moderator: Carlo Catalano; Roma / Italy

**Introduction** (2 min) Carlo Catalano; Roma / Italy

Radiology's transformation: new roles for talent and technology (28 min)

Geoffrey D. Rubin; Tucson / United States









#### CUBE 15 - Strategies in the management of acute pulmonary embolism - How do I do it?

Categories: Interventional Radiology Date: March 1, 2024 | 12:00 - 12:30 CET CME Credits: 0.5 Central IR Day - Topic Coordinator: Dr. Mohammad Tariq Ali

The "Special Topic" sessions address rarer, more challenging interventions or topics of importance to daily practice.

**Moderators:** Mohammad Tariq Ali; Norwich / United Kingdom Miltiadis Krokidis; Athens / Greece

**Chairperson's introduction** (2 min) Mohammad Tariq Ali; Norwich / United Kingdom Miltiadis Krokidis; Athens / Greece

#### Strategies in the management of acute pulmonary embolism - How do I do it? (28 min)

AbdulRahman Jan Alvi; Riyadh / Saudi Arabia







#### HW 14Ma - Ultrasound of the muscles and nerves of the upper limb

Categories: Imaging Methods, Musculoskeletal

ETC Level: LEVEL I Date: March 1, 2024 | 12:30 - 13:30 CET

CME Credits: 1

To participate, a pre-congress Hands-on Workshop registration is required.

### Participants who have completed their workshop registration before ECR are requested to arrive at the workshop room 20 minutes before the scheduled start of the session to present their badge and complete their check-in.

We would like to thank our workshop sponsors. For more information click here.

Please note we will be utilising equipment from certain vendors during the workshop sessions; however, a wide range of alternative options from other vendors is also available.

In this session participants will be able:

- 1. To become familiar with muscle and nerve anatomy of the upper limb with the usual landmarks.
- 2. To develop practical skills in performing ultrasound.
- 3. To understand the main limitations of ultrasound.
- 4. To learn tricks and tips to improve daily practice.

#### Instructors (60 min)

Lionel Pesquer; Bordeaux / France Georgina Marian Allen; Oxford / United Kingdom

#### Tutors

Umberto Viglino; Genoa / Italy Maria Pilar Aparisi Gomez; Valencia / Spain Žiga Snoj; Ljubljana / Slovenia Salvatore Gitto; Milano / Italy Alberto Bazzocchi; Bologna / Italy Saulius Rutkauskas; Kaunas / Lithuania Guillaume Lefebvre; Lille / France









## HW 14Sc - Imaging strategies in acute stroke

Categories: Education, Emergency Imaging, Imaging Methods, Neuro, Vascular

ETC Level: LEVEL II+III Date: March 1, 2024 | 12:30 - 13:30 CET

CME Credits: 1

To participate, a pre-congress Hands-on Workshop registration is required.

## Participants who have completed their workshop registration before ECR are requested to arrive at the workshop room 20 minutes before the scheduled start of the session to present their badge and complete their check-in.

We would like to thank our workshop sponsors. For more information click here.

Please note we will be utilising equipment from certain vendors during the workshop sessions; however, a wide range of alternative options from other vendors is also available.

In this session participants will be able:

- 1. To become familiar with imaging algorithms for a selection of acute stroke patients for IVT and EVT.
- 2. To learn about imaging protocols based on different imaging modalities.
- 3. To develop practical skills in detecting haemorrhage and large vessel occlusion.
- 4. To develop practical skills in detecting non-salvageable infarct "core" and potentially viable brain tissue.
- 5. To become familiar with treatment strategies for stroke following the latest research guidelines.

Instructors (60 min)

Myriam Edjlali-Goujon; Paris / France Karl-Olof Loevblad; Geneva / Switzerland







## EIBIR 14 - From pixels to probes: unveiling the potential of integrated photonics in medical imaging

Categories: Imaging Methods, Neuro, Physics in Medical Imaging, Research ETC Level: LEVEL III Date: March 1, 2024 | 12:30 - 13:30 CET CME Credits: 1

**Moderator:** Antonio Pifferi; Milan / Italy

Chairperson's introduction (6 min)

Antonio Pifferi; Milan / Italy

**HyperProbe: transforming brain surgery by advancing functional-guided neuronavigational imaging** (24 min) Luca Giannoni; Sesto Fiorentino / Italy

Med-IPUT, integrated photonic ultrasound transducers (IPUTs): revolutionising medical ultrasound imaging with light (24 min) Paul van Neer; The Hague / Netherlands

Discussion (6 min)







## OF 14R - Nurturing the caregiver: prioritising radiographers' mental health and wellness

Categories: Education, Management/Leadership, Medico-legal, Professional Issues, Radiographers

Date: March 1, 2024 | 12:30 - 13:30 CET

#### **CME Credits:** 1

In the demanding landscape of healthcare, radiographers serve as the cornerstone of diagnostic and radiotherapy services, playing a pivotal role in patient care. The session centres on the crucial theme of fostering the mental health and well-being of radiography professionals and will consist of three insightful talks that collectively address the critical issue of sustaining and supporting those who dedicate their careers to caring for others. The session will examine the multifaceted challenges faced by radiographers and the collective responsibility to prioritise their mental health and wellness. Through practical tips, compassionate leadership, and resilience-building strategies, this session aims to empower radiography professionals to continue providing exceptional care while nurturing their own well-being.

#### Moderator:

Megan Brydon; HALIFAX / Canada

Chairperson's introduction (5 min)

Megan Brydon; HALIFAX / Canada

Tips for addressing staff burnout, sustainability and retention (16 min)

Dávid Sipos; Pécs / Hungary

From empathy to action: compassionate leadership in combating workplace harassment (16 min) Amy Hancock; Exeter / United Kingdom

**Building resilience: enhancing radiographers' mental health in high-stress environments** (16 min) Barry Hallinan; Dublin / Ireland

Open forum discussion (7 min)









## RC 1407 - Pros and Cons: prostate-MRI reporting should be done with the aid of AI systems

Categories: Artificial Intelligence & Machine Learning, Genitourinary, Imaging Informatics, Oncologic Imaging, Professional Issues ETC Level: LEVEL III

Date: March 1, 2024 | 12:30 - 13:30 CET CME Credits: 1

Moderator: Anwar R. Padhani; Northwood / United Kingdom

**Chairperson's introduction** (5 min) Anwar R. Padhani; Northwood / United Kingdom

**Pro** (15 min) Tobias Penzkofer; Berlin / Germany

**Con** (15 min) Maarten De Rooij; Nijmegen / Netherlands

Panel discussion: Will AI replace radiology stars, or will it be an aiding tool? (25 min)







## ESR/UEMS - The voice of the future

Categories: Education, Management/Leadership, Professional Issues, Students ETC Level: ALL LEVELS Date: March 1, 2024 | 12:30 - 13:30 CET CME Credits: 1

**Moderators:** Paolo Ricci; Roma / Italy Miraude Adriaensen; Heerlen / Netherlands

Chairpersons' introduction (3 min) Paolo Ricci; Roma / Italy Miraude Adriaensen; Heerlen / Netherlands

ESR: past, present, and future (10 min)

Adrian Brady; Cork / Ireland

UEMS: past, present, and future (10 min)

Othmar Engelbert Haas; Klagenfurt / Austria

**Opportunities and involvement of junior doctors within the UEMS Radiology Section** (8 min) Katrine Riklund; Umeå / Sweden Antanas Montvila; Kaunas / Lithuania

**Opportunities and involvement of medical students within the ESR** (8 min) Annemiek Snoeckx; Zandhoven / Belgium Anna Detoraki; Nicosia / Cyprus

**Opportunities and involvement of radiology residents within the ESR** (8 min) Anagha P. Parkar; Bergen / Norway Saif Afat; Tübingen / Germany

How to become an EDiR holder (8 min) Laura Oleaga Zufiria; Barcelona / Spain

Panel discussion: Is there a future for radiologists? (5 min)









## E<sup>3</sup> 25C - Peripheral arterial disease

Categories: Vascular ETC Level: LEVEL I+II Date: March 1, 2024 | 12:30 - 13:30 CET CME Credits: 1

Moderator: Jonathan R. Weir-Mccall; London / United Kingdom

**Chairperson's introduction** (5 min) Jonathan R. Weir-Mccall; London / United Kingdom

Atherosclerotic peripheral arterial occlusive disease (23 min)

Giles Hannibal Roditi; Glasgow / United Kingdom

Non-atherosclerotic peripheral arterial disease, including compression syndromes (23 min)

Tim Leiner; Rochester / United States

Panel discussion (9 min)









## HW 14Pa - Peripheral zone: how to detect typical and not-so-typical tumours

Categories: Genitourinary, Oncologic Imaging

ETC Level: LEVEL II+III Date: March 1, 2024 | 12:30 - 13:30 CET

**Date:** March 1, 2024 | 12.30 - 1

CME Credits: 1

To participate, a pre-congress Hands-on Workshop registration is required.

## Participants who have completed their workshop registration before ECR are requested to arrive at the workshop room 20 minutes before the scheduled start of the session to present their badge and complete their check-in.

We would like to thank our workshop sponsors. For more information click here.

Please note we will be utilising equipment from certain vendors during the workshop sessions; however, a wide range of alternative options from other vendors is also available.

In this session participants will be able:

- 1. To understand the importance of optimal image quality for prostate MRI interpretation.
- 2. To become familiar with the typical features of PI-RADS 4 and 5 lesions.

3. To develop practical skills in minimising PI-RADS 3 lesions.

**Instructors** (60 min) Tristan Barrett; Cambridge / United Kingdom Philippe Puech; Lille / France









## RC 1411 - When neuro meets musculoskeletal: the craniocervical junction

Categories: Emergency Imaging, Musculoskeletal, Neuro ETC Level: LEVEL II+III Date: March 1, 2024 | 12:30 - 13:30 CET CME Credits: 1

**Moderator:** Alexis Kelekis; Athens / Greece

**Chairperson's introduction** (5 min) Alexis Kelekis; Athens / Greece

Anatomy, normal variants and congenital pathology of the craniocervical junction (15 min) Andrea Rossi; Genoa / Italy

Traumatic findings at the craniocervical junction (15 min)

Üstün Aydingöz; Ankara / Turkey

**Inflammatory and tumoral lesions at the craniocervical junction** (15 min) Cem Çalli; Izmir / Turkey

Panel discussion: Craniocervical junction: the terrain of musculoskeletal, neuro or both? (10 min)







## RPS 1415 - Exploring imaging and interventional treatment of atherosclerotic lesions: fresh perspectives

Categories: Cardiac, Imaging Methods, Interventional Radiology, Vascular Date: March 1, 2024 | 12:30 - 13:30 CET CME Credits: 1

Moderator: Irene Bargellini; Candiolo / Italy

Semi-automatic measurement of carotid intima-media thickness in atherosclerosis (7 min)

Jiatong Xu; Shanghai / China

Accuracy of an artificial intelligence-based algorithm for fully automated detection of aortic wall calcifications in chest **CT** (7 min)

Christopher Schuppert; Heidelberg / Germany

Quantitative parameters from dual-layer detector spectral CT (DLS-CT) in distinguishing non-calcified plaques and chronic total occlusion (CTO) components in lower limb arteries (7 min) Li Zhou; Xi'an / China

Voxel-based calcified plaque analysis: a comparison between a novel silicon-based photon-counting CT prototype, a conventional energy-integrating detector CT and µCT (7 min)

Emma Verelst; Brussels / Belgium

Role of dual-energy computed tomography (DECT) in detection of carotid artery monosodium urate deposition in patients with gout (7 min)

Muhammad Danish Sarfraz; Vancouver / Canada

Correlation between carotid NASCET-stenosis and plaque quality as characterised by the new Plaque-RADS score (7 min) Gian Luca Chabert; Cagliari / Italy

Imaging of the aorta in dual-source photon-counting CT: impact of low energy virtual monoenergetic imaging on image quality, vascular contrast and diagnostic assessability (7 min)

Ibrahim Yel; Frankfurt a. Main / Germany









## **RPS 1416 - Latest CT technology in oncologic imaging**

Categories: Artificial Intelligence & Machine Learning, Imaging Methods, Oncologic Imaging Date: March 1, 2024 | 12:30 - 13:30 CET CME Credits: 1

## Moderator:

Damiano Caruso; Roma / Italy

## **Rho/Z maps derived from dual-energy CT for differentiation of hypodense liver lesions in patients with colorectal carcinoma** (7 min)

Mirela Dimitrova; Frankfurt a. Main / Germany

**Photon-counting CT in depicting pancreatic ductal adenocarcinoma (PhDAC): a pilot study** (7 min) Mischa Woisetschlager; Linköping / Sweden

Correlation between iodine concentration in lung cancer on dual-energy CT and non-mucinous adenocarcinoma grading (7 min) Hikaru Watanabe; Tokyo / Japan

Deep learning-based iodine contrast-augmenting algorithm for low-contrast-dose liver CT to assess hypovascular hepatic metastasis (7 min) Taehee Lee; Seoul / Korea, Republic of

The value of dual-layer spectral-detector CT in detecting neuroendocrine tumour liver metastases: comparison with polyenergetic CT and Gd-EOB-DTPA-enhanced MR (7 min)

Tiansong Xie; Shanghai / China

Photon-counting computed tomography derived spectral reconstructions: a promising approach to diminish beamhardening artefacts in thoracic imaging (7 min)

Florian Haag; Heidelberg / Germany







#### **RPS 1404 - From diagnosis to prognosis: chest imaging**

Categories: Artificial Intelligence & Machine Learning, Chest, Imaging Methods, Vascular Date: March 1, 2024 | 12:30 - 13:30 CET CME Credits: 1

**Moderator:** Galit Aviram; Tel-Aviv / Israel

Al vs senior radiologists in detecting thoracic abnormalities on chest radiographs compared to CT (7 min) Nor-Eddine Regnard; Paris / France

Impact of the recent global iodinated contrast agent shortage on positivity rate for pulmonary embolism in CT pulmonary angiograms and chest CT with contrast at two major US health care systems (7 min) Axel Wismueller; Pittsford / United States

Correlation between postoperative pulmonary venous congestion on chest radiograph and outcome after cardiac transplantation (7 min) Charlotte Sonja Böttger; Düsseldorf / Germany

Comparison of two CT-derived methods to assess alveolar collapse as a potential prognostic imaging marker in pulmonary fibrosis (7 min) Hoen-oh Shin; Hannover / Germany

**Effect of inspiratory lung volume on bronchial and arterial dimensions on chest CT** (7 min) Yuxin Chen; Rotterdam / Netherlands

Quantitative CT characterises baseline regional structure and function in idiopathic pulmonary fibrosis patients with one-year diffusing capacity decline (7 min) Hongseok Ko; Seoul / Korea, Republic of

Default vs selective application of artificial intelligence to classify viral pneumonia on CT imaging: impact on human performance (7 min) Francesco Rizzetto; Rho / Italy







#### **RPS 1411 - Neuroimaging in white matter disease**

Categories: Artificial Intelligence & Machine Learning, Imaging Informatics, Imaging Methods, Neuro, Research, Vascular Date: March 1, 2024 | 12:30 - 13:30 CET **CME Credits:** 1

#### Moderator:

Radosław Zawadzki; Białystok / Poland

A novel 7T MRI approach to detect posterior fossa demyelinating lesions in patients with multiple sclerosis (7 min) Lela Okromelidze; Jacksonvill / United States

Comparative analysis of three commercially available artificial intelligence software programmes for brain volumetry and lesion segmentation in multiple sclerosis and dementia (7 min) Antonio Di Gioia; L'Aquila / Italy

Effect of AI supported lesion detection in MS patients on reporting times (7 min) Sönke Peters; Altenholz / Germany

Brain white matter microstructural alterations in Behcet's patients correlate with cognitive impairment: a diffusion tensor imaging (DTI) study (7 min) Osman Aykan Kargin; Istanbul / Turkey

Usefulness of automatic fully convolutional neural network algorithm (TractSeg) in DTI determining cerebral white matter integrity in patients with primary Sjögren's syndrome (7 min)

Michał Sobański; Wrocław / Poland

Quantitative assessment of lesion-cerebral cortex signal ratio in FLAIR sequence for discriminating white matter lesions from non-specific T2 hyperintensities in systemic lupus erythematosus (7 min) Alperen Tezcan; Malatya / Turkey

Relationship between nutritional status and white matter integrity in the geriatric population: a retrospective DTI Study (7 min) Naz Atila; Istanbul / Turkey

Cerebral microstructural white matter changes measured by diffusion tensor imaging in asymptomatic carotid endarterectomy patients: a prospective study into predictors and correlation with vascular anatomy (7 min) Csongor Péter; Budapest / Hungary







## EIBALL 14 - Clinical validation of DWI as imaging biomarkers

Categories: Imaging Methods, Oncologic Imaging, Physics in Medical Imaging ETC Level: LEVEL II Date: March 1, 2024 | 12:30 - 13:30 CET CME Credits: 1

Moderator: Nandita Desouza; London / United Kingdom

**Chairperson's introduction** (5 min) Nandita Desouza; London / United Kingdom

**Problems related to the DWI as a quantitative imaging biomarker** (15 min) Nandita Desouza; London / United Kingdom

**QIBA Profile on DWI** (15 min) Michael Boss; Boulder / United States

How to conform to the QIBA Profile (15 min) Gudrun Zahlmann; Oak Brook / United States

Panel discussion: Is the QIBA DWI Profile ready for clinical use? (10 min)







## BS 14 - Abdominal viscera: imaging the liver

Categories: Abdominal Viscera, General Radiology, Imaging Methods ETC Level: LEVEL II Date: March 1, 2024 | 12:30 - 13:30 CET CME Credits: 1

**Moderator:** Nikolaos Kartalis; Stockholm / Sweden

**Chairperson's introduction** (3 min) Nikolaos Kartalis; Stockholm / Sweden

**Imaging diffuse liver disease** (19 min) Maxime Ronot; Paris / France

**Imaging of cystic liver lesions** (19 min) Valérie Vilgrain; Clichy / France

**Imaging of solid liver lesions** (19 min) Giuseppe Brancatelli; Palermo / Italy









# MD 8 - Breast cancer: image-guided treatment de-escalation/optimisation - recommendations for clinical practice and directions for the future

Categories: Breast, Multidisciplinary, Oncologic Imaging, Research ETC Level: ALL LEVELS Date: March 1, 2024 | 12:45 - 13:45 CET CME Credits: 1

Moderator: Ritse Maarten Mann; Nijmegen / Netherlands

Chairperson's introduction (2 min) Ritse Maarten Mann; Nijmegen / Netherlands

**The surgeon's perspective** (8 min) Isabel T. Rubio; Madrid / Spain

**The oncologist's perspective** (8 min) Willemien Menke-van der Houven van Oordt; Amsterdam / Netherlands

**The radiologist's perspective** (8 min) Michael Fuchsjäger; Graz / Austria

Expert panel discussion (34 min)







## **CUBE 16 - Hybrid Operating Room: Experiences and Challenges**

Categories: Interventional Radiology Date: March 1, 2024 | 13:00 - 13:30 CET CME Credits: 0.5

The "EFRS @ the Cube" sessions focus on current radiography topics in interventional radiology.

## Hybrid Operating Room: Experiences and Challenges (30 min)

Silvia Svetlic; Milan / Italy









## RPS 1509 - Advanced imaging and challenging interventions in the liver

Categories: Artificial Intelligence & Machine Learning, Interventional Oncologic Radiology, Interventional Radiology, Vascular Date: March 1, 2024 | 14:00 - 15:30 CET CME Credits: 1.5

#### Moderator:

Aleksandar Gjoreski; Skopje / North Macedonia

Trans-splenic antegrade coil-assisted transvenous occlusion (TACATO) of gastric varices associated with gastro-renal shunt in cirrhosis: a single-centre prospective preliminary study (7 min) Stefano Groff; Padova / Italy

Factors impacting survival after transarterial radioembolisation in patients with intrahepatic cholangiocarcinoma: a combined analysis of the prospective CIRT and CIRT-FR studies (7 min) Peter Reimer; Karlsruhe / Germany

Simultaneous portal and hepatic vein embolisation in inducing future liver remnant hypertrophy: the impact of steatosis in hepatic regeneration (7 min) Domenico Santangelo; Milan / Italy

CT-guided high-dose-rate brachytherapy induces systemic proteins of proliferation and angiogenesis predicting outcome in HCC (7 min) Matthias Max Rudolf Stechele; Munich / Germany

Transjugular intrahepatic porto-systemic shunt in paediatric patients: comparison between standard approach and alternative techniques (7 min) Paolo Marra: Borramo / Italy

Paolo Marra; Bergamo / Italy

Feasibility, safety and mid-term outcomes of non-expandable biodegradable biliary stents in paediatric liver transplants (7 min) Paolo Marra; Bergamo / Italy

Role of different stent types in endoluminal IRE for recanalization of an occluded metal stent: mathematical model of temperature distribution (7 min)

Peter Matkulcik; Brno / Czechia

Multiparametric MRI-based radiomics nomogram predicts the recurrence of hepatocellular carcinoma after postoperative adjuvant transarterial arterial chemoembolisation (PA-TACE) (7 min) Xinyu Guo; Lishui / China









The challenge of percutaneous recanalisation of chronic portal vein thrombosis: from the lack of evidence to clinical experience (7 min) Paolo Marra; Bergamo / Italy

Improved identification of good candidates for the treatment of intermediate/advanced hepatocellular carcinoma by Yttrium-90 transarterial radioembolisation (7 min) Inès Oreistein; Angers / France

Al-derived body composition parameters as prognostic factors in patients with HCC undergoing TACE: results from a multicentre study (7 min) Lukas Müller; Mainz / Germany

**TARE of "multipedicular" malignant liver tumours: can we redistribute the blood flow?** (7 min) Rachele Fruzza; Pisa / Italy









## RPS 1501 - Insights in pancreatic imaging with current and novel techniques

Categories: Abdominal Viscera, Imaging Methods, Oncologic Imaging Date: March 1, 2024 | 14:00 - 15:30 CET CME Credits: 1.5

Moderator: Nikolaos Kartalis; Stockholm / Sweden

**T1** and **T2** mapping quantitative MRI in the characterisation of pancreatic cystic lesions: preliminary results (7 min) Alessandro Beleù; Treviso / Italy

**Development and validation of an imaging-based model to predict the malignant potential of intraductal papillary mucinous neoplasm of the pancreas: comparison with international consensus guidelines** (7 min) Junghoan Park; Seoul / Korea, Republic of

**Common imaging findings and clinical effects of high-grade pancreatic intraepithelial neoplasia in the remnant pancreas in patients with intraductal papillary mucinous neoplasms of the pancreas** (7 min) Jung Hoon Kim; Seoul / Korea, Republic of

**Prediction of tumour cellularity in resectable PDAC from preoperative computed tomography imaging** (7 min) Friederike Jungmann; Munich / Germany

A nomogram based on contrast-enhanced CT radiomics to preoperatively predict perineural invasion for patients with pancreatic adenocarcinoma (7 min)

Yan Deng; Chengdu / China

Evaluation of the efficacy of neoadjuvant chemotherapy in pancreatic ductal adenocarcinoma by three-dimensional quantitative analysis of spectral CT (7 min) Dan Zhang; Chongqing / China

Utility of conventional CT and MRI parameters in grading the severity of chronic pancreatitis: can delayed enhancement ratio be the guiding light? (7 min) Mohak Narang; New Delhi / India

Intra- and interpatient variability of iodine concentration in pancreatic parenchyma for individualised contrast agent application protocols in dual-layer spectral CT (7 min)

Mathis Franz Georg Konrad; Heidelberg / Germany

Quantitative image analysis in pancreatic cancer: might contrast agents become redundant? (7 min)







Jennifer Gotta; Frankfurt a. Main / Germany



VIENNA / FEBRUARY 28 - MARCH 03







## SF 15c - Low-dose effects on human health

Categories: Breast, Chest, EuroSafe Imaging/Radiation Protection, Research

ETC Level: LEVEL II Date: March 1, 2024 | 14:00 - 15:30 CET

CME Credits: 1.5



The session will provide an overview of the current knowledge on low-dose effects on human health, followed by presentations on screening (breast and lung) to clarify the radiogenic risk in this context and on patient perspectives. A panel discussion will focus on technological advances' impact on the current dose levels.

#### Moderators:

Guy Frija; Paris / France Virginia Tsapaki; Vienna / Austria

**Chairpersons' introduction** (5 min) Guy Frija; Paris / France

Virginia Tsapaki; Vienna / Austria

An overview of the current knowledge on the low-dose effects on human health (20 min)

Dominique Laurier; Fontenay aux Roses / France

#### Insights on CT lung screening and radiation dose (20 min)

Mahadevappa Mahesh; Baltimore / United States

#### The latest advances in breast mammography screening radiation dose (20 min)

Ioannis Sechopoulos; Nijmegen / Netherlands

**The patient's perspectives** (15 min) Erik Briers; Hasselt / Belgium

#### Panel discussion: How technology progresses are contributing to lowering the doses? (10 min)

Boris Brkljačić; Zagreb / Croatia Mahadevappa Mahesh; Baltimore / United States Ioannis Sechopoulos; Nijmegen / Netherlands John Damilakis; Iraklion / Greece Reinhard W.R. Loose; Nürnberg / Germany Erik Briers; Hasselt / Belgium Dominique Laurier; Fontenay aux Roses / France









#### **RPS 1507 - Prostate imaging and cancer management**

Categories: Genitourinary, Multidisciplinary, Oncologic Imaging Date: March 1, 2024 | 14:00 - 15:30 CET CME Credits: 1.5

Moderator:

Vibeke Berg Logager; Herlev / Denmark

Clinically significant prostate cancer detection of MRI in-bore biopsy after negative targeted plus systematic MRI/US fusions-guided biopsy (7 min)

Matthias Boschheidgen; Düsseldorf / Germany

Magnetic resonance imaging characteristics and oncological follow-up of patients with high grade prostate cancer (7 min)

Matthias Boschheidgen; Düsseldorf / Germany

Five-year outcomes after transurethral ultrasound ablation (TULSA) of localised prostate cancer (7 min) Jurgen Fütterer; Nijmegen / Netherlands

Expect the unexpected: unveiling discrepancies in prostate cancer diagnosis with an MRI-pathology discordance analysis (7 min) Arnaldo Stanzione; Napoli / Italy

Integrated diagnostics for the detection of prostate cancer through the integration of data derived from a breath analysis device, MRI, and molecular analysis: a proof-of-concept study (7 min) Martina Pecoraro; Rome / Italy

Surveillance of one-year post-focal cryotherapy for clinically significant prostate cancer using mpMRI and PIRADS v2.1: an initial experience from a prospective phase II mandatory biopsy study (7 min) Jyothirmayi Velaga; Singapore / Singapore

Diagnostic performance of PSMA-PET/CT and multiparametric MRI assessed using the PI-RR scoring system for the detection of prostate cancer local recurrence and lymph node metastases (7 min) Ludovica Laschena; Rome / Italy

Effect of preoperative PI-RADS assessment on pathological outcomes in patients who underwent radical prostatectomy (7 min) Li Chen; Beijing / China









ProstaPilot: prostate cancer screening by magnetic resonance imaging with a biparametric protocol, preliminary cohort analysis after the first screening round (7 min) Michal Standara; Brno / Czechia

Reduction of total perfusion of prostatic adenoma following prostate artery embolisation for benign prostatic hyperplasia (BPH) (7 min) Ailin Dehghanpour; Rome / Italy

Oncological and functional outcomes following MicroUS-guided focal laser ablation of localised prostate cancer: comparison of single and multi-laser fibers settings (7 min) François Cornud; Paris / France

**The accuracy of the MRI pathway in the detection of index prostate cancer lesion: a single-centre experience** (7 min) Selahattin Durmaz; Istanbul / Turkey







## E<sup>3</sup> 1518 - Vascular imaging: all you need to know (case-based session)

Categories: Emergency Imaging, Imaging Methods, Vascular

ETC Level: ALL LEVELS

Date: March 1, 2024 | 14:00 - 15:30 CET

## CME Credits: 1.5

At the end of this session, participants will be able to determine which imaging modality is preferred for suspected vascular disease. They should know how to assess the important imaging features in carotid and peripheral artery disease and how to contrast the imaging findings of acute versus chronic aortic disease.

#### Moderator:

Birgitta K Velthuis; Utrecht / Netherlands

Chairperson's introduction (6 min)

Birgitta K Velthuis; Utrecht / Netherlands

## Carotid disease: how to evaluate? (28 min)

Rodrigo Salgado; Antwerpen / Belgium

Aortic disease: acute or not? (28 min) Nicola Galea; Roma / Italy

## Peripheral artery disease: getting to the bottom (28 min)

Giles Hannibal Roditi; Glasgow / United Kingdom







## E<sup>3</sup> 1519 - US: beyond old limitations

Categories: Artificial Intelligence & Machine Learning, Imaging Methods ETC Level: LEVEL III Date: March 1, 2024 | 14:00 - 15:30 CET CME Credits: 1.5

**Moderator:** Vito Cantisani; Roma / Italy

**Chairperson's introduction** (5 min) Vito Cantisani; Roma / Italy

**A tour around new US technology** (25 min) Maija Radzina; Riga / Latvia

CEUS: from qualitative to quantitative approach (25 min)

Jean Michel Correas; Paris / France

The ultimate frontiers of AI in the US (25 min) Thomas Fischer; Berlin / Germany

**Discussion** (10 min)







#### RPS 1511 - Parkinson's, movement disorders, spine and nerve imaging

Categories: Artificial Intelligence & Machine Learning, Neuro, Research Date: March 1, 2024 | 14:00 - 15:30 CET CME Credits: 1.5

Assessment of nerve root compression and dorsal root ganglia in patients with radiculopathy using 7 Tesla MR imaging (7 min) Georg Constantin Feuerriegel; Zurich / Switzerland

Accuracy of automated Al-driven susceptiblity map-weighted MRI analyses for neurodegenerative Parkinsonism (7 min) Elon Wallert; Amsterdam / Netherlands

Functional brain connectivity in patients with de novo Parkinson's disease based on rs-fMRI (7 min) Noemi Pucci; Rome / Italy

Diagnostic value of quantitative susceptibility mapping in assessing iron deposition in the basal ganglia of patients with Parkinson's disease (7 min) Vahid Shahmaei; Tehran / Iran

Human visual nigrosome analysis improves AI-based diagnoses in neurodegenerative disease (7 min) Ebru Sayilir; Saint Martin D'Heres / France

Is pure akinesia with gait freezing associated with more ventriculomegaly in brain MRI than other subtypes of progressive supranuclear palsy? (7 min) Marcos Jiménez Vázquez; Pamplona / Spain

Early re-emerging tremor after MRgFUS thalamotomy: case-control analysis of procedural and imaging features (7 min) Pierfrancesco Badini; L'Aquila / Italy

Resting-state brain connectivity in patients with essential tremor undergoing vim ablation with MRgFUS: preliminary results (7 min) Filippo Colarieti; L'Aquila / Italy

**Changes to the peripheral nervous system in chronic spinal cord injury: a study on 3T MR neurography** (7 min) Johann Malte Enno Jende; Heidelberg / Germany

Al-based three-dimensional analysis of lumbar vertebrae micromovements in spondylolisthesis patients with weightbearing MRI (7 min)







Luca Alessandro Cappellini; Pieve Emanuele / Italy



VIENNA / FEBRUARY 28 - MARCH 03

## Neurite orientation dispersion and density imaging quantifies microstructural impairment in the thalamus and its connectivity in amyotrophic lateral sclerosis (7 min)

Yun-bin Cao; Fuzhou / China







## SF 15d - MRI-based synthetic CT and CT-like

Categories: Imaging Methods, Musculoskeletal ETC Level: LEVEL II+III Date: March 1, 2024 | 14:00 - 15:30 CET CME Credits: 1.5

**Moderator:** Alain Blum-Moyse; Nancy / France

**Chairperson's introduction** (5 min) Alain Blum-Moyse; Nancy / France

**Current strategies in constituting artificial CT images** (20 min) Pedro Augusto Gondim Teixeira; LAXOU / France

Applications in large joints (20 min) Lieve Morbee; Ghent / Belgium

**CT-like MRI and synthetic CT in inflammatory disorders: opportunities and limitations** (20 min) Georg Constantin Feuerriegel; Zurich / Switzerland

Panel discussion: MRI-based CT: what are the benefits and drawbacks? (25 min)







## RC 1503 - Imaging challenging cardiomyopathies

Categories: Cardiac, Contrast Media, Imaging Methods, Professional Issues ETC Level: LEVEL II+III Date: March 1, 2024 | 14:00 - 15:00 CET CME Credits: 1

Moderator: Maja Hrabak Paar; Zagreb / Croatia

**Chairperson's introduction** (5 min) Maja Hrabak Paar; Zagreb / Croatia

**The added value of dark-blood late gadolinium enhancement** (15 min) Robert J. Holtackers; Maastricht / Netherlands

Arrhythmogenic ventricular cardiomyopathy in the light of the PADUA criteria (15 min) Marco Francone; Milan / Italy

New horizons for imaging cardiomyopathies (15 min) Declan O'Regan; London / United Kingdom

Panel discussion: How to recognise and approach non-ischaemic cardiomyopathies (10 min)







## PC 15a - My journey in radiology research and lessons I learned for next-generation radiology

Categories: Education, Management/Leadership, Professional Issues, Research, Students

ETC Level: ALL LEVELS

Date: March 1, 2024 | 14:00 - 15:00 CET

## CME Credits: 1

The speakers, with years of professional experience in radiology, present and share how they have pioneered and gotten involved in various radiology research projects throughout their careers. Some projects turned out to be successful and impactful, while other projects phased out. Speakers would provide personal critical assessments on the outcome of their research projects and take-home lessons that could be valuable in developing roadmaps for next-generation radiology.

#### **Moderator:**

K.TY Bae; Hong Kong / Hong Kong SAR China

Chairperson's introduction (5 min)

K.TY Bae; Hong Kong / Hong Kong SAR China

#### It is never too late and not always a straight line (15 min)

Cindy Chew; Glasgow / United Kingdom

## Trial, success, failure, persistence (15 min)

K.TY Bae; Hong Kong / Hong Kong SAR China

#### What I would have done differently (and what not) (15 min)

Mathias Prokop; Nijmegen / Netherlands

Panel discussion: Back to the future (10 min)







## **OF 15R - EFRS Patient-Centred Care Awards**

Categories: Management/Leadership, Professional Issues, Radiographers Date: March 1, 2024 | 14:00 - 15:00 CET CME Credits: 1

Moderator: Andrew England; Cork / Ireland

**Chairperson's introduction** (5 min) Andrew England; Cork / Ireland

**Improving patient care: where are we and where should we go?** (10 min) Patrizia Cornacchione; Rome / Italy

Role of the patient advocates in improving patient care (10 min) Cheryl Cruwys; Haute Vienne / France

EFRS 2023 PCC winner. Identification and management of patients exposed to a significant radiation dose from a fluoroscopy-guided interventional procedure: an initiative at Beaumont Hospital to enhance patient safety (10 min) Jose Jr Binghay; Dublin / Ireland

EFRS 2023 PCC runner-up. Introduction of dog therapy (animal-assisted intervention (AAI)) in radiotherapy setting to support and enhance patient wellbeing (10 min) Kate Fitzgerald; Cork / Ireland

Panel discussion: How can we effectively promote PCC initiatives at a European level? (15 min)







## CUBE 17 - EVAR nightmares: How to stay calm!

Categories: Interventional Radiology Date: March 1, 2024 | 14:00 - 14:30 CET CME Credits: 0.5

## Advanced Session - Topic Coordinator: Prof. Miltiadis Krokidis

The "Advanced Session: The Extra Mile" introduces the audience to techniques and treatments offered for challenging cases where an out-of-the-box approach was required or where there has been an impactful learning point for clinical practice.

**Moderator:** Miltiadis Krokidis; Athens / Greece

**Chairperson's introduction** (2 min) Miltiadis Krokidis; Athens / Greece

## EVAR nightmares: How to stay calm! (28 min)

Hicham Kobeiter; Créteil / France









## PC 15b - Implementation and effectiveness of AI in practice

Categories: Artificial Intelligence & Machine Learning, Radiographers Date: March 1, 2024 | 14:00 - 15:30 CET CME Credits: 1.5

**Moderators:** Elmar Kotter; Freiburg / Germany Graciano Paulo; Coimbra / Portugal

**Chairpersons' introduction** (5 min) Elmar Kotter; Freiburg / Germany Graciano Paulo; Coimbra / Portugal

Tips and pitfalls for bringing AI into practice (15 min)

Janni Jensen; Odense / Denmark

## Methods for evaluating the effectiveness of AI (15 min)

Benoît Rizk; Villars-sur-Glane / Switzerland

**The role of educating the medical imaging workforce for clinical adoption of AI** (15 min) Christina Malamateniou; London / United Kingdom

Use of AI to help radiographers enhance patient experience (15 min) Mark F. McEntee; Cork / Ireland

Panel discussion: How can radiographers embrace AI implementation in practice? (25 min)







# MD 9 - Head and neck cancer: new developments in imaging and treatment - recommendations for clinical practice and directions for the future

Categories: Head and Neck, Multidisciplinary, Oncologic Imaging, Research ETC Level: ALL LEVELS Date: March 1, 2024 | 14:00 - 15:00 CET CME Credits: 1

Moderator: Minerva Becker; Geneva / Switzerland

**Chairperson's introduction** (2 min) Minerva Becker; Geneva / Switzerland

**The head and neck surgeon's perspective** (10 min) Michiel van den Brekel; Amsterdam / Netherlands

**The radiologist's perspective** (10 min) Roberto Maroldi; Concesio / Italy

Expert panel discussion (38 min)









## E<sup>3</sup> 1521 - Practical applications of radiomics

Categories: Breast, Interventional Oncologic Radiology, Oncologic Imaging ETC Level: LEVEL III Date: March 1, 2024 | 14:00 - 15:30 CET CME Credits: 1.5

**Breast cancer** (45 min) Pascal A.T. Baltzer; Vienna / Austria

**Ovarian cancer** (45 min) Evis Sala; Rome / Italy









## Meets 15 - The importance of the radiologist as part of a medical team: Qatar 2022 experience

Categories: Education, Imaging Methods, Interventional Radiology, Multidisciplinary, Musculoskeletal

ETC Level: LEVEL II+III Date: March 1, 2024 | 14:00 - 15:00 CET CME Credits: 1

Moderators:

Carlo Catalano; Roma / Italy Eduardo Pablo Eyheremendy; Buenos Aires / Argentina Alejandro Ulises Rolón; Buenos Aires / Argentina

Introduction (10 min)

Carlo Catalano; Roma / Italy Eduardo Pablo Eyheremendy; Buenos Aires / Argentina Alejandro Ulises Rolón; Buenos Aires / Argentina

MRI and ultrasound in sports pathology: allied methods (15 min)

Agustin Manuel Marrero; LA PLATA / Argentina

**Muscle injuries in high-performance athletes** (15 min) Tomas Pascual; Buenos aires / Argentina

Road to Qatar 2022: world in victory (15 min)

Alejandro Ulises Rolón; Buenos Aires / Argentina

Panel discussion (5 min)







#### SF 15b - Validity of explainable AI and model trustworthiness

Categories: Artificial Intelligence & Machine Learning, Imaging Informatics, Physics in Medical Imaging

ETC Level: LEVEL III Date: March 1, 2024 | 14:00 - 15:30 CET CME Credits: 1.5

**Moderator:** Federica Zanca; Leuven / Belgium

**Chairperson's introduction** (5 min) Federica Zanca; Leuven / Belgium

Assessing the trustworthiness of saliency maps as a tool to increase clinical explainability of AI radiology models (25 min) Kostas Marias; Heraklion, Crete / Greece

Generation of visual counterfactual explanation for classification problems in (medical) imaging (25 min) Gaspard D'Assignies; Nantes / France

Quantifying explainability: does it improve clinical acceptance of AI? (25 min) Alberto Traverso; Milan / Italy

Panel discussion: Who should care about explainability? Is explainability the best choice, or should we invest resources in developing inherently interpretable and transparent models? (10 min)







## HW 15Ma - Ultrasound of the muscles and nerves of the upper limb

Categories: Imaging Methods, Musculoskeletal

ETC Level: LEVEL I Date: March 1, 2024 | 14:00 - 15:00 CET

CME Credits: 1

To participate, a pre-congress Hands-on Workshop registration is required.

# Participants who have completed their workshop registration before ECR are requested to arrive at the workshop room 20 minutes before the scheduled start of the session to present their badge and complete their check-in.

We would like to thank our workshop sponsors. For more information click here.

Please note we will be utilising equipment from certain vendors during the workshop sessions; however, a wide range of alternative options from other vendors is also available.

In this session participants will be able:

- 1. To become familiar with muscle and nerve anatomy of the upper limb with the usual landmarks.
- 2. To develop practical skills in performing ultrasound.
- 3. To understand the main limitations of ultrasound.
- 4. To learn tricks and tips to improve daily practice.

#### Instructors (60 min)

Lionel Pesquer; Bordeaux / France Georgina Marian Allen; Oxford / United Kingdom

#### Tutors

Umberto Viglino; Genoa / Italy Maria Pilar Aparisi Gomez; Valencia / Spain Žiga Snoj; Ljubljana / Slovenia Salvatore Gitto; Milano / Italy Alberto Bazzocchi; Bologna / Italy Amanda Isaac; London / United Kingdom Saulius Rutkauskas; Kaunas / Lithuania









# HW 15Ca - Coronary artery disease and myocardial ischaemia: imaging, diagnosis, and reporting

Categories: Cardiac, Imaging Methods, Vascular ETC Level: LEVEL III Date: March 1, 2024 | 14:00 - 15:30 CET CME Credits: 1.5 To participate, a pre-congress Hands-on Workshop registration is required.

Participants who have completed their workshop registration before ECR are requested to arrive at the workshop room 20 minutes before the scheduled start of the session to present their badge and complete their check-in.

#### Moderator:

James Shambrook; Winchester / United Kingdom

#### Chairperson's introduction (10 min) James Shambrook; Winchester / United Kingdom

Instructors (80 min) Marco Rengo; Roma / Italy Michelle Claire Williams; Edinburgh / United Kingdom Federica Catapano; Milan / Italy







# SF 15a - The future of interventional radiology (IR) is clinical

Categories: Education, Interventional Radiology, Management/Leadership, Multidisciplinary, Professional Issues

ETC Level: LEVEL II Date: March 1, 2024 | 14:00 - 15:30 CET CME Credits: 1.5

**Moderator:** Christoph Binkert; zurich / Switzerland

**Chairperson's introduction** (5 min) Christoph Binkert; Zurich / Switzerland

IR as a clinical speciality (15 min) Raman Uberoi; Oxford / United Kingdom

**Training future IRs** (15 min) Afshin Gangi; Strasbourg / France

**Cornerstones of IR practice** (15 min) Andreas H. Mahnken; Marburg / Germany

What are the expected community and social benefits of an IR team (15 min) Roberto lezzi; Roma / Italy

Panel discussion: Different ways to implement clinical IR: experience from the speakers (25 min)







# IIQ - The Radiology Odyssey: a journey home through challenges and cases

Categories: Cardiac, General Radiology, Oncologic Imaging, Paediatric

ETC Level: LEVEL ||+|||

Date: March 1, 2024 | 14:00 - 15:30 CET

### CME Credits: 1.5

Join us in this year's Image Interpretation Quiz in which we will help Odysseus return to Ithaca by answering different intricate and interactive cases correctly.

#### Moderator:

Konstantin Nikolaou; Tuebingen / Germany

#### Introduction (5 min) Konstantin Nikolaou; Tuebingen / Germany

# Radiology Odyssey (80 min)

Tilman Stephan Emrich; Mainz / Germany Bibi Martens; Maastricht / Netherlands Alexandra A. Ntorkou; Paris / France Vasileios G Xydis; Ioannina / Greece Vicky Goh; London / United Kingdom Melvin D'Anastasi; Mosta / Malta

**Closing words** (5 min) Konstantin Nikolaou; Tuebingen / Germany









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# ESR Audit - Adding value in European radiology: developing national clinical audit infrastructure

Categories: Audit, EuroSafe Imaging/Radiation Protection, Evidence-Based Imaging ETC Level: ALL LEVELS Date: March 1, 2024 | 14:00 - 15:30 CET CME Credits: 1.5



**Moderator:** Roman Klöckner; Lübeck / Germany

**Chairperson's introduction** (5 min) Roman Klöckner; Lübeck / Germany

QuADRANT: definitions and proposed clinical audit models (15 min) Alexandra Karoussou-Schreiner; Luxembourg / Luxembourg

The UK model of national clinical audit (15 min) David Howlett; Eastbourne / United Kingdom

**The Finnish model of national clinical audit** (15 min) Petro Julkunen; Kuopio / Finland

Swiss perspective on the clinical audit (15 min) Manuel Bondini; Lugano / Switzerland

The role of the ESR national professional societies in developing European clinical audit (15 min) Andrea Grace Rockall; Godalming / United Kingdom

Panel discussion: Is a European radiological clinical audit network a realistic possibility? (10 min)









# EFRS 7 - Quiz for Radiographers/Technologists not specialized in Nuclear Medicine

Categories: Nuclear Medicine, Professional Issues, Radiographers

ETC Level: LEVEL I

Date: March 1, 2024 | 15:00 - 16:00 CET

This session is an excellent opportunity and time to introduce EFRS Nuclear Medicine Committee, get to know colleagues, and explore possibilities for committee integration.

**Moderator:** Ana Geão; Montijo / Portugal

Chairperson's Introduction (5 min)

Ana Geão; Montijo / Portugal

#### Quiz for Radiographers/Technologists not specialized in Nuclear Medicine (50 min)

**Closing** (5 min) Ana Geão; Montijo / Portugal









# AI-SC 6 - Quality assurance (QA) vs Post-market surveillance (PMS) of AI tools

Categories: Artificial Intelligence & Machine Learning, Audit, Imaging Informatics, Physics in Medical Imaging Date: March 1, 2024 | 15:00 - 16:00 CET CME Credits: 1

#### Moderators:

Hilde Bosmans; Leuven / Belgium Mansoor Fatehi; Tehran / Iran

### Chairperson's introduction (3 min)

Hilde Bosmans; Leuven / Belgium Mansoor Fatehi; Tehran / Iran

### Panel Discussion (57 min)

Leon Doorn; Amsterdam / Netherlands Kicky Gerhilde van Leeuwen; De Bilt / Netherlands Mika Kortesniemi; ESPOO / Finland Nadya Pyatigorskaya; Paris / France









# MD 10 - European School of Radiology (ESOR) and multidisciplinary fellowships

Categories: Education, General Radiology, Multidisciplinary, Oncologic Imaging, Students ETC Level: ALL LEVELS Date: March 1, 2024 | 15:15 - 15:50 CET CME Credits: 0.5

Interview (30 min) Regina G. H. Beets-Tan; Amsterdam / Netherlands Valérie Vilgrain; Clichy / France Justas Žilinskas; Kaunas / Lithuania Uli Fehrenbach; Berlin / Germany Tatiana Plescan; Chisinau / Moldova

**Wrap-up of connAction** (5 min) Regina G. H. Beets-Tan; Amsterdam / Netherlands









#### **CUBE 18** - Innovations in big vessels endovascular treatment

Categories: Interventional Radiology

Date: March 1, 2024 | 15:30 - 16:00 CET

CME Credits: 0.5

#### Advanced Session - Topic Coordinator: Prof. Gianpaolo Carrafiello

The "Advanced Session: Percutaneous Interventions" is aimed at a more advanced audience and covers percutaneous interventions in various areas of interventional radiology.

1. To highlight the new tools and devices.

2. To understand how to use them.

3. To discuss the advantages and improvements in clinical practice.

#### Moderator:

Gianpaolo Carrafiello; Milan / Italy

# Chairperson's introduction (2 min)

Gianpaolo Carrafiello; Milan / Italy

#### Venous stenting: case presentations (14 min)

Velio Ascenti; Milano / Italy

#### Fusion imaging in aortic percutaneous interventions (14 min)

Hicham Kobeiter; Créteil / France







#### **RPS 1602 - Functional breast imaging modalities**

Categories: Artificial Intelligence & Machine Learning, Breast, Contrast Media, Imaging Methods Date: March 1, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

Moderator: Silvia Perez Rodrigo; Madrid / Spain

DCE MRI radiomic analysis in triple negative ductal invasive breast cancer: comparison between BRCA and non-BRCA mutated patients (7 min)

Chiara Bozzola; Modena / Italy

Feasibility and added value of contrast-enhanced tomosynthesis (7 min)

Paola Clauser; Vienna / Austria

Quantitative and qualitative evaluation of reduced dose of high-concentration of contrast media in CESM (contrast enhancement spectral mammography) (7 min)

Dominga Pugliese; Rome / Italy

Breast lesion analysis in contrast-enhanced photon-counting CT (PC-CT) reconstructions with special breast positioning: a prospective study on iodine quantification and lesion conspicuity (7 min) Caroline Wilpert; Freiburg im Breisgau / Germany

Discrimination of axillary lymph nodes and lymph node metastasis in contrast-enhanced photon-counting CT (PC-CT) breast reconstructions (7 min) Caroline Wilpert; Freiburg im Breisgau / Germany

Quantitative DCE-MRI in breast cancer: different HER2 expression cohorts (7 min) Yangling Hu; China

Proportion of suboptimal baseline 18F-FDG PET/CT exams in oestrogen positive breast cancer patients according to 18F-FDG uptake in the primary tumour: a single-centre retrospective analysis (7 min) Melissa Lenaerts; Peer / Belgium

Breast imaging reporting and data system in contrast-enhanced mammography (CEM): "Lesion Conspicuity" correlation with malignancy and tumour receptor pattern (7 min)

Davide Pupo; Naples / Italy









# RC 1617 - Non-trauma acute abdomen: don't miss the diagnosis

Categories: Abdominal Viscera, Emergency Imaging ETC Level: LEVEL I Date: March 1, 2024 | 16:00 - 17:00 CET CME Credits: 1

**Moderator:** Raffaella Basilico; Chieti / Italy

Chairperson's introduction (5 min) Raffaella Basilico; Chieti / Italy

**Peritonitis: diagnostic approach** (15 min) Tiina Elina Lehtimäki; Helsinki / Finland

### Spontaneous haemorrhage: diagnostic approach (15 min)

Ali Devrim Karaosmanoğlu; Ankara / Turkey

**Ischemia: diagnostic approach** (15 min) Maria Antonietta Mazzei; Siena / Italy

Panel discussion: From imaging findings to aetiology, not always an easy task (10 min)







# NH 16 - The brain's waste facility: the glymphatic system

Categories: Imaging Methods, Neuro ETC Level: LEVEL II Date: March 1, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

**Moderator:** E. Turgut Tali; Ankara / Turkey

**Chairperson's introduction** (5 min) Tchoyoson Lim; Singapore / Singapore

**Current concepts in intracranial interstitial fluid transport and the glymphatic system** (20 min) Shinji Naganawa; Nagoya / Japan

**Imaging techniques for the glymphatic system** (20 min) Geir Andrè Ringstad; Oslo / Norway

**Glymphatic waste clearance and neurological diseases** (20 min) Toshiaki Taoka; Nagoya / Japan

Panel discussion: Cerebrospinal, interstitial fluids and glymphatic system (25 min)







#### **TF - Highlighted lectures**

Categories: Abdominal Viscera, Chest, Paediatric ETC Level: LEVEL I Date: March 1, 2024 | 16:00 - 17:30 CET CME Credits: 1.5



Moderator: Viktoriia Pozdniakova; London / United Kingdom

**Chairperson's introduction** (5 min) Viktoriia Pozdniakova; London / United Kingdom

How to survive the night shift volume two: paediatric edition (25 min) Ilze Apine; Riga / Latvia

How to deal with abdominal emergencies on the night shift: do not forget mesenteric ischaemia (25 min) Lorenzo Garzelli; Paris / France

Pleural pathologies: the good, the bad and the ugly (25 min) Nadine Christina Bayerl; Erlangen / Germany

Panel discussion: What are the most important features from the topics of highlighted lectures that young radiologists should add to their portfolio of radiology wisdom? (10 min)







### RC 1613 - Interventional procedures: what should we be aware of?

**Categories:** EuroSafe Imaging/Radiation Protection, Imaging Methods, Interventional Radiology, Multidisciplinary, Physics in Medical Imaging, Professional Issues

ETC Level: LEVEL II+III

Date: March 1, 2024 | 16:00 - 17:00 CET CME Credits: 1



**Moderator:** Annalisa Trianni; Trento / Italy

**Chairperson's introduction** (5 min) Annalisa Trianni; Trento / Italy

Clinical point of view from a radiologist: what they want to see (15 min) Siobhan Hoare; Dublin / Ireland

A patient follow-up after high-dose interventional procedures (15 min) Jenia Vassileva; Vienna / Austria

Long-term risks from paediatric interventional imaging: HARMONIC Project (15 min) Marie-Odile Bernier; Fontenay Aux Roses / France

Panel discussion: How can we aid in the optimisation of interventional procedures and communication of associated dose risks? (10 min)







#### SA 16 - Imaging of lung cancer in the era of molecular medicine

Categories: Chest, Oncologic Imaging ETC Level: LEVEL II+III Date: March 1, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

Moderator: Annemiek Snoeckx; Zandhoven / Belgium

**Chairperson's introduction** (5 min) Annemiek Snoeckx; Zandhoven / Belgium

**Genomic testing, targeted and immunotherapy for lung cancer: past, present, and future** (20 min) Robin Cornelissen; Rotterdam / Netherlands

Assessing lung cancer response to immunotherapy and targeted therapies (20 min) Marie-Pierre Revel; Paris / France

**Tumour assessment beyond lesion measurement** (20 min) Helmut Prosch; Vienna / Austria

Panel discussion: How will lung cancer imaging change in the next five years? (25 min)







### IF 16 - Next-generation radiology

Categories: Artificial Intelligence & Machine Learning, Imaging Methods, Management/Leadership, Multidisciplinary, Research

ETC Level: LEVEL III

Date: March 1, 2024 | 16:00 - 17:30 CET

#### CME Credits: 1.5

Radiology is an exciting speciality, but it faces many challenges - from technological advances not translating into clinical practice as envisioned to other technological advances threatening how radiology is done and difficulties in ever more subspecialised multidisciplinary and multi-professional environments. The next generation of radiologists and radiographers will need to face those challenges in order to remain relevant and responsible. This session will cover current discussions and offer potential solutions and visions for the future.

#### Moderator:

Andrea Giovagnoni; Ancona / Italy

#### Chairperson's introduction (5 min)

Andrea Giovagnoni; Ancona / Italy

#### The cycle of life: from nice ideas to practical application (20 min)

Adrian Brady; Cork / Ireland

#### Radiology and AI: team member or terminator? (15 min)

Renato Cuocolo; Napoli / Italy

# Building bridges: how to stay relevant in a multidisciplinary environment? (15 min)

Regina G. H. Beets-Tan; Amsterdam / Netherlands

# What does the future hold for radiographers? (20 min)

Christina Malamateniou; London / United Kingdom

#### Panel discussion: How do we stay relevant and responsible? (15 min)







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#### MS 16 - Inflammatory bowel disease

Categories: GI Tract, Imaging Methods ETC Level: LEVEL III Date: March 1, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

Moderator: Stuart Andrew Taylor; Prestwood / United Kingdom

Chairperson's introduction (5 min)

What the gastroenterologist wants (15 min) Sara McCartney; LONDON / United Kingdom

What the surgeon wants (15 min) Christopher Wood; Henley-on-Thames / United Kingdom

**The role of the histopathologist** (15 min) Ruma Saraswati; London / United Kingdom

What can radiology offer (15 min) Andrew Plumb; Esher / United Kingdom

Case discussion: Complex IBD, the power of the team (25 min)







#### RC 1606 - Artificial intelligence is here: have you noticed?

Categories: Artificial Intelligence & Machine Learning, General Radiology, Hybrid Imaging, Multidisciplinary, Nuclear Medicine, Physics in Medical Imaging ETC Level: LEVEL III Date: March 1, 2024 | 16:00 - 17:00 CET

CME Credits: 1

Moderator: Thomas Küstner; Tübingen / Germany

**Chairperson's introduction** (5 min) Thomas Küstner; Tübingen / Germany

Al: just another tool in the radiologists' toolbox (15 min) Thomas Küstner; Tübingen / Germany

Al in imaging before it reaches the radiologist (15 min) Flemming Littrup Andersen; Copenhagen / Denmark

Al as a tool to assist the radiologist (15 min) Vicky Goh; London / United Kingdom

Panel discussion: Will AI enhance radiologist skills and improve patient management? (10 min)







# Meets 16 - Education and training of Australian medical radiation professionals

Categories: Education, Multidisciplinary, Professional Issues, Radiographers, Students

Date: March 1, 2024 | 16:00 - 17:00 CET

# CME Credits: 1

The session aims to introduce the education standards for radiographers and radiation therapists in Australia. At the end of the session, the attendees should appreciate the challenges in education delivery within Australia and become familiar with advanced practice opportunities for Australian radiographers and radiation therapists.

#### Moderators:

Napapong Pongnapang; Bangkok / Thailand Stephen Lacey; Parkville / Australia

# Chairpersons' introduction (2 min)

Napapong Pongnapang; Bangkok / Thailand Stephen Lacey; Parkville / Australia

#### Education, training, and professional development for medical radiation technologists in Australia (25 min)

Carolyn Louise Heyes; Taylors Lakes, VI / Australia Elizabeth Phillips; Mount Louisa / Australia

#### Formalisation of the advanced practice: challenges and opportunities, Australian experience (25 min)

Carolyn Louise Heyes; Taylors Lakes, VI / Australia Elizabeth Phillips; Mount Louisa / Australia

Questions and answers (8 min)







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#### E<sup>3</sup> 1623 - Paediatric

Categories: Abdominal Viscera, Chest, GI Tract, Neuro, Paediatric ETC Level: LEVEL I+II Date: March 1, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

Moderator: Simon G. F. Robben; Maastricht / Netherlands

**Chairperson's introduction** (6 min) Simon G. F. Robben; Maastricht / Netherlands

**Paediatric neuroimaging** (28 min) Maria Argyropoulou; Ioannina / Greece

**Paediatric chest imaging** (28 min) Pierluigi Ciet; Rotterdam / Netherlands

**Paediatric abdominal imaging** (28 min) Giulia Perucca; London / United Kingdom







#### E<sup>3</sup> 1620 - Access to interventional radiology training

Categories: Interventional Radiology, Professional Issues, Students

ETC Level: LEVEL III

Date: March 1, 2024 | 16:00 - 17:30 CET

#### CME Credits: 1.5

The session summarises the expected training for an interventionalist in the main regions worldwide. The audience will also familiarise themselves with the relevance of undertaking an international certification.

**Moderator:** Afshin Gangi; Strasbourg / France

**Chairperson's introduction** (5 min) Afshin Gangi; Strasbourg / France

#### IR training in Europe (18 min)

Rok Dežman; Ljubljana / Slovenia

**IR training in Northern America** (18 min) Monica M Matsumoto; Philadelphia / United States

IR training in Africa and the Middle East (18 min) Mohamed Elsayed Elbadawy Mostafa Fouad; Frankfurt am main / Germany

The EBIR exam: the advantages of an international certification (18 min)

Christoph Binkert; Zurich / Switzerland

Panel discussion: Which actions should be taken to harmonise IR training worldwide? (13 min)









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# E<sup>3</sup> 1621 - Sport injuries

Categories: Emergency Imaging, General Radiology, Imaging Methods, Musculoskeletal ETC Level: LEVEL II+III Date: March 1, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

Wrist (45 min) Marco Zanetti; Baden / Switzerland

Hand and fingers (45 min) Gerd Bodner; Vienna / Austria









# EFRS 5 - FORCE Project - Bring your own laptop

Categories: Education, Professional Issues, Radiographers, Research, Students ETC Level: LEVEL I Date: March 1, 2024 | 16:00 - 18:00 CET This session aims to provide an overview on the FORCE project tools.

Moderator: Kate Matthews; Dublin / Ireland

**Chairperson's Introduction** (10 min) Kate Matthews; Dublin / Ireland

#### Hands-on (bring your own laptop) (100 min)

**Closing** (10 min) Kate Matthews; Dublin / Ireland









#### **RPS 1614 - Current insights and future horizons**

Categories: Artificial Intelligence & Machine Learning, Education, Professional Issues, Radiographers Date: March 1, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

#### Moderators:

Ljubomir Popovic; Beograd / Serbia Guido Ligabue; Modena / Italy

Green radiology: a pilot study for a sustainable radiology project (7 min)

Andrea Masperi; Abbiategrasso / Italy

Caring for tomorrow: sustainable practices in medical imaging departments implemented by radiographers and policy makers (7 min) Switinder Singh Ghotra; Lausanne / Switzerland

**Burnout and job satisfaction among radiographers internationally** (7 min) Mark F. McEntee; Cork / Ireland

R-Al-diographers: exploring the changing professional role and identity of radiographers in Europe in the era of artificial intelligence (AI) (7 min) Gemma Walsh; Chesham / United Kingdom

What radiographers need to know about explainable artificial intelligence in medical imaging? (7 min) Mélanie Champendal; Lausanne / Switzerland

Identifying the needs of radiographers working in nuclear medicine departments for the co-construction of XAI tools for enhanced PET image reconstruction (7 min) Mélanie Champendal; Lausanne / Switzerland

The role of virtual reality allowing dialogue between users and virtual patients for the preclinical education of radiographers: a pilot study (7 min) Kengo Kato; Tsukuba / Japan

The inclusion of cross-sectional imaging within preregistration radiography training curricula (7 min) Rena Young; Cork / Ireland

**Radiography students' viewpoints of the clinical learning environment: a cross-sectional study** (7 min) Michelle O'Connor; Dublin / Ireland









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# HW 16Pb - Transition zone: how to detect typical and not-so-typical tumours

Categories: Genitourinary, Oncologic Imaging

ETC Level: LEVEL II+III

Date: March 1, 2024 | 16:00 - 17:00 CET

CME Credits: 1

To participate, a pre-congress Hands-on Workshop registration is required.

# Participants who have completed their workshop registration before ECR are requested to arrive at the workshop room 20 minutes before the scheduled start of the session to present their badge and complete their check-in.

We would like to thank our workshop sponsors. For more information click here.

Please note we will be utilising equipment from certain vendors during the workshop sessions; however, a wide range of alternative options from other vendors is also available.

In this session participants will be able:

1. To become familiar with the typical features of PI-RADS 4 and 5 lesions.

- 2. To understand how to make the differential diagnosis of benign hyperplastic nodules.
- 3. To develop practical skills in minimising PI-RADS 3 lesions.

4. To learn about the impact of PSA density in PI-RADS 1 and 2.

**Instructors** (60 min) Ivo Gerardus Schoots; Rotterdam / Netherlands Tobias Penzkofer; Berlin / Germany







### HW 16Ma - Ultrasound of the muscles and nerves of the upper limb

Categories: Imaging Methods, Musculoskeletal ETC Level: ALL LEVELS Date: March 1, 2024 | 16:00 - 17:00 CET CME Credits: 1

# To participate, a pre-congress Hands-on Workshop registration is required.

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We would like to thank our workshop sponsors. For more information click here.

Please note we will be utilising equipment from certain vendors during the workshop sessions; however, a wide range of alternative options from other vendors is also available.

In this session participants will be able:

- 1. To become familiar with muscle and nerve anatomy of the upper limb with the usual landmarks.
- 2. To develop practical skills in performing ultrasound.
- 3. To understand the main limitations of ultrasound.
- 4. To learn tricks and tips to improve daily practice.

#### Instructors (60 min)

Lionel Pesquer; Bordeaux / France Georgina Marian Allen; Oxford / United Kingdom

#### Tutors

Umberto Viglino; Genoa / Italy Maria Pilar Aparisi Gomez; Valencia / Spain Žiga Snoj; Ljubljana / Slovenia Salvatore Gitto; Milano / Italy Alberto Bazzocchi; Bologna / Italy Amanda Isaac; London / United Kingdom Saulius Rutkauskas; Kaunas / Lithuania









#### SF 16 - Patient-centred care

Categories: Education, Management/Leadership, Professional Issues ETC Level: LEVEL II+III Date: March 1, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

**Moderator:** Michael Fuchsjäger; Graz / Austria

**Chairperson's introduction** (2 min) Michael Fuchsjäger; Graz / Austria

**Knowledge is power: appropriate communication with our patients** (15 min) Fiona J. Gilbert; Cambridge / United Kingdom

**Educating the healthcare providers** (15 min) Valérie Vilgrain; Clichy / France

The radiographer's perspective (15 min) Andrew England; Cork / Ireland

What does a patient need? (15 min) Caroline Justich; Vienna / Austria

**The ethical perspective** (15 min) Ilenia Rapisarda; Aci Sant'Antonio, Catania, Sicilia / Italy

Panel discussion: How do we make sure that our patients are in the centre? (13 min)







#### RPS 1605 - Exploring the frontiers of AI-enhanced radiology reporting

Categories: Artificial Intelligence & Machine Learning, Education, General Radiology Date: March 1, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

Moderator:

Luís Donoso Bach; Matadepera / Spain

Utilising Chat-GPT4 for conversion of free-text head and neck cancer CT reports into structured reports (7 min) Amit Gupta; Ansari Nagar / India

Enhancing radiology reporting efficiency through structured reports: a quantitative analysis (7 min) Paweł Pawel Paczuski; Legionowo / Poland

Leveraging GPT-4 for structured radiology reporting: a multilingual proof-of-concept study (7 min) Felix Busch; Berlin / Germany

Automated anonymisation of radiology reports: comparison of publicly available natural language processing and large language models for HIPAA-compliant data use (7 min) Marcel Christian Langenbach; Cologne / Germany

A RAdiology Data EXtraction (RADEX) tool for fast and accurate information curation from free-text reports: case study on thyroid ultrasound examinations (7 min)

Lewis James Howell; Leeds / United Kingdom

Large language models for structured reporting with speech recognition: a comparative feasibility study (7 min) Benedikt Kämpgen; Würzburg / Germany

Using large language models to improve quality and actionability of radiology reports (7 min) Kalyan Sivasailam; Bangalore / India

A natural language processing pipeline to extract relevant information from mammography reports (7 min) Nikola Cihoric; Bern / Switzerland

Automatic structuring of radiology reports with on-premise open-source large language models (7 min) Piotr Woznicki; Warszawa / Poland







Integrating AI results into standardised structured radiology reports: feasibility and implementation (7 min)<sup>28 – MARCH 03</sup> Cyril Thouly; Sion / Switzerland

Structured reporting for efficient epidemiological and in-hospital prevalence analyses of pulmonary embolism (7 min) Tobias Jorg; Mainz / Germany

**Extracting information from unstructured MRI reports with a local open-source GPT model** (7 min) Bastien Le Guellec; Lille / France







### **RPS 1603 - Biomarkers in cardiac imaging**

Categories: Cardiac, Imaging Methods, Research Date: March 1, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

Moderator: Dominika Suchá; Utrecht / Netherlands

A radiomic model to correlate the quality of pericoronary adipose tissue with significant coronary artery disease (7 min) Marco De Giorgi; Salerno / Italy

Advancing pericoronary inflammation evaluation: dual-energy CT-derived fat fraction as a promising imaging biomarker for cardiovascular risk stratification (7 min) Sara Marziali; Milan / Italy

**Prognostic value of changes in epicardial adipose tissue volume and density on lung cancer screening CT** (7 min) Isabel Luisa Langenbach; Erzhausen / Germany

**Foetal epicardial fat thickness: can it serve as a marker for gestational diabetic mellitus?** (7 min) Amandeep Singh; Amritsar / India

Is familial combined hypolipidemia (FHBL2) due to loss of function mutation in the Angiopoietin-like3 (ANGPTL3) gene protective for CAD?" (7 min) Serena Paciulli; Rome / Italy

**Combined use of MRI and PET imaging enhances diagnostic accuracy in cardiac sarcoidosis** (7 min) Knut Haakon Stensaeth; Trondheim / Norway







VIENNA / FEBRUARY 28 - MARCH 03

# OF 16T - Back to the basics: classic signs in radiology

Categories: Education, General Radiology, Genitourinary, Head and Neck, Paediatric, Students ETC Level: LEVEL I Date: March 1, 2024 | 16:00 - 17:00 CET CME Credits: 1

**Moderator:** Michail Klontzas; Heraklion / Greece

**Chairperson's introduction** (5 min) Michail Klontzas; Heraklion / Greece

Classic signs in head and neck radiology (15 min) Edith Vassallo; Imsida / Malta

**Classic signs in paediatric radiology** (15 min) Maria Raissaki; HERAKLION / Greece

**Classic signs in uroradiology** (15 min) Aart J. Van Der Molen; Leiden / Netherlands

Panel discussion: What is the role of classic signs in radiology today? (10 min)







#### RPS 1610 - Pelvis, hip, and bone lesions

Categories: Imaging Methods, Musculoskeletal, Oncologic Imaging Date: March 1, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

Moderator: Milko Charles De Jonge; Amsterdam / Netherlands

Can we differentiate acute osteomyelitis and vaso-occlusive crises in sickle cell disease patients? (7 min) Florian Nabet; Paris / France

Hip muscle size and density are associated with trochanteric fractures of elderly women (7 min) Pengju Huang; Beijing / China

Long-term active MRI-surveillance of low-grade central cartilage tumours of the long bones: towards an optimal assessment of imaging characteristics (7 min) Jacoba De Rooy; Nijmegen / Netherlands

Metal artifact reduction strategies for clinical photon counting computed tomography of total hip arthroplasty: a volumetric quantitative and qualitative phantom study (7 min) Roy P. Marcus; Zurich / Switzerland

Evaluation of lower extremity skeletal muscle fibrosis in peripheral arterial disease (PAD) using extracellular volume fraction (ECV) from dual-layer spectral CT (7 min) Ningning Ding; Xi'an / China

Monostotic metachronous osteoid osteoma (7 min) Sara Battisti; Arqua' Petrarca / Italy

Hip MRI in flexion abduction external rotation (FABER) position for assessment of the ischiofemoral interval in patients with hip pain: a feasibility study (7 min) Florian Schmaranzer: Bern / Switzerland

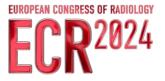
Are degenerative findings detected on traction MR arthrography of the hip associated with failure of arthroscopic femoroacetabular impingement surgery? (7 min)

Florian Schmaranzer; Bern / Switzerland

Decentration of the femoral head: is it associated with osseous deformities predisposing to hip instability? (7 min) Florian Schmaranzer; Bern / Switzerland









VIENNA / FEBRUARY 28 - MARCH 03

The overlooked symptom coccydynia: evaluation of sacrococcygeal morphologic and morphometric findings (7 min) Abdullah Şükün; Antalya / Turkey







#### iViolin - Objective image quality determination in oncological patient images

Categories: EuroSafe Imaging/Radiation Protection, Oncologic Imaging, Physics in Medical Imaging, Research

ETC Level: LEVEL II+III Date: March 1, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

SESSION RECOMMENDED BY

#### To participate, a pre-congress Hands-on Workshop registration is required.

Participants who have completed their workshop registration before ECR are requested to arrive at the workshop room 20 minutes before the scheduled start of the session to present their badge and complete their check-in.

Workshop description:

In this workshop you can test and evaluate a web-based tool for image quality analysis of thorax CT or abdomen CT images. In this initial version, the quality is assessed in an area surrounding the major fissure of the left lung or in some parts of the abdomen CT images. To work with your own data in this workshop, please prepare the following:

• CT DICOM images of the thorax / lung where the major fissure is visible or CT DICOM images of the abdomen where the psoas muscle is visible.

• [x, y] coordinate of a point on the major fissure in thorax images, i.e. the major fissure should cross these coordinates or [x, y] coordinates of a point on the psoas muscle in abdomen images.

The workshop targets radiologists, radiographers, and medical physicists interested in image quality analysis.

#### Moderator:

Christoph Hoeschen; Magdeburg / Germany

#### Chairperson's introduction (5 min)

Christoph Hoeschen; Magdeburg / Germany

#### Determine image quality in patient images based on physical parameters (15 min)

Christoph Hoeschen; Magdeburg / Germany

#### Image quality assessment based on physics (15 min)

Hilde Bosmans; Leuven / Belgium

#### Requirements on clinical data for setting up sufficient databases (10 min)

Peter Mildenberger; Mainz / Germany

# Hands-on workshop: Evaluate your own images or use existing data sets to test the methods provided by the i-Violin project for image quality assessment in patient images (45 min)

Zahra Passand; Magdeburg / Germany Christoph Hoeschen; Magdeburg / Germany Dimitar Petrov; Leuven / Belgium







Peter Mildenberger; Mainz / Germany



VIENNA / FEBRUARY 28 - MARCH 03







# ST 12 - European Radiology Experimental - Novel approaches moving radiology forward

Categories: Education, Professional Issues, Research

Date: March 1, 2024 | 16:30 - 17:00 CET

The Editor-in-Chief of European Radiology Experimental, Prof. Francesco Sardanelli (Milan/IT) explains the scope of the journal, the recent receipt of the Impact Factor and thematic series, and his vision for the future.

**Moderators:** Ben Giese; Chicago / United States Mélisande Rouger; Bilbao / Spain

Interview (30 min) Francesco Sardanelli; San Donato Milanese, Milan / Italy









#### ST 13 - How to start or boost your academic career with an ESOR Exchange Programme

#### Date: March 1, 2024 | 17:15 - 17:45 CET

The European School of Radiology (ESOR) is an institution, fulfilling the mission of the European Society of Radiology (ESR) in the field of education. One of its main goals is to assist in harmonising radiological education in Europe. With its wide range of activities ESOR additionally aims to raise standards in the field of scientific radiology, to extend and coordinate teaching resources worldwide and to help young radiologists to achieve the knowledge and skills to fulfil tomorrow's requirements.

In her function as ESOR Educational/Scientific Director, Prof. Valérie Vilgrain will give an overview of the broad spectrum of short-term and long-term training programmes ESOR has on offer for radiology residents as well as recently board-certified radiologists. In addition, she will also talk about her personal experience as mentor of many ESOR scholars and fellows over the past years and the win-win situation that ESOR training programmes represents also for European training centers that enrol as host institutions.

Dr. Fulvio Renoldi Bracco, CEO of Bracco Imaging SpA, will inform about the value of education in partnership and the long-standing and fruitful cooperation between ESOR and Bracco over nearly two decades. Young radiologists, thanks to the many projects organised in partnership between Bracco Imaging and ESOR, can learn and grow and contribute to innovation in imaging for the benefit of patients.

Dr. Angela Ammirable, Dr. Filipa Coelho, Dr. Petr Matkulcik and Dr. Irina Stavarache are young radiologists who have only recently been awarded an ESR Scholar- or Fellowship grant. They will give an insight into the impact the ESOR training abroad had on their professional and personal lives.

#### Moderator:

Ben Giese; Chicago / United States

Interview (15 min) Valérie Vilgrain; Clichy / France Fulvio Renoldi Bracco; Milano / Italy

Interview (15 min) Angela Ammirabile; Milan / Italy Filipa Coelho; Porto / Portugal Peter Matkulcik; Brno / Czechia Irina Stavarache; Bucuresti / Romania









# ST 14 - Daily Wrap-up

Categories: General Radiology Date: March 1, 2024 | 18:00 - 18:15 CET Join our studio moderators as they look back on the day's highlights and offer a glimpse of what's still to come at ECR 2024.

#### Moderators:

Ben Giese; Chicago / United States Mélisande Rouger; Bilbao / Spain

Interview (30 min)









#### ST 15 - Morning Welcome with Carlo Catalano

Categories: Education, General Radiology, Multidisciplinary, Professional Issues

Date: March 2, 2024 | 07:50 - 08:00 CET

Grab your morning coffee and join our studio moderators as they discuss the most exciting highlights of the upcoming day with Congress President Prof. Carlo Catalano. Make a list of what not to miss and hear his insights on some of the biggest trends currently rocking the world of radiology.

#### Moderators:

Ben Giese; Chicago / United States Mélisande Rouger; Bilbao / Spain

Interview (30 min) Carlo Catalano; Roma / Italy









#### RPS 1714 - Enhancing patient experience and safety in medical imaging and radiotherapy

Categories: Evidence-Based Imaging, Professional Issues, Radiographers Date: March 2, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderators:

Anastasia Sarchosoglou; Athens / Greece Ana Blanco Barrio; Murcia / Spain

Radiographers' current experiences interacting with patients with dementia and cognitive impairment during magnetic resonance imaging (7 min) Mark F. McEntee; Cork / Ireland

Radiographers' experience during medical imaging of patients with dementia in Norway (7 min) Christine Eikefet; Borre / Norway

An investigation into the perceived challenges and facilitators Parkinson's disease patients undergo when accessing radiology examinations (7 min) Mark F. McEntee; Cork / Ireland

**The effect of inhalation aromatherapy on patient anxiety in nuclear medicine** (7 min) Karen Borg Grima; Naxxar / Malta

**Evaluation of the influence of music in women undergoing radiation therapy** (7 min) Magda Cruz Ramos; Olhao / Portugal

Using the e-Delphi method to develop informative nutritional leaflets for patients undergoing radiotherapy to the head and neck (7 min) Duncan Munro; Haz-Zebbug / Malta

Radiographers' knowledge, clinical expertise and application of pain management strategies in the radiology department (7 min) Andrew England; Cork / Ireland

# Deaf-friendly MRI: radiographers' communication toolkit (7 min)

Eleonora Stefani; Susegana (TV) / Italy









#### **RPS 1705 - Radiomics applications in MDCT**

Categories: Artificial Intelligence & Machine Learning, Imaging Methods, Physics in Medical Imaging Date: March 2, 2024 | 08:00 - 09:00 CET CME Credits: 1

**Moderator:** Rebeca Mirón Mombiela; Herlev / Denmark

**Moderator introduction** (4 min) Rebeca Mirón Mombiela; Herlev / Denmark

A reference framework for standardisation and harmonisation of CT radiomics features: the "CadAlver" analysis (7 min) Riccardo Levi; Pieve Emanuele / Italy

**Development of a radiomic model to predict the risk of hepatocellular carcinoma in cirrhotic patients** (7 min) Ludovica Leo; Parma / Italy

Influence of CT scanners on radiomics features in abdominal CT: a multicentre phantom study (7 min) Markus Obmann; Basel / Switzerland

Radiomics and machine learning for the assessment of renal tumour histological subtypes on multiphase computed tomography: a multicentre trial with independent testing (7 min) Sophie Bachanek; Göttingen / Germany

**Overcoming data scarcity in radiomics/radiogenomics using synthetic radiomic features** (7 min) Milad Ahmadian; Amsterdam / Netherlands

Impact of population size and validation method on the performance of radiomics models: application to COVID lung lesions (7 min) Antoine Decoux; Vigneux sur Seine / France







#### RPS 1711 - CSF, glymphatic system and MR contrast agents

Categories: Imaging Informatics, Imaging Methods, Multidisciplinary, Neuro, Research, Translational Imaging Date: March 2, 2024 | 08:00 - 09:00 CET CME Credits: 1

#### Moderator:

Milos A. Lucic; Sremska Kamenica / Novi Sad / Serbia

In vivo CSF mobility mapping at ultra-high field MRI in patients with cerebral amyloid angiopathy (7 min) Katerina Deike; Bonn / Germany

**DTI-ALPS sequences for the study of the glymphatic system in idiopathic normal-pressure hydrocephalus** (7 min) Fabio Martino Doniselli; Milan / Italy

Intraindividual comparison between gadopiclenol (0.05 mmol/kg)- and gadobutrol (0.1 mmol/kg)-enhanced MRI in terms of brain metastases visualisation (7 min) Lisa Maria Farina; Pavia / Italy

Quantification and assessment of the chemical form of residual gadolinium in the skin after repeated administration of gadolinium-based contrast agents in rats (7 min) Axel Treu; Wuppertal / Germany

Potential of heavily T2-weighted fluid-attenuated inversion recovery sequence for detection of contrast agent (7 min) Lars-Patrick Schmill; Kiel / Germany

Assessment of pharmacokinetics and safety of gadoquatrane in renally impaired patients and its dialysability using clinical trial data, modeling and simulation approaches and in-vitro data (7 min) Birte Maria Hofmann; Berlin / Germany







#### **RPS 1713 - Optimisation and its tools**

Categories: EuroSafe Imaging/Radiation Protection, Paediatric, Physics in Medical Imaging, Research Date: March 2, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderator:

Agnieszka Kuchcinska; Warsaw / Poland

CT acquisition parameter selection in the real world: impacts on paediatric radiation dose and variation amongst 155 institutions (7 min) Yifei Wang; Sunnyvale / United States

Establishing indication-based diagnostic reference levels for paediatric computed tomography and international comparison: data from an international registry (7 min) Denise Bos; Essen / Germany

Automated dose and noise assessment as a guide for harmonisation of abdominal CT protocols across multiple scanners (7 min) Janne Vignero; Leuven / Belgium

Clinical CT protocol comparison: an Italian multicentre study (7 min) Raffaele Villa; Monza / Italy

Implementation of the German lung cancer screening protocol and image quality evaluation over three generations of CT systems (7 min) Mishal Ursani; Heidelberg / Germany

Physics evaluation of a super resolution deep learning reconstruction algorithm in an anatomical background (7 min) Kirsten Boedeker; Los Angeles / United States

Influence of foreign bodies on image quality in dark-field chest radiography (7 min) Lennard Kaster; Munich / Germany

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# OF 17T - Tackle twisted cases, win a must-have EDiR educational package (part 4)

Categories: Education, Professional Issues, Students ETC Level: LEVEL II Date: March 2, 2024 | 08:00 - 08:30 CET CME Credits: 0.5

**Moderators:** Laura Oleaga Zufiria; Barcelona / Spain Annemiek Snoeckx; Zandhoven / Belgium

**Chairpersons' introduction** (5 min) Laura Oleaga Zufiria; Barcelona / Spain Annemiek Snoeckx; Zandhoven / Belgium

Let the games begin (20 min) Annemiek Snoeckx; Zandhoven / Belgium

Pooling of conclusions and perceptions (5 min)

Annemiek Snoeckx; Zandhoven / Belgium







# E<sup>3</sup> 22D - On-call in the emergency department: the power of radiography

Categories: Education, Emergency Imaging, General Radiology, Imaging Methods, Musculoskeletal ETC Level: LEVEL I Date: March 2, 2024 | 08:00 - 09:00 CET CME Credits: 1

**Moderator:** Andrea B. Rosskopf; Zurich / Switzerland

**Chairperson's introduction** (2 min) Andrea B. Rosskopf; Zurich / Switzerland

**Upper extremity** (25 min) Milko Charles De Jonge; Amsterdam / Netherlands

Lower extremity (25 min) Georgina Marian Allen; Oxford / United Kingdom

Panel discussion (8 min)









#### RPS 1704 - Novel technological developments in chest imaging: from research to practice

Categories: Chest, Contrast Media, Imaging Methods, Physics in Medical Imaging Date: March 2, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderator:

Andreas Christe; Bern / Switzerland

Assessment of lung perfusion using dynamic digital radiography and comparison with nuclear medicine lung scintigraphy (7 min) Satinder Singh; Birmingham / United States

Silver x-ray spectrum modulation filter for lung cancer screening: comparison of capability for radiation dose reduction and detection performance with copper filter (7 min) Yoshiharu Ohno; Toyoake / Japan

**Ultra-low-dose photon-counting detector CT for imaging follow-up after lung transplantation** (7 min) Ruxandra-Iulia Milos; Vienna / Austria

Low-dose high-resolution photon-counting CT in patients with cycstic fibrosis: radiation dose and image quality in the clinical routine (7 min) Marko Frings; Essen / Germany

Optimal slice thickness and quantum iterative reconstruction level in low-dose ultra-high-resolution photon-counting detector CT of the lungs (7 min) Dirk Graafen; Mainz / Germany

The feasibility and accuracy of using low- and ultra-low-dose photon counting detector CT to detect metastatic lung nodules in paediatric and young adults with malignant bone tumours (7 min)

Shanshui Zhou; Shanghai / China







# US 17 - Comprehensive ultrasound pathways for patient management: how to pick up the pieces from CT and MR imaging

Categories: Education, EuroSafe Imaging/Radiation Protection, Evidence-Based Imaging, Imaging Methods ETC Level: LEVEL III Date: March 2, 2024 | 08:00 - 09:00 CET CME Credits: 1

**Moderators:** Adrian K. P. Lim; London / United Kingdom Mustafa Seçil; Izmir / Turkey

**Chairpersons' introduction** (4 min) Adrian K. P. Lim; London / United Kingdom Mustafa Seçil; Izmir / Turkey

Indeterminate thyroid lesion: one-stop US clinic (14 min) Mustafa Seçil; Izmir / Turkey

**Shoulder pain assessment and management following x-ray and MR imaging** (14 min) Bhavna Batohi; London / United Kingdom

Indeterminate CT renal lesion: cyst, complex or simple, solid or a normal variant? (14 min) Adrian K. P. Lim; London / United Kingdom

Incidental liver lesions following CT: benign or malignant (14 min) Tommaso Vincenzo Bartolotta; Palermo / Italy







## RC 1707 - Overview of "RADS" in genitourinary

Categories: Education, Genitourinary, Imaging Methods, Oncologic Imaging, Research ETC Level: LEVEL II Date: March 2, 2024 | 08:00 - 09:00 CET CME Credits: 1

**Moderator:** Jelle O. Barentsz; Arnhem / Netherlands

**Chairperson's introduction** (5 min) Jelle O. Barentsz; Arnhem / Netherlands

**Kidney's score** (15 min) Refky Nicola; Syracuse / United States

**O-RADS** (15 min) Isabelle Thomassin-Naggara; Paris / France

**VI-RADS** (15 min) Valeria Panebianco; Roma / Italy

Panel discussion: Genitourinary-RADS as living documents: what's next? (10 min)

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#### EIBIR 17 - From seed to success: exciting projects funded by the ESR Research Seed Grant Global

Categories: EuroSafe Imaging/Radiation Protection, Research

ETC Level: LEVEL I Date: March 2, 2024 | 08:00 - 09:00 CET

CME Credits: 1



This session showcases interim outcomes of three ESR Research Seed Grant Global projects, promoting advancements in the fields of quality and safety and value-based radiology. It introduces the ESR Research Seed Grant Global funding scheme, a programme aiming to stimulate innovative projects and pilot studies from Eastern Europe, Central Asia and Africa to propel them towards larger research efforts and further funding applications.

#### Moderators:

Marion Smits; Rotterdam / Netherlands Regina G. H. Beets-Tan; Amsterdam / Netherlands

Chairpersons' introduction (10 min)

Marion Smits; Rotterdam / Netherlands Regina G. H. Beets-Tan; Amsterdam / Netherlands

Assessing the Safety and Effectiveness of the First Interventional Radiology Training Program in Uganda: A Quality Assurance Project (15 min) Eva Nabawanuka: Kampala / Uganda

Improving utilisation of mechanical thrombectomy for acute ischemic stroke by implementation of standardised protocols for patient selection, imaging and referral (15 min) Tajana Turk; Osijek / Croatia

Discussion (5 min)







# E<sup>3</sup> 25D - Venous imaging

Categories: Vascular ETC Level: LEVEL I+II Date: March 2, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderator: Katarzyna Gruszczyńska; Katowice / Poland

**Chairperson's introduction** (5 min) Katarzyna Gruszczyńska; Katowice / Poland

**Chest and upper extremities** (15 min) Alexandros Kallifatidis; Thessaloniki / Greece

Abdomen (15 min) Ali Devrim Karaosmanoğlu; Ankara / Turkey

**Peripheral venous system** (15 min) Carsten Willem Koen Paul Arnoldussen; Venlo / Netherlands

Panel discussion (10 min)

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## OF 17R - Towards equity, diversity and inclusion in radiography and research

Categories: Education, Medico-legal, Professional Issues, Radiographers, Research

Date: March 2, 2024 | 08:00 - 09:00 CET

#### CME Credits: 1

This session highlights the essential commitment of the radiography field to fostering an environment that embraces diversity and champions equity and inclusion. Comprising three thought-provoking talks, this session explores the imperative of EDI in radiography curriculum, management, and research. The session should be of interest to radiographers, educators and researchers as it seeks to explore EDI in curriculum design, leadership, and the dissemination of knowledge, with the aim of empowering attendees to actively contribute to a more inclusive and equitable future for radiography professionals and the broader healthcare community.

#### **Moderator:**

Karoliina Paalimäki-Paakki; Oulu / Finland

Chairperson's introduction (5 min)

Karoliina Paalimäki-Paakki; Oulu / Finland

Working together to enhance curriculum design that meets future needs (16 min)

Janice Mary St John-Matthews; Newport / United Kingdom

**Fostering inclusive leadership: driving EDI in radiography management** (16 min) Diego Catania; Milan / Italy

**Promoting EDI in journal publishing** (16 min) Jonathan McNulty; Dublin / Ireland

**Open forum discussion** (7 min)







#### MR 17 - MR safety: towards a practical approach for the European reality

Categories: Education, Evidence-Based Imaging, Management/Leadership ETC Level: LEVEL II Date: March 2, 2024 | 08:00 - 09:00 CET CME Credits: 1

**Moderator:** Anna Pichiecchio; Pavia / Italy

Chairperson's introduction (5 min)

Anna Pichiecchio; Pavia / Italy

**The MR safety landscape in Europe: results of the ESR survey** (15 min) Francesco Santini; Basel / Switzerland

**To scan or not to scan: maximising patient benefit with a practical MR safety approach** (20 min) Isabella Maria Björkman-Burtscher; Gothenburg / Sweden

**Standardising MR safety through nationally certified education: the Austrian experience** (20 min) Siegfried Trattnig; Vienna / Austria

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# RC 1702 - Update of BI-RADS lexicon: case-based radiologic-pathologic correlation

Categories: Breast, Imaging Methods ETC Level: LEVEL I Date: March 2, 2024 | 08:00 - 09:00 CET CME Credits: 1

**Moderator:** Federica Pediconi; Roma / Italy

**Chairperson's introduction** (5 min) Federica Pediconi; Roma / Italy

Mass and non-mass lesions (15 min) Paola Clauser; Vienna / Austria

Microcalcifications and non-mass enhancement (NME) (15 min)

Füsun Taşkin; Istanbul / Turkey

Architectural distortions and asymmetric densities (15 min)

Theodora Kanavou; Larissa / Greece

Panel discussion: The importance of radiologic-pathologic correlation (10 min)







#### E<sup>3</sup> 1726 - Imaging response criteria in oncology

Categories: Education, Hybrid Imaging, Oncologic Imaging ETC Level: LEVEL II Date: March 2, 2024 | 08:00 - 09:00 CET CME Credits: 1

**Moderator:** Melvin D'Anastasi; Mosta / Malta

**Chairperson's introduction** (5 min) Melvin D'Anastasi; Mosta / Malta

## RECIST 1.1 and iRECIST (15 min)

Doenja Marina Johanna Lambregts; Amsterdam / Netherlands

**mRECIST and CHOI** (15 min) Giulia Zamboni; Verona / Italy

**PERCIST and LUGANO** (15 min) Clemens C. Cyran; München / Germany

Panel discussion: Are morphological criteria enough? (10 min)







# RC 1711 - Where neuro meets head and neck: from border zones to common ground

Categories: Head and Neck, Neuro ETC Level: LEVEL II+III Date: March 2, 2024 | 08:00 - 09:00 CET CME Credits: 1

**Moderator:** Natalia Shor; Paris / France

**Chairperson's introduction** (5 min) Natalia Shor; Paris / France

Skull base: anatomy and routes of disease spread (15 min) Alexandra Borges; Lisbon / Portugal

 $\label{eq:orbit:awindow to (systemic) disease (15 min)} \end{tabular}$ 

Augustin Lecler; Paris / France

**Temporal bone: anatomy and variants the ENTG surgeon wants to know** (15 min) Berit Verbist; Leiden / Netherlands

Panel discussion: How not to miss border zone lesions? (10 min)

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#### ESR/ESSO 17 - Interdisciplinary seminar series: from imaging to cancer surgery - Soft tissue sarcoma

Categories: Abdominal Viscera, Imaging Methods, Multidisciplinary, Oncologic Imaging, Paediatric

ETC Level: ALL LEVELS

Date: March 2, 2024 | 08:30 - 09:30 CET

#### CME Credits: 1

Retroperitoneal sarcoma is a challenging, rare disease that requires to be managed by expert multidisciplinary teams to achieve the best chance of cure. Interaction between radiologists and surgeons is key in the initial diagnostic work and in planning the extent of surgical resection that may often require multivisceral procedures. Adequate diagnostic work is also crucial to rule out any role for multimodal treatments that are preferably administered before surgery.

#### **Moderator:**

Marco Fiore; Milan / Italy

#### Chairperson's introduction (5 min)

Marco Fiore; Milan / Italy

# Soft tissue sarcoma (50 min) Andrea Vanzulli; Tradate (VA) / Italy Marco Fiore; Milan / Italy

Wrap-up (5 min) Marco Fiore; Milan / Italy







#### **CUBE 19 - Tool of the trade in Interventional Neuroradiology**

Categories: Interventional Radiology

Date: March 2, 2024 | 09:00 - 09:30 CET

CME Credits: 0.5

#### Neuro IR Day - Topic Coordinator: Prof. Jean-Pierre Pruvo

The "Tools of the Trade" session is an innovative session format that introduces the audience to the most important devices (tools) used in interventional radiology. A specialist leads these sessions, describing the devices and its use, and demonstrating its application on anatomical phantoms. Participants also have the opportunity to touch and explore these devices, which are circulated in the audience.

#### **Moderator:**

Jean-Pierre Pruvo; Lille / France

#### Chairperson's introduction (2 min)

Jean-Pierre Pruvo; Lille / France

#### Tool of the trade in Interventional Neuroradiology (28 min)

François Zhu; Nancy / France







#### SF 18a - Cardiac CT in the emergency department

Categories: Cardiac, Chest ETC Level: ALL LEVELS Date: March 2, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

Moderator: Marco Francone; Milan / Italy

Chairperson's introduction (5 min) Marco Francone; Milan / Italy

Which patients benefit from cardiac CT in the emergency department and how do we do it? (20 min) Rodrigo Salgado; Antwerpen / Belgium

**Do we need CT-FFR and CT-perfusion in the emergency department?** (20 min) Rozemarijn Vliegenthart; Groningen / Netherlands

What does plaque analysis add in acute chest pain patients? (20 min) Michelle Claire Williams; Edinburgh / United Kingdom

Panel discussion: Are we ready for 24/7 cardiac CT in the emergency department? (25 min)

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## PC 18 - Embracing clinical care

Categories: Interventional Radiology, Management/Leadership, Multidisciplinary, Oncologic Imaging, Professional Issues ETC Level: LEVEL III Date: March 2, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

**Moderator:** Christoph Binkert; zurich / Switzerland

**Chairperson's introduction** (5 min) Christoph Binkert; Zurich / Switzerland

Strategy for DR and IR to be visible for the patients (12 min) Carlo Catalano; Roma / Italy

Organisation of an outpatient clinic (12 min)

Christoph Binkert; Zurich / Switzerland

In-patient clinical services (12 min) Roberto lezzi; Roma / Italy

The role of DR and IR at tumour boards (12 min) Otto M Van Delden; Amsterdam / Netherlands

Value proposition of clinical care in IR (12 min) Charles E. Ray Jr.; Chicago, IL / United States

Panel discussion: How to change the image of IR from a technical service to a clinical discipline? (25 min)







#### **CTiR 18 - Clinical Trials in Radiology 3**

Categories: Artificial Intelligence & Machine Learning, Cardiac Date: March 2, 2024 | 09:30 - 10:30 CET CME Credits: 1

**Moderators:** Marc Dewey; Berlin / Germany Ferdia Aidan Gallagher; Cambridge / United Kingdom

**Chairpersons' introduction** (6 min) Marc Dewey; Berlin / Germany Ferdia Aidan Gallagher; Cambridge / United Kingdom

Segment level coronary artery calcium scoring: an agreement analysis of non-contrast CT data from a multicentre trial (8 min) Sotirios Tsogias; Berlin / Germany

Discussant (4 min) Bernd J. Wintersperger; Toronto / Canada

Quality of life and chest pain outcomes in women and men following initial CT angiography or invasive coronary angiography strategies for stable chest pain: results from the randomised DISCHARGE trial (8 min) Jonathan Dermot Dodd; Dublin / Ireland

Discussant (4 min) Stephen Harden; Southampton / United Kingdom

Artificial intelligence-enabled opportunistic screening for coronary artery calcium and thoracic aortic disease on lowdose, non-gated CT scans: A sub-analysis of the National Lung Screening Trial (NLST), The Final Update (8 min) Aleena Yasin; Stanford / United States

**Discussant** (4 min) Peter Beddy; Dublin / Ireland

Comparative analysis of cardiac CT and invasive coronary angiography in guiding functional testing and revascularisation for suspected stable coronary artery disease (8 min) Jonathan Dermot Dodd; Dublin / Ireland

Discussant (4 min)







François Ascagne Pontana; Lille / France



VIENNA / FEBRUARY 28 - MARCH 03







### ESGAR Quiz - The Young ESGAR Quiz at ECR 2024

Categories: Abdominal Viscera, Education, General Radiology, GI Tract

ETC Level: LEVEL II

Date: March 2, 2024 | 09:30 - 10:30 CET

#### CME Credits: 1

This is an interactive session in which the attendees will answer short questions on gastrointestinal radiology. Each round will explore a key theme. Speakers will navigate the challenging abdominal imaging cases using a fun Quiz Show format, presenting insights on differential diagnoses and essential diagnostic clues.

#### Moderators:

Carmelo Sofia; Messina / Italy Francesca Castagnoli; London / United Kingdom

Introduction (10 min) Carmelo Sofia; Messina / Italy Francesca Castagnoli; London / United Kingdom

Quiz round 1 (15 min) Ana Maria Villanueva Campos; Madrid / Spain

Quiz round 2 (15 min) Nino Bogveradze; Vienna / Austria

Quiz round 3 (15 min) Cesare Maino; Monza / Italy

**Conclusion and final remarks** (5 min) Carmelo Sofia; Messina / Italy Francesca Castagnoli; London / United Kingdom







#### RPS 1801 - From guidelines to new approaches in liver tumour imaging

Categories: Abdominal Viscera, Imaging Methods, Oncologic Imaging Date: March 2, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

**Moderator:** Maria Carmen Ayuso Colella; Barcelona / Spain

**Moderator introduction** (6 min) Maria Carmen Ayuso Colella; Barcelona / Spain

Alternative surveillance using CT/MR improves clinical outcomes in high-risk patients with chronic hepatitis B (7 min) Dong Ho Lee; Seoul / Korea, Republic of

A comprehensive study on the feasibility and diagnostic potential of fluctuation imaging (FLI) in liver tumour assessment (7 min) Dong Ho Lee; Seoul / Korea, Republic of

**Comparison of diagnostic guidelines for hepatocellular carcinoma on gadoxetic acid-enhanced liver magnetic resonance imaging** (7 min) Jeong-Hee Yoon; Seoul / Korea, Republic of

**Diagnostic performance of CT/MRI LI-RADS v2018 in non-cirrhotic steatotic liver disease** (7 min) Justin Ruey Tse; Stanford / United States

Value of preoperative magnetic resonance imaging for diagnosis of LR-3 and LR-4 lesions coexisting with main hepatocellular carcinoma (7 min) Yuyao Xiao; Shanghai / China

A new criterion for diagnosis of subcentimetre hepatocellular carcinoma in treatment-naive patients using tumour biomarker and gadoxetic acid-enhanced MRI features (7 min) Peng Huang; Shanghai / China

Quantitative CT analysis of hepatocellular carcinoma nodules in liver transplant candidates: impact of volume of interest and contrast phase on recurrence prediction (7 min) Francesco Rizzetto; Rho / Italy

Development of the MIEM score to predict survival after recurrence in patients with recurrent HCC following curative resection (7 min)







Hong Wei; Chengdu / China



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# Nomogram development and validation based on Gd-EOB-DTPA-enhanced MRI to predict IDH1 mutation for intrahepatic cholangiocarcinoma (7 min)

Xiaoqi Zhou; Guangzhou / China

# Prognostic role of CT and MRI of resectable intrahepatic mass forming cholangiocarcinoma (7 min) Silvia De Vizio; Rome / Italy

Photon-counting detector CT for liver lesion detection: optimising virtual monoenergetic images across different sizes and doses (7 min) Andre Euler; Baden / Switzerland

Detection of spoke-wheel pattern in focal nodular hyperplasia with microvascular flow imaging in a preliminary study (7 min) Aladár David Rónaszéki; Gyömrő / Hungary







#### **RPS 1802 - Advances in breast MRI techniques**

Categories: Breast, Contrast Media, Evidence-Based Imaging, Imaging Methods Date: March 2, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

**Moderator:** Nina Pötsch; Vienna / Austria

Abbreviated breast magnetic resonance imaging (MRI) protocols in a very high-risk population: friend or foe? (7 min) Tamara Suaris; London / United Kingdom

Evaluation of pure DCIS with abbreviated breast MRI (7 min) Nurbanu Basdogan; Istanbul / Turkey

Abbreviated vs full protocol in breast MRI: a meta-analysis comparing their diagnostic performances (7 min) Ottavia Battaglia; Milan / Italy

Enhancing the Kaiser score for unenhanced breast MRI (7 min) Nina Pötsch; Vienna / Austria

**Role of ultra-fast breast MRI in characterisation of breast masses: a step toward a faster MRI technique** (7 min) Rasha Karam Mahmoud Mohammed; Mansoura / Egypt

Application of the Kaiser score in the assessment of suspicious contrast-enhancing lesions on breast MRI in patients with equivocal conventional imaging findings (7 min) Katarina Obradovic; Belgrade / Serbia

Breast multiparametric MRI (MP-MRI) to discriminate between pure ductal carcinoma in situ (DCIS) and microinvasive carcinoma (MIC): the importance of DWI (7 min) Federica Cicciarelli; Latina / Italy

Screening without mammography using abbreviated breast MRI alone (7 min) Stephanie Morscheid; Aachen / Germany

Looking beyond standard dosage in dynamic contrast enhanced breast MRI using a pre-trained deep-learning model (7 min) Srivathsa Pasumarthi Venkata; Santa Clara / United States









# E<sup>3</sup> 1821 - Genitourinary incidentalomas

Categories: Genitourinary, Oncologic Imaging ETC Level: LEVEL II+III Date: March 2, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

**Adrenal** (45 min) Olivera Nikolic; Novi Sad / Serbia

Renal (45 min) Dominik Nörenberg; Mannheim / Germany









## HW 18Cb - Exploring cardiomyopathies: imaging insights and reporting techniques

Categories: Cardiac, Imaging Methods, Multidisciplinary ETC Level: LEVEL III Date: March 2, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

To participate, a pre-congress Hands-on Workshop registration is required.

# Participants who have completed their workshop registration before ECR are requested to arrive at the workshop room 20 minutes before the scheduled start of the session to present their badge and complete their check-in.

We would like to thank our workshop sponsors. For more information click here.

Please note we will be utilising equipment from certain vendors during the workshop sessions; however, a wide range of alternative options from other vendors is also available.

#### Moderator:

James Shambrook; Winchester / United Kingdom

Chairperson's introduction (10 min) James Shambrook; Winchester / United Kingdom

Instructors (80 min) Guido Ligabue; Modena / Italy Jonathan R. Weir-Mccall; London / United Kingdom Maja Pirnat; Maribor / Slovenia

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#### HW 18Sd - Mastering stroke perfusion imaging and MR, CT and AI applications

Categories: Education, Emergency Imaging, Imaging Methods, Neuro, Vascular

ETC Level: LEVEL II+III Date: March 2, 2024 | 09:30 - 10:30 CET

CME Credits: 1

To participate, a pre-congress Hands-on Workshop registration is required.

# Participants who have completed their workshop registration before ECR are requested to arrive at the workshop room 20 minutes before the scheduled start of the session to present their badge and complete their check-in.

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In this session participants will be able:

1. To become familiar with the use of MRI for the purpose of using perfusion MRI in assessing stroke patients.

2. To learn about stroke and treatment options by examining the role of CT scans in guiding treatment decisions for strokes.

To develop practical skills in perfusion techniques and post-processing for patient diagnosis, triage, and treatment orientations.
 To understand available public and commercial platforms in stroke imaging and artificial intelligence-driven applications for acute stroke.

Instructors (60 min)

Myriam Edjlali-Goujon; Paris / France Dennis M Hedderich; Munich / Germany









#### **RPS 1816 - Liver, biliary tract and pancreas**

Categories: Abdominal Viscera, Imaging Methods, Oncologic Imaging Date: March 2, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

Moderator:

Carolina Rio Bartulos; Braunschweig / Germany

An image-based comparison of histological subtypes in intraductal papillary mucinous neoplasm of the pancreas (7 min)

Jessica Ritter; Munich / Germany

Dual-layer detector spectral CT: a non-invasive preoperative tool for predicting histopathological differentiation in pancreatic ductal adenocarcinoma (7 min) Wei Liu; Shanghai / China

Preoperative scoring model for identifying proliferative hepatocellular carcinoma on multiphase liver MRI and its implication for surgical resection (7 min)

Junhan Pan; Hangzhou / China

Intraindividual comparison of CT and MRI for predicting vessels encapsulating tumour clusters in hepatocellular carcinoma: which imaging modality is better? (7 min) Junhan Pan; Hangzhou / China

CT evaluation of hepatic steatosis as a predictive factor for the development of surgical complications in patients with pancreatic adenocarcinoma resected after neoadjuvant chemotherapy (7 min) Elisa Boffa; Padova PD / Italy

Apparent diffusion coefficient and tissue stiffness are associated with different tumour microenvironment features in hepatocellular carcinoma (7 min) Jie Chen; Chengdu / China

Pancreatic cancer in photon-counting CT: low keV virtual monoenergetic images improve tumour conspicuity (7 min) Matthias Michael Wöltjen; Minden / Germany

Is computed tomography-based body composition a reliable predictor of chemotherapy-related toxicity in pancreatic cancer patients? (7 min)

Vito Chianca; Naples / Italy









Intrahepatic mass-forming cholangiocarcinoma: is there additional prognostic value in using Gd-EOB enhanced MRI? (7<sup>03</sup> min) Sebastian Halskov; Berlin / Germany

Efficacy and evaluation of response in hepatocellular carcinoma (HCC) treated with stereotactic body radiotherapy (SBRT) (7 min)

Francesca Castagnoli; London / United Kingdom







## **RPS 1808 - Thyroid and salivary gland imaging**

Categories: Artificial Intelligence & Machine Learning, Head and Neck, Imaging Methods, Interventional Radiology Date: March 2, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

Moderator: Edith Vassallo; Imsida / Malta

Role of superb microvascular imaging for differentiation between benign and malignant neck lymph nodes (7 min) Hye Ree Cho; Changwon / Korea, Republic of

Blood leukocyte DNA methylation biomarker for distinguishing malignant from benign thyroid nodules (7 min) Feihang Wang; Shanghai / China

CEUS as an additional tool in differentiating hyperthyroid diffuse disease: destructive vs hyperproduction conditions (7 min) Andreea Borlea; Timisoara / Romania

Radiomics analysis of thyroid ultrasound in relation to the radioactive iodine therapy-related sialadenitis (7 min) Hyein Kim; Suwon / Korea, Republic of

Arterial spin labelling MR technique in assessing blood perfusion of thyroid nodules and differentiating the malignancy by comparing with CT enhancement (7 min) Yuyun Xu; Hangzhou / China

Risk stratification of incidental 18F-Fluorodeoxyglucose-avid thyroid nodules based on six societies' ultrasound risk stratification systems (7 min) Chae Young Shin; Gangneung-si / Korea, Republic of

Ouantitative evaluation of thyroid gland vascularisation with microvascular ultrasonography and contribution of vascular index for differential diagnosis of Graves' disease and subacute thyroiditis (7 min) Zeynep Sezgi Erdal; Ankara / Turkey

Possibility to predict BRAFV600E mutations of papillary thyroid carcinoma via nomogram based on dual-layer detector spectral CT and clinical characteristics (7 min)

Dan Zhang; Chongqing / China

Magnetic Resonance (MR) sialographic assessment of masseter muscle and ductal kinking in patients with recurrent parotitis (7 min)







Sonia Triggiani; Milan / Italy



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The role of magnetic resonance elastography in the evaluation of benign parotid tumours (7 min) Vitaliy Atamaniuk; Rzeszów / Poland

**Ultrasound-assisted identification of the cricothyroid ligament: use in head and neck ultrasound education** (7 min) Andreas Weimer; Heppenheim / Germany







## E<sup>3</sup> 1819 - MR: the future is now

Categories: Artificial Intelligence & Machine Learning, Imaging Methods ETC Level: LEVEL III Date: March 2, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

**Moderator:** Jürgen Hennig; Freiburg / Germany

**Chairperson's introduction** (5 min) Jürgen Hennig; Freiburg / Germany

Low-field MR: a renaissance (25 min) Elmar M. Merkle; Basel / Switzerland

**MR beyond 3T: technical challenges and current applications beyond neuroimaging** (25 min) Tom Scheenen; Nijmegen / Netherlands

Al in MR examinations: no more compromise between time and quality (25 min) Marta Zerunian; Rome / Italy

Discussion (10 min)







## RC 1804 - Back to basics: diffuse lung diseases

Categories: Chest ETC Level: LEVEL II Date: March 2, 2024 | 09:30 - 10:30 CET CME Credits: 1

Moderator: Anna Kerpel-Fronius; Budapest / Hungary

**Chairperson's introduction** (4 min) Anna Kerpel-Fronius; Budapest / Hungary

Navigating the secondary pulmonary lobule (12 min) Eva Kocova; Hradec Kralove / Czechia

How to approach nodular lung diseases (12 min) Lukas Ebner; Bern / Switzerland

How to approach reticulation on HRCT (12 min) Anand Devaraj; London / United Kingdom

Diagnosis of cystic lung diseases made easy (12 min) Anagha P. Parkar; Bergen / Norway

Panel discussion: The importance of a systematic approach in diffuse lung diseases (8 min)









## RC 1806 - Non-FDG PET tracers in oncologic imaging

Categories: Hybrid Imaging, Molecular Imaging, Oncologic Imaging, Translational Imaging ETC Level: LEVEL II Date: March 2, 2024 | 09:30 - 10:30 CET CME Credits: 1

Moderator: Michel Eisenblaetter; Detmold / Germany

**Chairperson's introduction** (5 min) Michel Eisenblaetter; Detmold / Germany

**PSMA-PET: state-of-the-art and current developments** (15 min) Daniela Elena Oprea-Lager; Amsterdam / Netherlands

FAPI-PET: a new workhorse in oncologic imaging? (15 min)

Frederik L Giesel; Düsseldorf / Germany

**SSR-PET: imaging of neuroendocrine tumours and beyond** (15 min) Luigi Aloj; Cambridge / United Kingdom

Panel discussion: When and how? Choosing the right tracer for the right patient (10 min)







## RC 1814 - The role of radiographers in translating research into clinical practice

Categories: Education, Evidence-Based Imaging, Professional Issues, Radiographers, Research Date: March 2, 2024 | 09:30 - 10:30 CET CME Credits: 1

**Moderators:** Bo Redder Mussmann; Odense C / Denmark Gertraud Heinz; St. Pölten / Austria

**Chairpersons' introduction** (4 min) Bo Redder Mussmann; Odense C / Denmark Gertraud Heinz; St. Pölten / Austria

**Appraising the evidence: key skills and tips for radiographers** (12 min) Nejc Mekis; Ljubljana / Slovenia

Using the "complex interventions framework" to implement research (12 min) Karen Knapp; NEWTON ABBOT / United Kingdom

Strategies to disseminate research results to influence change (12 min)

Louise A. Rainford; Dublin / Ireland

**Tips for adopting research evidence into radiography practice** (12 min) Francis Zarb; Msida / Malta

Panel discussion: How can radiographers bring evidence-based practice into clinical departments (10 min)







## MS 18 - Muscle-tendon tears: from the basis to the frontiers of imaging

Categories: Imaging Methods, Musculoskeletal ETC Level: LEVEL III Date: March 2, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

**Moderator:** Xavier Tomas Batlle; Barcelona / Spain

**Chairperson's introduction** (5 min) Xavier Tomas Batlle; Barcelona / Spain Gil Rodas; Cardedeu / Spain

**Muscle-tendon tears: a sports and exercise medicine specialist's point of view** (15 min) Gil Rodas; Cardedeu / Spain

MRI approach to acute muscle injuries and the impact of imaging on RTP estimation (15 min) Sandra Mechó Meca; Barcelona / Spain

**MRI approach during the repair process after a muscle injury and estimation of reinjure risk** (15 min) Jaime Isern Kebschull; Barcelona / Spain

**Imaging of muscle injuries in elite and non-elite athletes** (15 min) Fernando Idoate Saralegui; PAMPLONA / Spain

**Case discussion: Let's go to work** (25 min) Xavier Tomas Batlle; Barcelona / Spain







## OF 18R - Latest advances and considerations in radiation therapy and oncology

Categories: Hybrid Imaging, Imaging Methods, Multidisciplinary, Oncologic Imaging, Radiographers

Date: March 2, 2024 | 09:30 - 10:30 CET

## CME Credits: 1

This session aims to provide a comprehensive overview of the evolving landscape in radiation therapy and oncology. It encompasses three pivotal talks, each shedding light on cutting-edge technologies, challenges, and quality control considerations that radiographers must navigate in their pursuit of excellence in cancer care. Indeed, the session will include talks relating to some of the latest advances and considerations in radiation therapy and oncology. Whether you are a seasoned practitioner or a newcomer to the field, this session offers invaluable knowledge and practical insights that will empower radiographers to provide the highest quality care in the dynamic landscape of cancer treatment.

## **Moderator:**

Theresa O'Donovan; Co. Cork / Ireland

Chairperson's introduction (5 min)

Theresa O'Donovan; Co. Cork / Ireland

Proton therapy: what radiographers need to know (16 min)

Brigitte Florentine barones van Asbeck; Utrecht / Netherlands

Opportunities and challenges of MR-guided adaptive radiotherapy (16 min)

Cynthia Eccles; Buxton / United Kingdom

## Keeping up to date with the latest QC for RT equipment (16 min)

Ainars Bajinskis; Riga / Latvia

Open forum discussion (7 min)







## SF 18b - Incidental lesions in children

Categories: Abdominal Viscera, Chest, Musculoskeletal, Neuro, Paediatric ETC Level: LEVEL II Date: March 2, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

Moderator: Ignasi Barber; EspluguesdeLlobregat / Spain

Chairperson's introduction (5 min) Ignasi Barber; EspluguesdeLlobregat / Spain

**Neuroimaging** (17 min) Maria Argyropoulou; Ioannina / Greece

**Thoracic imaging** (17 min) Maria Raissaki; HERAKLION / Greece

Abdominal imaging (17 min) Simon G. F. Robben; Maastricht / Netherlands

Musculoskeletal imaging (17 min) Ignasi Barber; EspluguesdeLlobregat / Spain

Panel discussion: How do we report incidental findings? (17 min)









## IF 18 - Large language models (LLM), chatbots, and the next generation of texts in radiology

Categories: Artificial Intelligence & Machine Learning, Education, Management/Leadership, Research

ETC Level: LEVEL III

Date: March 2, 2024 | 09:30 - 10:30 CET

## CME Credits: 1

Clearly, ChatGPT and other large language models (LLM) are one of the potentially most transformative developments in AI to date. Those generative models offer potentials not yet fully perceivable – especially if and how those could be applied in medicine and radiology. This session will discuss potential applications of LLMs in radiology, from documentation and report generation, to teaching and even academic writing.

#### **Moderator:**

Vicky Goh; London / United Kingdom

## Chairperson's introduction (5 min)

Vicky Goh; London / United Kingdom

## The future of reporting and documentation (15 min)

Philippe Puech; Lille / France

## The future of teaching and testing radiology residents (15 min)

Laura Oleaga Zufiria; Barcelona / Spain

## Al apps for academic writing: if, when, and how to use it (15 min)

Nicholas Landini; Rome / Italy

Panel discussion: Will large language models and chatbots transform radiology reporting and research? (10 min)







## OF 18T - Photon-counting CT: what you wanted to know but were afraid to ask

Categories: Education, General Radiology, Imaging Methods, Professional Issues, Students ETC Level: ALL LEVELS Date: March 2, 2024 | 09:30 - 10:30 CET CME Credits: 1

**Moderator:** Mirjam Gerwing; Münster / Germany

**Chairpersons' introduction** (5 min) Mirjam Gerwing; Münster / Germany

**The basics of photon-counting CT** (15 min) Martin J. Willemink; San Diego / United States

Clinical application: cardiothoracic imaging (15 min)

Ricardo P. J. Budde; Rotterdam / Netherlands

**Clinical application: emerging areas** (15 min) Dietmar Tamandl; Vienna / Austria

Open forum discussion: How will photon-counting CT change my practice? (10 min)







## RC 1811 - Neurovascular intervention for the non-interventionalist

Categories: Interventional Radiology, Neuro, Vascular ETC Level: LEVEL II+III Date: March 2, 2024 | 09:30 - 10:30 CET CME Credits: 1

**Moderator:** Zsolt Mihaly Kulcsar; Zurich / Switzerland

**Chairperson's introduction** (5 min) Zsolt Mihaly Kulcsar; Zurich / Switzerland

**Stroke imaging: what does the interventionalist need to know from your report?** (15 min) Aleksandra Zoran Aracki-Trenkic; Nis / Serbia

Aneurysm evaluation: what diagnostic information helps better treatment planning? (15 min) Pedro Vilela; Lisbon / Portugal

**Dural fistula and arteriovenous malformations (AVMs): how to predict rupture risk?** (15 min) Zsolt Mihaly Kulcsar; Zurich / Switzerland

Panel discussion: Collaboration between diagnostic and interventional neuroradiologists: how I do it and how I would like to do it (10 min)







## ESR eHealth 18 - The EU Health Data Space (EHDS): what does it mean for radiology?

Categories: Imaging Informatics, Management/Leadership, Professional Issues, Research

ETC Level: LEVEL II

Date: March 2, 2024 | 09:30 - 10:30 CET

## CME Credits: 1

The European Health Data Space (EHDS) is a health-specific ecosystem comprising rules, common standards and practices, infrastructures and a governance framework aiming at empowering individuals through health data access and researchers through a trustworthy set-up for health data research. This session will provide an overview of what the EHDS is from the EU perspective, how it is perceived by patients and what challenges to data exchange lie ahead.

#### Moderator:

Luis Marti-Bonmati; Valencia / Spain

Chairperson's introduction (5 min)

Luis Marti-Bonmati; Valencia / Spain

Potentials and challenges to data exchange in the EHDS (15 min)

Robin Germain Lucien Decoster; Brussels / Belgium

**The EU vision for health data exchange** (15 min) Aleksandra Wesolowska; Luxembourg / Luxembourg

The patient perspective on data exchange (15 min)

Erik Briers; Hasselt / Belgium

Panel discussion: How will the EHDS impact us? How can we use it? (10 min)







## E<sup>3</sup> 1823 - Interventional

Categories: Interventional Radiology, Vascular ETC Level: LEVEL I+II Date: March 2, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

Moderator: Irene Bargellini; Candiolo / Italy

**Chairperson's introduction** (6 min) Irene Bargellini; Candiolo / Italy

Basic principles of angiography and image-guided interventions (28 min)

Rene Mueller Müller-Wille; Wels / Austria

Image-guided interventions in oncology (28 min) Adrian Kobe; Zurich / Switzerland

**Vascular interventions** (28 min) Dimitrij Kuhelj; Ljubljana / Slovenia







# MD 11 - Brain tumours: new developments in imaging and treatment - recommendations for clinical practice and directions for the future

Categories: Multidisciplinary, Neuro, Oncologic Imaging ETC Level: ALL LEVELS Date: March 2, 2024 | 10:00 - 11:00 CET CME Credits: 1

Moderator: Marion Smits; Rotterdam / Netherlands

**Chairperson's introduction** (2 min) Marion Smits; Rotterdam / Netherlands

**The neuro-oncologist's perspective** (8 min) Martin Jacques van den Bent; Rotterdam / Netherlands

**The neurosurgeon's perspective** (8 min) Niels Verburg; Amsterdam / Netherlands

**The neuroradiologist's perspective** (8 min) Marion Smits; Rotterdam / Netherlands

Expert panel discussion (34 min)







## **EFRS 8 - EFRS Educational Wing in the Future**

Categories: Education, Professional Issues, Radiographers, Research, Students

ETC Level: LEVEL I

Date: March 2, 2024 | 10:30 - 11:30 CET

## CME Credits: 1

This session aims to learn the outcomes of the 1st EFRS summit, to meet the EFRS Educational Wing Management Team and to consider the need for OPTIMAX summer school, as also to share the thoughts and suggestions for EFRS EW webinars.

Moderator: Alexandra Partner; Leicester / United Kingdom

**Chairperson's Introduction** (10 min) Alexandra Partner; Leicester / United Kingdom

Outcomes from EFRS Summit (10 min)

Karoliina Paalimäki-Paakki; Oulu / Finland

**EFRS Strategy for Education** (5 min) Altino Jorge Conde Da Cunha; Cumieira / Portugal

**Summer School experiences** (10 min) Carst Buissink; Groningen / Netherlands

## Supporting members in education - Discussion (20 min)

**Closing** (5 min) Alexandra Partner; Leicester / United Kingdom







## **CUBE 20 - Case Studies: Individualized Decision Making for Rescue Therapy**

Categories: Emergency Imaging, Interventional Radiology, Neuro, Research, Vascular

Date: March 2, 2024 | 10:30 - 11:00 CET

CME Credits: 0.5

## Neuro IR Day - Topic Coordinator: Prof. Jean-Pierre Pruvo

During the "What would you do?" sessions, an expert leads the audience through past interventions. At critical junctures in each of the cases, the audience is then asked about the course of action they would take, with the implications of different decisions then being explored.

Moderator: Jean-Pierre Pruvo; Lille / France

## Chairperson's introduction (2 min)

Jean-Pierre Pruvo; Lille / France

## Case Studies: Individualized Decision Making for Rescue Therapy (28 min)

Johannes Kaesmacher; Bern / Switzerland







## AI-SC 7 - Economic impact and clinical risk of AI

Categories: Artificial Intelligence & Machine Learning, Imaging Informatics, Professional Issues Date: March 2, 2024 | 11:15 - 12:15 CET CME Credits: 1

**Moderator:** Kicky Gerhilde van Leeuwen; De Bilt / Netherlands

**Chairperson's introduction** (3 min) Kicky Gerhilde van Leeuwen; De Bilt / Netherlands

Economic impact and clinical risk of AI (57 min)

Hugues Brat; Sion / Switzerland









## PL 3 - Advancing radiology in times of dwindling resources and increasing demands

Categories: Management/Leadership, Professional Issues Date: March 2, 2024 | 11:30 - 12:00 CET CME Credits: 0.5

Moderator: Carlo Catalano; Roma / Italy

**Introduction** (2 min) Carlo Catalano; Roma / Italy

## Advancing radiology in times of dwindling resources and increasing demands (28 min)

Annemiek Snoeckx; Zandhoven / Belgium









## ST 16 - EDiR: a certificate of excellence. Why you should take it?

## Date: March 2, 2024 | 11:30 - 12:00 CET

The European Diploma in Radiology is a certificate of excellence with a great prestige not only at European level but also international.

## Moderators:

Ben Giese; Chicago / United States Mélisande Rouger; Bilbao / Spain

**Interview** (30 min) Laura Oleaga Zufiria; Barcelona / Spain Lucian Beer; Vienna / Austria









## **CUBE 21 - EYMINT E-fellowship programme: current state and future directions**

Categories: Interventional Radiology Date: March 2, 2024 | 12:00 - 12:30 CET CME Credits: 0.5 Neuro IR Day - Topic Coordinator: Prof. Jean-Pierre Pruvo

The "Special Topic" sessions address rarer, more challenging interventions or topics of importance to daily practice.

**Moderator:** Jean-Pierre Pruvo; Lille / France

**Chairperson's introduction** (2 min) Jean-Pierre Pruvo; Lille / France

## EYMINT E-fellowship programme: current state and future directions (28 min)

Uta Hanning; Hamburg / Germany









## **RPS 1908 - Head and neck: advances in tumour imaging**

Categories: Artificial Intelligence & Machine Learning, Head and Neck, Imaging Methods, Interventional Oncologic Radiology, Oncologic Imaging

Date: March 2, 2024 | 12:15 - 13:45 CET CME Credits: 1.5

Moderator: Burce Özgen Mocan; Chicago / United States

The prediction of biological features using MR imaging in head and neck squamous cell carcinoma: a systematic review and meta-analysis (7 min)

Hedda Joanne van der Hulst; Amsterdam / Netherlands

Comparison of diffusion-weighted MRI using imaging split acquisition of fast spin echo signal (SPLICE) and single-shot echo-planar imaging (SS-EPI) in tumours of the head and neck (7 min) Hedda Joanne van der Hulst; Amsterdam / Netherlands

Does radiotherapy influence the diagnostic performance of ultrasound-guided fine-needle aspiration cytology of neck nodes in head and neck squamous cell carcinoma? (7 min)

Sophie Neveu; Geneva / Switzerland

Detection of recurrent nodal disease in head and neck squamous cell carcinoma with multiparametric contrastenhanced FDG-PET/DWIMRI (7 min)

Sophie Neveu; Geneva / Switzerland

Predicting response to exclusive combined radio-chemotherapy in naso-oropharyngeal cancer: the role of texture analysis (7 min) Eleonora Bicci; Florence / Italy

Early intra-treatment T1 rho imaging predicts treatment response to induction chemotherapy in patients with advanced nasopharyngeal carcinoma (7 min)

Qi Yong AI; Hong Kong / Hong Kong SAR China

Radiologic predictors of response to neoadjuvant chemotherapy in patients with advanced oral cavity tumours (7 min) Iris Burck; Frankfurt a. Main / Germany

Image-guided intraoperative assessment of surgical margins in oral cavity squamous cell cancer: a diagnostic test accuracy review (7 min) Giorgia Carnicelli; Rome / Italy









**Reproducibility and prognostic value of NI-RADS score in early post-operative CT for oral Cavity cancer** (7 min) - MARCH 03 Giovanni Mazzon; Padua / Italy

## Diagnostic accuracy of MRI in detecting perineural spread of head and neck tumours: a systematic review and metaanalysis (7 min)

Umida Bafoevna Abdullaeva; Tashkent / Uzbekistan







## ESR/EORTC - Next-generation imaging: clinical trials and AI

Categories: Artificial Intelligence & Machine Learning ETC Level: LEVEL III Date: March 2, 2024 | 12:15 - 13:45 CET CME Credits: 1.5

**Moderators:** Thomas Beyer; Vienna / Austria Frédéric Lecouvet; Brussels / Belgium

**Chairpersons' introduction** (5 min) Thomas Beyer; Vienna / Austria Frédéric Lecouvet; Brussels / Belgium

Large language models in radiology and beyond (15 min) Christian Blüthgen; Zürich / Switzerland

How to validate Al in healthcare? (15 min) Daniel Pinto Dos Santos; Frankfurt / Germany

**Al in hybrid imaging** (15 min) Thomas Beyer; Vienna / Austria

Al for oncological follow-up (15 min) Andrea Schenk; Bremen / Germany

**Patient's perspective: collecting high-quality data to benefit the patient** (15 min) Caroline Justich; Vienna / Austria

Panel discussion: Challenges and opportunities of AI in clinical trials (10 min)







## RPS 1909 - IR in the management of benign and malignant disease in male patients

Categories: Genitourinary, Interventional Radiology, Vascular Date: March 2, 2024 | 12:30 - 13:30 CET CME Credits: 1

Moderator: Asuncion Torregrosa Andres; Valencia / Spain

A single-centre retrospective study of 300 men with localised primary prostate cancer treated using MRI-guided transurethral ultrasound ablation (TULSA) (7 min) Lucas Engelage; Berlin / Germany

Twelve-month outcomes of salvage transurethral ultrasound ablation (TULSA) for the treatment of localised radiorecurrent prostate cancer (7 min) Pouya Doerwald; Hamburg / Germany

**CTA** and angiographic prostatic artery anatomy in a Korean population (7 min) Seung Hyun Lee; Incheon / Korea, Republic of

Six years of prostatic artery embolisation (PAE): a comprehensive and critical single-centre, single-operator retrospective analysis of 551 cases (7 min) Leona Soraja Alizadeh; Frankfurt a. Main / Germany

12-month outcomes of MRI-guided transurethral ultrasound ablation (TULSA) for the treatment of benign prostatic hyperplasia (7 min) Pouya Doerwald; Hamburg / Germany

Recurrence rates of male varicocele after endovascular treatment using NBCA-MS (Glubran2): a retrospective study (7 min) Alessandra Mininni; Milan / Italy

Endovascular embolisation for high-flow priapism in paediatric patients (7 min)

Edanur Karapinar; Istanbul / Turkey

MRI-guided transrectal focal laser ablation for localised low and intermediate risk prostate cancer: initial experience using an integrated laser ablation system (7 min)

Jurgen Fütterer; Nijmegen / Netherlands









## **RPS 1910 - CT applications in musculoskeletal imaging**

Categories: Imaging Methods, Musculoskeletal, Physics in Medical Imaging Date: March 2, 2024 | 12:30 - 13:30 CET CME Credits: 1

Moderator:

Patrick Omoumi; Lausanne / Switzerland

Value-added opportunistic chest CT screening for osteoporosis using bone mineral density estimation computed by multi-view semi-supervised learning (7 min)

Jinrong Yang; Wuhan / China

Multiparametric contrast-enhanced dual-energy CT as a one-stop shop approach in arthritis imaging-first results of the HAI-DECT study (7 min) Sevtap Tugce Ulas; Berlin / Germany

Risk factors for compression fractures in patients treated with gastrectomy: emphasis on bone mineral density measured on opportunistic CT (7 min) Suiji Lee; Seoul / Korea, Republic of

Photon-counting detector computed tomography (PCD-CT) for quantitative microstructural imaging of bone (7 min) Janina Maria Patsch; Vienna / Austria

Prediction of osteoporosis associated fractures: evaluation of dual-energy CT-derived metrics of the lumbar spine (7 min)

Leon David Grünewald; Frankfurt a. Main / Germany

**Cone beam CT in the emergency department: revising incidence rates for carpal bone fractures** (7 min) Sophie Murphy; Dublin / Ireland

**Potential of dual-energy CT-based collagen maps for the assessment of thoracic disc degeneration** (7 min) Leon David Grünewald; Frankfurt a. Main / Germany







## **RPS 1912** - The newest techniques in paediatric radiology: faster imaging, less radiation and contrast agents

Categories: Artificial Intelligence & Machine Learning, Contrast Media, EuroSafe Imaging/Radiation Protection, Imaging Methods, Paediatric

Date: March 2, 2024 | 12:30 - 13:30 CET CME Credits: 1

Moderator: Élida Vazquez; Barcelona / Spain

Factors associated with CT Scan repetition among paediatrics and its association with cancer risk: a systematic review and meta-analysis study (7 min) Tahani Alshangeeti; MADINAH / Saudi Arabia

Myocardial strain assessment in the human foetus by cardiac MRI using Doppler ultrasound gating and feature tracking (7 min) Björn Schönnagel; Hamburg / Germany

Location comparison of radiation doses in paediatric Hickman line insertion (7 min) Sara Hosseinzadeh; Glasgow / United Kingdom

Reducing radiation dose and contrast medium volume in paediatric spectral CT imaging: how is the second generation dual-layer CT? (7 min) Yiran Wang; Zhengzhou / China

The effect of arm positioning on radiation dose and image quality during paediatric CT chest examinations (7 min) Charlotte Emma Kelly; London / United Kingdom

Ushering into another dimension: diagnostic utility of low-dose four dimensional (4D) dynamic airway CT in paediatric stridor (7 min) Shubham Saini; Chandigarh / India







## PC 19 - European Union Artificial Intelligence (AI) Act: impact on imaging

Categories: Artificial Intelligence & Machine Learning, Medico-legal, Professional Issues ETC Level: ALL LEVELS Date: March 2, 2024 | 12:30 - 13:30 CET CME Credits: 1

**Moderator:** Carlo Catalano; Roma / Italy

Chairperson's introduction (2 min) Carlo Catalano; Roma / Italy

**Between legislation and innovation** (12 min)

Vlastimil Valek; Praha / Czechia

The Act's impact on purchasing decisions (8 min)

Elmar Kotter; Freiburg / Germany

Factoring in the risks when reporting: the Act and everyday practice (8  $\ensuremath{\mathsf{min}}\xspace)$ 

Joe Barnett; St Albans / United Kingdom

Round table discussion (30 min) Carlo Catalano; Roma / Italy Vlastimil Valek; Praha / Czechia Elmar Kotter; Freiburg / Germany Joe Barnett; St Albans / United Kingdom Emanuele Neri; Pisa / Italy Konstantin Nikolaou; Tuebingen / Germany







## RC 1916 - Post-treatment changes in oncologic patients

Categories: Abdominal Viscera, Chest, Genitourinary, Interventional Oncologic Radiology, Interventional Radiology

ETC Level: LEVEL III Date: March 2, 2024 | 12:30 - 13:30 CET CME Credits: 1

Moderator: Thomas J. Vogl; Frankfurt a. Main / Germany

Chairperson's introduction (5 min) Thomas J. Vogl; Frankfurt a. Main / Germany

**Prostate** (15 min) Jurgen Fütterer; Nijmegen / Netherlands

Lung (15 min) Fernando Gomez Muñoz; Valencia / Spain

Liver (15 min) Thomas Karl Helmberger; Munich / Germany

Panel discussion: Is radiology enough, or do we still need surgery? (10 min)







## RC 1913 - Physics of photon-counting CT: game changer or incremental progress?

Categories: EuroSafe Imaging/Radiation Protection, Imaging Methods, Physics in Medical Imaging

ETC Level: LEVEL II+III Date: March 2, 2024 | 12:30 - 13:30 CET CME Credits: 1



**Moderator:** Paddy Gilligan; Dublin / Ireland

**Chairperson's introduction** (5 min) Paddy Gilligan; Dublin / Ireland

**Technical possibilities of photon-counting CT** (15 min) Marc Kachelrieß; Heidelberg / Germany

Image quality and dose in photon-counting CT (15 min) Lucie Sukupova; Prague / Czechia

**Clinical practice in photon-counting CT** (15 min) Dominik Juskanic; Nitra / Slovakia

Panel discussion: Photon-counting CT: game changer or incremental progress? (10 min)







## HW 19Sd - Mastering stroke perfusion imaging and MR, CT and AI applications

Categories: Education, Emergency Imaging, Imaging Methods, Neuro, Vascular

ETC Level: LEVEL II+III Date: March 2, 2024 | 12:30 - 13:30 CET

CME Credits: 1

To participate, a pre-congress Hands-on Workshop registration is required.

## Participants who have completed their workshop registration before ECR are requested to arrive at the workshop room 20 minutes before the scheduled start of the session to present their badge and complete their check-in.

We would like to thank our workshop sponsors. For more information click here.

Please note we will be utilising equipment from certain vendors during the workshop sessions; however, a wide range of alternative options from other vendors is also available.

In this session participants will be able:

1. To become familiar with the use of MRI for the purpose of using perfusion MRI in assessing stroke patients.

2. To learn about stroke and treatment options by examining the role of CT scans in guiding treatment decisions for strokes.

To develop practical skills in perfusion techniques and post-processing for patient diagnosis, triage, and treatment orientations.
 To understand available public and commercial platforms in stroke imaging and artificial intelligence-driven applications for acute stroke.

Instructors (60 min)

Myriam Edjlali-Goujon; Paris / France Abderrahmane Hedjoudje; Cergy / France









## HW 19Mb - Ultrasound of the muscles and nerves of the lower limb

Categories: Imaging Methods, Musculoskeletal

**ETC Level:** LEVEL I **Date:** March 2, 2024 | 12:30 - 13:30 CET

CME Credits: 1

To participate, a pre-congress Hands-on Workshop registration is required.

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Please note we will be utilising equipment from certain vendors during the workshop sessions; however, a wide range of alternative options from other vendors is also available.

In this session participants will be able:

- 1. To become familiar with muscle and nerve anatomy of the lower limb with the usual landmarks.
- 2. To develop practical skills in performing ultrasound.
- 3. To understand the main limitations of ultrasound.
- 4. To learn tricks and tips to improve daily practice.

## Instructors (60 min)

Lionel Pesquer; Bordeaux / France Georgina Marian Allen; Oxford / United Kingdom

## Tutors

Guillaume Lefebvre; Lille / France Maria Pilar Aparisi Gomez; Valencia / Spain Vito Chianca; Naples / Italy Salvatore Gitto; Milano / Italy Alberto Bazzocchi; Bologna / Italy Francesca Serpi; Milan / Italy Saulius Rutkauskas; Kaunas / Lithuania









## E<sup>3</sup> 1926 - Imaging of stroke: what should you know in 2024?

Categories: Artificial Intelligence & Machine Learning, Emergency Imaging, Interventional Radiology, Neuro, Vascular

ETC Level: LEVEL III Date: March 2, 2024 | 12:30 - 13:30 CET CME Credits: 1

Moderator: Wim van Zwam; Maastricht / Netherlands

**Chairperson's introduction** (5 min) Wim van Zwam; Maastricht / Netherlands

State-of-the-art diagnosis: role of MRI combined with AI (15 min) Georgina Gáti; Budapest / Hungary

State-of-the-art diagnosis: role of CTA combined with AI (15 min)

Paul M. Parizel; Perth / Australia

What is new in endovascular management? (15 min) Roberto Gandini; Rome / Italy

Panel discussion: Logistical challenges in stroke diagnosis and treatment. Is there room for improvement? (10 min)







# EDIR 19 - EDIR simulation session: real exam cases with feedback from the examiners, win an EDIR examination place

Categories: Education, Professional Issues, Students ETC Level: LEVEL II Date: March 2, 2024 | 12:30 - 13:30 CET CME Credits: 1

## Moderators:

Laura Oleaga Zufiria; Barcelona / Spain Clemens C. Cyran; München / Germany Carmel J. Caruana; Msida / Malta

## Chairpersons' introduction (5 min)

Laura Oleaga Zufiria; Barcelona / Spain Clemens C. Cyran; München / Germany Carmel J. Caruana; Msida / Malta

## EDiR simulation (40 min)

Clemens C. Cyran; München / Germany Carmel J. Caruana; Msida / Malta Lucian Beer; Vienna / Austria

Scientific discussion and Q&A (15 min)







## BS 19 - Normal or not? A neuroradiological roadmap

Categories: Neuro ETC Level: LEVEL I+II Date: March 2, 2024 | 12:30 - 13:30 CET CME Credits: 1

**Moderator:** Andrea Rossi; Genoa / Italy

**Chairperson's introduction** (5 min) Andrea Rossi; Genoa / Italy

**Head and neck** (20 min) Katarina Šurlan Popović; Ljubljana / Slovenia

**Spine** (20 min) Johan Van Goethem; Antwerpen / Belgium

Panel discussion: To follow up or not to follow up? That is the question. (15 min)







## RC 1904 - Technical advances in thoracic imaging

Categories: Chest, Imaging Methods ETC Level: LEVEL III Date: March 2, 2024 | 12:30 - 13:30 CET CME Credits: 1

**Moderator:** Galit Aviram; Tel-Aviv / Israel

**Chairperson's introduction** (5 min) Galit Aviram; Tel-Aviv / Israel

Protons and more: the rise of lung MRI (15 min) Mark O. Wielpütz; Heidelberg / Germany

Positrons and more: the further rise of nuclear medicine (15 min) Tim van den Wyngaert; Edegem / Belgium

**Photons illuminating the dark: potential of spectral thoracic imaging** (15 min) Victor Mergen; Zurich / Switzerland

Panel discussion: How do patients profit from technical advances (10 min)







### OF 19R - Developing image perception skills for enhanced practice

Categories: Education, Imaging Informatics, Imaging Methods, Radiographers, Research

Date: March 2, 2024 | 12:30 - 13:30 CET

#### CME Credits: 1

The aim of this session is to offer a comprehensive exploration of the critical aspects of image perception in the field of radiography. This session comprises three insightful talks that collectively provide attendees with a deep understanding of the fundamental concepts, practical skills, and the role of research in advancing image perception proficiency. The multifaceted aspects of developing image perception skills will be explored and explained, which should be appealing to both novice and more experienced radiographers and health professionals. Indeed, this session will offer valuable knowledge and practical insights to enhance one's proficiency in image perception, ultimately contributing to improved patient care.

### **Moderator:**

Helle Precht; Middelfart / Denmark

Chairperson's introduction (5 min)

Helle Precht; Middelfart / Denmark

### Medical image perception: key concepts for radiographers (16 min)

Rachel Toomey; Dublin / Ireland

Developing skills in image interpretation: insights and tips from a reporting radiographer (16 min)

Jarno Tapani Huhtanen; Raisio / Finland

### The importance of research in understanding medical image perception (16 min)

Tim Donovan; Lancaster / United Kingdom

Open forum discussion (7 min)







## ESR/ESSO 19 - From imaging to cancer surgery

Categories: Abdominal Viscera, Breast, Gl Tract, Multidisciplinary, Oncologic Imaging ETC Level: LEVEL II+III Date: March 2, 2024 | 12:30 - 13:30 CET CME Credits: 1

**Moderators:** Regina G. H. Beets-Tan; Amsterdam / Netherlands Isabel T. Rubio; Madrid / Spain

**Chairpersons' introduction** (4 min) Regina G. H. Beets-Tan; Amsterdam / Netherlands Isabel T. Rubio; Madrid / Spain

Imaging to help decisions about colorectal cancer surgery: impact on surgical options (28 min) Regina G. H. Beets-Tan; Amsterdam / Netherlands Per J. Nilsson; Stockholm / Sweden

Screening and early detection in breast cancer: impact on non-palpable breast-guided surgery (28 min)

Paola Clauser; Vienna / Austria Isabel T. Rubio; Madrid / Spain







## ESR Research - Next-generation researchers: here's how to get started!

Categories: Management/Leadership, Multidisciplinary, Professional Issues, Research, Students

ETC Level: LEVEL I+II Date: March 2, 2024 | 12:30 - 13:30 CET CME Credits: 1

Moderator: Marion Smits; Rotterdam / Netherlands

**Chairperson's introduction** (2 min) Marion Smits; Rotterdam / Netherlands

**Getting funded** (5 min) Johannes Uhlig; Göttingen / Germany

Finding a mentor (5 min) Monika Radikė; Liverpool / United Kingdom

**Going abroad** (5 min) Oğuz Lafcı; Ankara / Turkey

**Building a research line** (5 min) Alejandro Rovira Cañellas; Barcelona / Spain

**Involving patients in research projects** (5 min) Cheryl Cruwys; Haute Vienne / France

Interactive panel discussion: How do/did you take your first steps in the research domain? (33 min)









## RC 1901 - Emergency! Two patients, not one: abdominal pain in pregnancy

Categories: Abdominal Viscera, Emergency Imaging, GI Tract ETC Level: LEVEL I+II Date: March 2, 2024 | 12:30 - 13:30 CET CME Credits: 1

**Moderator:** Marc Zins; Paris / France

**Chairperson's introduction** (5 min) Marc Zins; Paris / France

Liver, gallbladder, pancreas and bile duct disorders (15 min) Marco Dioguardi Burgio; Clichy / France

**Appendix and bowel disorders** (15 min) Vikas Shah; Leicester / United Kingdom

**Quantifying the risks of cross-sectional imaging in an emergency** (15 min) Jeannette Kraft; Leeds / United Kingdom

Panel discussion: Imaging as a problem-solving tool? (10 min)







### HW 19Pc - Mimickers: not every lesion is a tumour

Categories: Genitourinary, Oncologic Imaging

ETC Level: LEVEL II+III

Date: March 2, 2024 | 12:30 - 13:30 CET

CME Credits: 1

To participate, a pre-congress Hands-on Workshop registration is required.

# Participants who have completed their workshop registration before ECR are requested to arrive at the workshop room 20 minutes before the scheduled start of the session to present their badge and complete their check-in.

We would like to thank our workshop sponsors. For more information click here.

Please note we will be utilising equipment from certain vendors during the workshop sessions; however, a wide range of alternative options from other vendors is also available.

In this session participants will be able:

- 1. To become familiar with the typical mimickers in the central zone.
- 2. To understand the differential diagnosis of a hypertrophied AFS and a tumour.
- 3. To know the mimickers in the peripheral zone.
- 4. To know the mimickers in the transition zone.

Instructors (60 min) Geert M. Villeirs; Gent / Belgium

Pieter Julien Luc De Visschere; Ghent / Belgium









# ST 17 - EuroSafe Imaging: celebrating 10 years of success in radiation protection

Categories: EuroSafe Imaging/Radiation Protection

Date: March 2, 2024 | 12:45 - 13:30 CET

In this session, joins us as our speakers discuss EuroSafe Imaging, the ESR's flagship initiative on radiation protection.

As EuroSafe Imaging is celebrating its 10 year anniversary at ECR 2024, we will take a look back at some of its successes over the past decade as well as discussing current initiatives, such as its educational activities that aim to support and strengthen medical radiation protection across Europe and beyond.

We will also highlight one of the most recent European projects related to radiation protection led by the ESR: the European coordinated action on improving justification of computed tomography (EU-JUST-CT) project.

### Moderators:

Ben Giese; Chicago / United States Mélisande Rouger; Bilbao / Spain

Interview (45 min) Boris Brkljačić; Zagreb / Croatia Reinhard W.R. Loose; Nürnberg / Germany Graciano Paulo; Coimbra / Portugal Deniz Akata; Ankara / Turkey









# EFRS 9 - Nuclear Medicine becomes Person-Centered: An Exploration in a Group

Categories: Nuclear Medicine, Professional Issues, Radiographers

ETC Level: LEVEL I

Date: March 2, 2024 | 13:00 - 14:00 CET

This session is a focus group on the topic of Person-Centered Care in Nuclear Medicine to validate working tool and gather suggestions from those working in other fields.

**Moderator:** Ana Geão; Montijo / Portugal

Chairperson's Introduction (5 min)

Ana Geão; Montijo / Portugal

Focus Group (50 min)

**Closing** (5 min) Ana Geão; Montijo / Portugal







# CUBE 22 - Opportunities to improve patient safety during neurological IR procedures

Categories: Interventional Radiology Date: March 2, 2024 | 13:00 - 13:30 CET CME Credits: 0.5

The "EFRS @ the Cube" sessions focus on current radiography topics in interventional radiology.

Opportunities to improve patient safety during neurological IR procedures (30 min)

Jose Jr Binghay; Dublin / Ireland







### EFRS - Radiography: meet the editors

Categories: Education, Evidence-Based Imaging, Professional Issues, Radiographers, Research Date: March 2, 2024 | 14:00 - 15:30 CET CME Credits: 1.5

**Moderators:** Jonathan McNulty; Dublin / Ireland Francis Zarb; Msida / Malta

**Chairpersons' introduction** (2 min) Jonathan McNulty; Dublin / Ireland Francis Zarb; Msida / Malta

Journal performance and why engage (12 min) Jonathan McNulty; Dublin / Ireland

Addressing equality, diversity, and inclusivity (12 min) Amy Hancock; Exeter / United Kingdom

**Fostering clinical engagement** (12 min) Bo Redder Mussmann; Odense C / Denmark

**Getting published: my ten top tips** (12 min) Robert Meertens; Exeter / United Kingdom

**Promoting your research through social media: my ten top tips** (12 min) Nejc Mekis; Ljubljana / Slovenia

**Becoming a reviewer: my ten top tips** (12 min) Theophilus N Akudjedu; Bournemouth / United Kingdom

Panel discussion: Ask the editors (16 min)









## CUBE 23 - Carotid interventions: what to do to avoid disasters!

Categories: Interventional Radiology Date: March 2, 2024 | 14:00 - 14:30 CET CME Credits: 0.5

## Advanced Session - Topic Coordinator: Prof. Miltiadis Krokidis

The "Advanced Session: The Extra Mile" introduces the audience to techniques and treatments offered for challenging cases where an out-of-the-box approach was required or where there has been an impactful learning point for clinical practice.

### Moderator:

Maximilian De Bucourt; Berlin / Germany

Chairperson's introduction (2 min)

### Carotid interventions: what to do to avoid disasters! (28 min)

Grzegorz Marek Karwacki; Luzern / Switzerland







## HW 20Mb - Ultrasound of the muscles and nerves of the lower limb

Categories: Imaging Methods, Musculoskeletal

ETC Level: LEVEL | Date: March 2, 2024 | 14:00 - 15:00 CET

CME Credits: 1

To participate, a pre-congress Hands-on Workshop registration is required.

# Participants who have completed their workshop registration before ECR are requested to arrive at the workshop room 20 minutes before the scheduled start of the session to present their badge and complete their check-in.

We would like to thank our workshop sponsors. For more information click here.

Please note we will be utilising equipment from certain vendors during the workshop sessions; however, a wide range of alternative options from other vendors is also available.

In this session participants will be able:

- 1. To become familiar with muscle and nerve anatomy of the lower limb with the usual landmarks.
- 2. To develop practical skills in performing ultrasound.
- 3. To understand the main limitations of ultrasound.
- 4. To learn tricks and tips to improve daily practice.

### Instructors (60 min)

Lionel Pesquer; Bordeaux / France Georgina Marian Allen; Oxford / United Kingdom

### Tutors

Guillaume Lefebvre; Lille / France Maria Pilar Aparisi Gomez; Valencia / Spain Vito Chianca; Naples / Italy Salvatore Gitto; Milano / Italy Alberto Bazzocchi; Bologna / Italy Francesca Serpi; Milan / Italy Saulius Rutkauskas; Kaunas / Lithuania









# ST 18 - Funding the Future: A Dialogue with EIBIR's Scientific Director on Navigating EU Research Opportunities

#### Categories: Research

Date: March 2, 2024 | 14:00 - 14:30 CET

The European Institute for Biomedical Imaging Research (EIBIR) is at the forefront of coordinating research projects to support the development of biomedical imaging technologies and the dissemination of knowledge. EIBIR actively supports research networking activities and common initiatives in the field of biomedical imaging research. With the EU-funded projects EIBIR leads and supports, the institute is working towards the goal of building stronger, more resilient health systems. In this interview, the EIBIR Scientific Director Prof. Regina Beets-Tan will share their insights on how the organisation navigates the European funding programmes, aligns its research efforts with its objectives and prioritises the projects it supports. Join us as we delve into the inner workings of EIBIR and discover how it is contributing to the European Health Union.

#### Moderators:

Ben Giese; Chicago / United States Mélisande Rouger; Bilbao / Spain

Interview (30 min) Regina G. H. Beets-Tan; Amsterdam / Netherlands







## HW 20Cc - Cardiac inflammation: imaging insights and reporting strategies

Categories: Cardiac, Imaging Methods ETC Level: LEVEL III Date: March 2, 2024 | 14:00 - 15:30 CET CME Credits: 1.5

To participate, a pre-congress Hands-on Workshop registration is required.

# Participants who have completed their workshop registration before ECR are requested to arrive at the workshop room 20 minutes before the scheduled start of the session to present their badge and complete their check-in.

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Please note we will be utilising equipment from certain vendors during the workshop sessions; however, a wide range of alternative options from other vendors is also available.

### Moderator:

lacopo Carbone; Roma / Italy

### Chairperson's introduction (10 min)

lacopo Carbone; Roma / Italy

Instructors (80 min) Davide Farina; Brescia / Italy Ausami Abbas; Sherbourne st.john / United Kingdom Luigia D'Errico; Cambridge / United Kingdom







## S 20 - Students Session 2

Categories: Cardiac, Chest, Interventional Radiology, Neuro, Oncologic Imaging, Students Date: March 2, 2024 | 14:00 - 15:30 CET CME Credits: 1.5

Moderator: Luca Maria Sconfienza; Milano / Italy

**Automated detection of prostate cancer biomarkers with pseudo-diffusion techniques in 3.0 Tesla MR** (8 min) Pablo Baltasar Irusta; Mendoza / Argentina

Spectral computed tomography differentiates airway wall enhancement patterns in typical and atypical pneumonia (8 min) Johanna Thomä; Heidelberg / Germany

**Diagnostic performance of vascular reconstruction kernel in photon-counting CT angiography for lower extremity peripheral artery disease: a comparative study with invasive angiography** (8 min) Paul Simeon Friemel; Freiburg / Germany

Endovascular thrombectomy in patients aged 80 years and older with acute ischaemic stroke (AIS): technical and clinical outcomes (8 min) Anastasija Solodjankina; Riga / Latvia

Clinical value of using heart rate variability biofeedback before elective CT coronary angiography to reduce the heart rate and the need for beta-blockers (8 min) Carmen Wolf; Zürich / Switzerland

**Optimisation of mesenteric vascular CT mapping** (8 min) Julia Sophie Heeb; Sevelen / Switzerland

**Predictive value of PET- and CT-based imaging criteria at first follow-up for GEP-NET under PRRT** (8 min) Christian Alexander Dascalescu; München / Germany

Effects of contrast medium injection pressure on angiographic image quality using different microcatheter systems: a prospective pilot study (8 min)

Sara Abosabie; Berlin / Germany

Prognostic machine learning classifiers using radiomics of supratentorial intracerebral haemorrhage and surrounding oedema on admission non-contrast head CT (8 min)





Fiona Dierksen; Göttingen / Germany



VIENNA / FEBRUARY 28 - MARCH 03







### **RPS 2005 - Recent AI advancements in MRI for precision imaging**

Categories: Artificial Intelligence & Machine Learning, Imaging Methods, Multidisciplinary Date: March 2, 2024 | 14:00 - 15:30 CET CME Credits: 1.5

Moderator: Marwan El-Koussy; Rüfenacht bei Bern / Switzerland

T2-weighted fat-saturated and PD-weighted contrast synthesis from knee MRF maps via deep-learning: clinical feasibility study (7 min) Mika Tapani Nevalainen; Oulu / Finland

Leveraging brain MRI and wearable sensor data for early detection of neurodegenerative diseases (7 min) Jie Lian; Hong Kong / Hong Kong SAR China

Synthesis of artificial T1w full-dose images using low doses of gadolinium-based contrast agents: a new deep neural network approach of contrast signal mapping (7 min) Robert Haase; Bonn / Germany

**Brain age fingerprinting from MR image using multi-level information fusion networks and its application in cognitive impairment patient screening** (7 min) Feng Shi; Shanghai / China

A fully automated approach for contrast-agent-free myocardial tissue characterisation using T1-rho mapping (7 min) Victor De Villedon De Naide; Pessac / France

Predicting Alzheimer's progression from mild cognitive impairment: a generalised approach integrating automated MRI segmentation and longitudinal atrophy analysis (7 min) Tobias Lindig; Tübingen / Germany

Towards precision diagnosis: machine learning in identifying malignant orbital tumours with multiparametric 3 Tesla MRI (7 min) Emma O'Shaughnessy; Paris / France

Improving whole body MRI in multiple myeloma: reduced acquisition time with a deep learning reconstruction for diffusion-weighted imaging at 3 Tesla-preliminary results (7 min)

Judith Herrmann; Tübingen / Germany

Prediction of therapy response of breast cancer patients with machine-learning based on clinical data and imaging data derived from breast [18F]FDG-PET/MRI (7 min)





Kai Jannusch; Düsseldorf / Germany



VIENNA / FEBRUARY 28 - MARCH 03

**Trading speed for certainty: artefacts and non-inferiority in Al-accelerated FLAIR imaging of the brain** (7 min) Matthias Anthony Mutke; Basle / Switzerland







### **RPS 2002 - Advances in breast intervention**

Categories: Breast, Interventional Radiology, Oncologic Imaging Date: March 2, 2024 | 14:00 - 15:30 CET CME Credits: 1.5

Moderator: Tamar Sella; Jerusalem / Israel

**Clinical pilot study using polygenetic risk score for personalised risk-based breast cancer screening** (7 min) Tone Hovda; Drammen / Norway

Contrast-enhanced spectral mammography (CESM) vs MRI-guided vacuum-assisted breast biopsy: towards a reduced number of unnecessary biopsies (7 min) Mirjan M. Nadrljanski; Belgrade / Serbia

Diagnostic performance of Kaiser score in BI-RADS 3 lesions: a promising tool to reduce unnecessary biopsies (7 min) Pietro Costantini; Novara / Italy

**Optimising assessment and reducing benign biopsy rate in screen-recalled women** (7 min) Ernest Usang Ekpo; Sydney / Australia

The ICE Study: to detect cryoimmunologic response induced by ultrasound-guided cryoablation on early breast cancer: preliminary results (7 min) Francesca Galati; Rome / Italy

Role of vacuum assisted excision in treatment of ductal carcinoma in situ: preliminary results of a monocentric prospective pilot study (7 min) Serena Carriero; Milan / Italy

Cancer detection in relation to type and stage in the randomised Mammography Screening with Artificial Intelligence trial (MASAI) (7 min) Kristina Lang; Malmö / Sweden

Performance of vacuum-assisted excision (VAE) with "cavity margins shaving" technique in small clusters of suspicious microcalcifications (7 min) Francesca Morciano; Rome / Italy

Influence of complete lesion removal at VAB on the upgrade of B3 lesions presenting as microcalcifications: five years of experience from a referral centre (7 min)





Giovanni Irmici; Milan / Italy



VIENNA / FEBRUARY 28 - MARCH 03

High-risk breast lesions treated with vacuum-assisted excision (VAE): a systematic review and meta-analysis of 3,975 cases (7 min) Andrea Cozzi; Lugano / Switzerland

Intertumoral heterogeneity in primary breast tumours and synchronous axillary lymph node metastases: comparing immunohistochemical expression for concurrent core needle biopsy consideration (7 min)

Muhammed Şamil Aydın; Kayseri / Turkey









## RPS 2003 - Clinical applications of AI and ML in cardiovascular imaging

Categories: Cardiac, Imaging Methods, Research Date: March 2, 2024 | 14:00 - 15:30 CET CME Credits: 1.5

**Moderator:** Sara Boccalini; Villeurbanne / France

**Deep learning denoising in cardiac CT imaging: improved image quality and workflow efficiency** (7 min) Andreas Stefan Brendlin; Tübingen / Germany

Impact of AI-enabled motion compensation algorithm on coronary computed tomography angiography image quality (7 min) Giuseppe Stancanelli; Rome / Italy

Automatic AI-based calcium scoring in cardiac and chest computed tomography: a validation study (7 min) Iris Hamelink; Zwolle / Netherlands

Al-precision in cardiovascular risk assessment: non-gated chest CT coronary artery calcium scoring (7 min) Dan Mu; Nanjing / China

Al-based quantification of total and vessel-specific coronary artery calcifications in calcium scoring CT (7 min) Lilian Henriksson; Linköping / Sweden

A deep learning algorithm for fully-automated myocardial infarct scar segmentation (7 min) Matthias Schwab; Innsbruck / Austria

Artificial intelligence-based CT-derived FFR for the detection of haemodynamically significant coronary artery disease: a comparative study with dynamic stress CT myocardial perfusion imaging (7 min) Antoine Andary; Lille / France

Machine learning explainable analysis for prediction of atrial fibrillation recurrence after catheter ablation using clinical and radiological variables (7 min) Alvaro Palazón Ruiz De Temiño; Alicante / Spain

Impact of super resolution deep learning reconstruction with 1024 matrix in inter and intra reader reproducibility of pre-TAVR CT measurements (7 min) Mickaël Ohana; Strasbourg / France









Enhancing preoperative risk assessment in noncardiac surgery (NCS): comparative evaluation of coronary CT angiography (CCTA), CT perfusion (CTP), and CT-derived fractional flow reserve (CT-FFR) (7 min) Federica Brilli; Rome / Italy

Artificial intelligence for automated classification of coronary lesions from computed tomography coronary angiography scans (ALERT) (7 min) Victor Verpalen; Amsterdam / Netherlands

Super-resolution deep learning reconstruction for improved image quality of myocardial late enhancement CT (7 min)

Masafumi Takafuji; Tsu Mie / Japan









### **RPS 2007 - Innovations in prostate imaging**

Categories: Artificial Intelligence & Machine Learning, Genitourinary, Oncologic Imaging Date: March 2, 2024 | 14:00 - 15:30 CET CME Credits: 1.5

Moderator:

Maarten De Rooij; Nijmegen / Netherlands

Performance of an ultra-fast deep-learning accelerated MRI screening protocol for prostate cancer compared to a standard multiparametric protocol (7 min)
Penedict Oerther: Freiburg / Cormany

Benedict Oerther; Freiburg / Germany

Developing a dynamic predictive model for baseline detection and follow-up re-evaluation of the risk of prostate cancer progression on active surveillance (PROGRESS Prostate) (7 min) Oleg Blyuss; London / United Kingdom

**DWI**<sup>2</sup>-improvement of diffusion-weighted imaging for the detection of clinical significant prostate cancer (7 min) Birte Valentin; Düsseldorf / Germany

**Spectral diffusion analysis to improve the detection and classification of clinical significant prostate cancer** (7 min) Birte Valentin; Düsseldorf / Germany

Assessing the performance of generative pre-trained transformers against radiologists for PI-RADS classification based on prostate mpMRI text reports (7 min)

Kang-Lung Lee; Taipei / Taiwan, Chinese Taipei

Sodium MRI quantification of prostate tissue and therapy-naïve primary prostate cancer with internal references (7 min) Fabian Tollens; Mannheim / Germany

Qualitative comparison of conventional and deep-learning reconstructed diffusion-weighted magnetic resonance imaging sequence for prostate cancer imaging (7 min)

Yolène Lefebvre; Anderlecht / Belgium

MRI radiomic model to predict prostate cancer of the anterior zone (7 min) Silvia Schirò; Parma / Italy

The role of in-bore prostate biopsy in the diagnosis of prostate cancer (7 min) Caterina Pizzi; Milan / Italy









Ultrasound/ MRI fusion-guided transperineal laser ablation (TPLA) in the treatment of localised radiotherapy-resistant prostate cancer (7 min) Beatrice Carreri; Rome / Italy

Deep-learning-based image reconstruction of T2W images of the prostate and compressed sensing for one half of the acquisition time (7 min) Lukas Lambert; Prague / Czechia

**PSMA PET-based radiomic features for non-invasive discrimination of intraprostatic tumours** (7 min) Liang Luo; Xi'an / China







## OF 20T - Making the most of European scholarships and fellowships

Categories: Education, General Radiology, Management/Leadership, Professional Issues, Research, Students

ETC Level: ALL LEVELS Date: March 2, 2024 | 14:00 - 15:00 CET CME Credits: 1

**Moderator:** Vicky Goh; London / United Kingdom

**Chairperson's introduction** (5 min) Vicky Goh; London / United Kingdom

**Tips and tricks for successful applications** (10 min) Katharina Lampichler; Vienna / Austria

**The practicalities: moving and working in another country** (10 min) Georgios Kalarakis; Stockholm / Sweden

Looking back: what I gained from an ESOR scholarship (10 min) David Castanedo Vázquez; Santander / Spain

Looking back: what I gained from an ESOR research fellowship (10 min) Laura Isabel Loebelenz; Bern / Switzerland

Open forum discussion: Top tips for potential ESOR applicants (15 min)







# E<sup>3</sup> 2021 - Pitfall and mimickers in gynaecological cancer imaging

Categories: Abdominal Viscera, Genitourinary, Imaging Methods, Oncologic Imaging ETC Level: LEVEL II+III Date: March 2, 2024 | 14:00 - 15:30 CET CME Credits: 1.5

**Endometrial and cervical cancer** (45 min) Milagros Otero Garcia; Vigo / Spain

**Ovarian cancer** (45 min) Teresa Margarida Cunha; Lisboa / Portugal







## RC 2001 - Cholangitis or cholangiocarcinoma: how to distinguish inflammation from a tumour?

Categories: Abdominal Viscera ETC Level: LEVEL III Date: March 2, 2024 | 14:00 - 15:00 CET CME Credits: 1

Moderator: Ahmed Ba-Ssalamah; Vienna / Austria

**Chairperson's introduction** (5 min) Ahmed Ba-Ssalamah; Vienna / Austria

**Primary sclerosing cholangitis** (15 min) Nikolaos Kartalis; Stockholm / Sweden

**IgG4 cholangitis** (15 min) Martina Gilda Pezzullo; Brussels / Belgium

**Cholangiocarcinoma** (15 min) Roberto Cannella; Palermo / Italy

Panel discussion: Mistakes I've made and what I learnt from them (10 min)







## Meets 20 - Brave new world: how Singapore is forging forward in a post-pandemic future

Categories: Education, Interventional Radiology, Management/Leadership, Molecular Imaging, Neuro, Nuclear Medicine

ETC Level: LEVEL II+III Date: March 2, 2024 | 14:00 - 15:00 CET CME Credits: 1

**Moderators:** Carlo Catalano; Roma / Italy Charles Xian-yang Goh; Singapore / Singapore

Introduction (5 min) Carlo Catalano; Roma / Italy Charles Xian-yang Goh; Singapore / Singapore

**Molecular imaging and targeted therapies in the era of precision medicine** (12 min) Charles Xian-yang Goh; Singapore / Singapore

**Evolving trends in interventional radiology (IR) and challenges in meeting them** (12 min) Lawrence Han Hwee Quek; Singapore / Singapore

**CNS features of infection: past outbreaks, future pandemics** (12 min) Tchoyoson Lim; Singapore / Singapore

**Evolving residency as radiology evolves: from apprentices to entrustable professional activities in Singapore** (12 min) Lim Chee Yeong; Singapore / Singapore

Panel discussion (7 min)









## E<sup>3</sup> 24D - Heart and brain

Categories: Hybrid Imaging, Molecular Imaging, Nuclear Medicine ETC Level: LEVEL II Date: March 2, 2024 | 14:00 - 15:00 CET CME Credits: 1

Moderator: Clemens C. Cyran; München / Germany

**Chairperson's introduction** (5 min) Clemens C. Cyran; München / Germany

**PET MR in cardiac imaging** (15 min) Patrick Krumm; Tübingen / Germany

Propelling new dementia therapies: PET/MR leading the way? (15 min)

Alexander Hammers; London / United Kingdom

**Brain tumour management with hybrid imaging** (15 min) Nathalie L. Albert; München / Germany

Panel discussion: Finally there? Key indications of PET/MRI in heart and brain (10 min)







### EU 20 - Radiological exposure in newborns and pregnancy

Categories: EuroSafe Imaging/Radiation Protection, Paediatric ETC Level: LEVEL II Date: March 2, 2024 | 14:00 - 15:30 CET CME Credits: 1.5

**Moderator:** Claudio Granata; Trieste / Italy

**Chairperson's introduction** (5 min) Claudio Granata; Trieste / Italy

**Good practice in radiation protection of newborns** (20 min) Sergio Salerno; Palermo / Italy

**Imaging in pregnancy: the best investigation, at the right time** (20 min) Joanna Kasznia-Brown; Bristol / United Kingdom

Radiological procedures and dose exposure to the newborn and conceptus (20 min) Timo De Bondt; Sint-Niklaas / Belgium

Panel discussion: How to deal with a woman unaware of pregnancy and undergoing a radiological procedure? (25 min)







## RC 2008 - Orbital imaging

Categories: Head and Neck, Oncologic Imaging, Paediatric ETC Level: LEVEL I+II Date: March 2, 2024 | 14:00 - 15:00 CET CME Credits: 1

Moderator: Soraya Robinson; Wien / Austria

**Chairperson's introduction** (5 min) Soraya Robinson; Wien / Austria

Paediatric masses with emphasis on retinoblastoma (15 min) Pim De Graaf; Amsterdam / Netherlands

Adult masses with emphasis on melanoma (15 min) Teresa A G G Guerreiro Gonçalves Ferreira; Leiden / Netherlands

**Inflammatory lesions mimicking masses** (15 min) Katharina Erb-Eigner; Berlin / Germany

Panel discussion: Current state of imaging in orbital lesions (10 min)







# RC 2010 - Technological advances in musculoskeletal imaging: where are we in 2024

Categories: Imaging Methods, Musculoskeletal ETC Level: LEVEL III Date: March 2, 2024 | 14:00 - 15:00 CET CME Credits: 1

**Moderator:** Filippo Del Grande; Lugano / Switzerland

**Chairperson's introduction** (5 min) Filippo Del Grande; Lugano / Switzerland

**Photon-counting CT: what can we see?** (15 min) Ronald Booij; Rotterdam / Netherlands

Al-based acceleration: what is the limit? (15 min)

Filippo Del Grande; Lugano / Switzerland

**Going low-field in MSK, is it a good idea?** (15 min) Ricardo Donners; Basel / Switzerland

Panel discussion: Do we still need x-rays? (10 min)







## SF 20 - Photon-counting CT

Categories: Contrast Media, EuroSafe Imaging/Radiation Protection, General Radiology, Imaging Methods, Physics in Medical Imaging ETC Level: LEVEL II+III Date: March 2, 2024 | 14:00 - 15:30 CET CME Credits: 1.5



**Moderator:** Anders Persson; Linköping / Sweden

**Chairperson's introduction** (5 min) Anders Persson; Linköping / Sweden

Photon-counting CT: image quality and radiation dose (20 min) Erik Tesselaar; Linköping / Sweden

**Optimisation of contrast media** (20 min) Joachim E. Wildberger; Maastricht / Netherlands

**Clinical application** (20 min) Hatem Alkadhi; Zürich / Switzerland

Panel discussion: ECR 2024: Exploring the advancements and challenges of photon-counting CT technology (25 min)







### MS 20 - Interstitial lung diseases

Categories: Chest, Multidisciplinary ETC Level: LEVEL III Date: March 2, 2024 | 14:00 - 15:30 CET CME Credits: 1.5

Moderator: Cornelia M. Schaefer-Prokop; Amersfoort / Netherlands

**Chairperson's introduction** (5 min) Cornelia M. Schaefer-Prokop; Amersfoort / Netherlands

### Diagnosis and management of fibrosing non-IPF ILDs (30 min)

Sujal R. Desai; London / United Kingdom Peter M George; LONDON / United Kingdom

## The many faces of sarcoidosis: diagnosis and management (30 min)

Helmut Prosch; Vienna / Austria Marco Idzko; Vienna / Austria

Case discussion (25 min)









## RC 2011 - Pitfalls in neuroradiology

Categories: Neuro, Vascular ETC Level: LEVEL II+III Date: March 2, 2024 | 14:00 - 15:00 CET CME Credits: 1

**Moderator:** Sonja Jankovic; Nis / Serbia

**Chairperson's introduction** (5 min) Sonja Jankovic; Nis / Serbia

**Perfusion imaging and rainbow scales, pitfalls and alternatives** (15 min) Anouk Van Der Hoorn; Groningen / Netherlands

**Postictal imaging: a great mimicker** (15 min) Eftychia Kapsalaki; Larissa / Greece

Incidental findings: no-touch or clinically relevant? (15 min) Nadya Pyatigorskaya; Paris / France

Panel discussion: Tips and strategies to avoid pitfalls in neuroradiology (10 min)







## PA 20 - Next-generation patient care

Categories: Artificial Intelligence & Machine Learning, Education, Interventional Radiology, Multidisciplinary, Oncologic Imaging ETC Level: ALL LEVELS Date: March 2, 2024 | 14:00 - 15:30 CET CME Credits: 1.5

**Moderators:** Christian Loewe; Vienna / Austria Caroline Justich; Vienna / Austria

**Chairpersons' introduction** (5 min) Christian Loewe; Vienna / Austria Caroline Justich; Vienna / Austria

Responsibility and opportunity (10 min)

Caroline Justich; Vienna / Austria

How to get imaging information and basic knowledge for shared decision-making to the patient (10 min) Erik Briers; Hasselt / Belgium

When the radiologist-patient dialogue is established (10 min) Dominique-Gérard Carrie; Balma / France

**The challenge of interventional radiology** (10 min) Christian Loewe; Vienna / Austria

**Better ways to communicate: the views of patients and radiographers** (20 min) Cheryl Cruwys; Haute Vienne / France Andrew England; Cork / Ireland

**Presentation of the posters** (5 min) Caroline Justich; Vienna / Austria

**Panel discussion: How to implement improvements that work for all stakeholders? All speakers and** (20 min) Judy Birch; Poole / United Kingdom

Michael Fuchsjäger; Graz / Austria









## SA 20 - Radiomics application in clinical practice

Categories: Artificial Intelligence & Machine Learning, Education, Imaging Informatics, Oncologic Imaging, Research

ETC Level: LEVEL III Date: March 2, 2024 | 14:00 - 15:30 CET CME Credits: 1.5

Moderator: Nikolaos Papanikolaou; Lisbon / Portugal

**Chairperson's introduction** (6 min) Nikolaos Papanikolaou; Lisbon / Portugal

Introductions to radiomics (18 min) Constance De Margerie-Mellon; Paris / France

Radiomics for treatment response and outcome prediction (18 min) Lorenzo Ugga; Naples / Italy

**Nomogram development: integrating radiomics and clinical features for risk stratification** (18 min) Katja Pinker-Domenig; New York / United States

Panel discussion: How to accelerate radiomics translation to the clinics? (30 min)







## AI-SC 8 - Societal implications of AI in radiology

Categories: Artificial Intelligence & Machine Learning, Imaging Informatics, Professional Issues Date: March 2, 2024 | 15:00 - 16:00 CET CME Credits: 1

Moderator: Kicky Gerhilde van Leeuwen; De Bilt / Netherlands

**Chairperson's introduction** (3 min) Kicky Gerhilde van Leeuwen; De Bilt / Netherlands

Panel Discussion (57 min) Pablo Valdes Solis; Marbella / Spain Christina Malamateniou; London / United Kingdom Mansoor Fatehi; Tehran / Iran Mónica Cano Abadía; Graz / Austria Melanie Goisauf; Graz / Austria







## ST 19 - Unveiling the Future: The Impact of EUCAIM's First Platform Release on AI in Cancer Research

#### Categories: Research

Date: March 2, 2024 | 15:00 - 15:30 CET

Join us for an insightful interview as we delve into the transformative impact of EUCAIM's first platform release on the landscape of cancer research. Our discussion will unravel the significance of this milestone, examining how the platform is set to revolutionize cancer research.

We will also explore the crucial topic of safeguarding the privacy and security of sensitive imaging data, shedding light on the measures implemented by EUCAIM to ensure ethical and secure practices.

Don't miss this opportunity to gain exclusive insights into the future of cancer imaging, to learn how you could collaborate and contribute to this initiative, as well as to learn how EUCAIM is shaping the way forward for researchers, clinicians, and the radiology community at large.

#### Moderators:

Ben Giese; Chicago / United States Mélisande Rouger; Bilbao / Spain

Interview (30 min) Esther Bron; Rotterdam / Netherlands









#### **CUBE 24 - IR strategies in particular situations**

Categories: Interventional Radiology

Date: March 2, 2024 | 15:30 - 16:00 CET

CME Credits: 0.5

#### Advanced Session - Topic Coordinator: Prof. Gianpaolo Carrafiello

The "Advanced Session: Percutaneous Interventions" is aimed at a more advanced audience and covers percutaneous interventions in various areas of interventional radiology.

1. To learn about the techniques available nowadays.

2. To learn about indicaations and application.

3. To get an overview on the outcomes of IR procedures.

#### Moderator:

Gianpaolo Carrafiello; Milan / Italy

## Chairperson's introduction (2 min)

Gianpaolo Carrafiello; Milan / Italy

#### Paraganglioma embolization: indications and techniques (14 min)

Pierpaolo Biondetti; Milano / Italy

#### Percutaneous treatment of neurogenic pain due to discal herniation (14 min)

Carolina Lanza; Milan / Italy









## RC 2115 - Diagnosis and management of acute and chronic upper limb ischaemia

Categories: Imaging Methods, Interventional Radiology, Multidisciplinary, Vascular ETC Level: LEVEL II+III Date: March 2, 2024 | 16:00 - 17:00 CET CME Credits: 1

**Moderator:** Jernej Lučev; Maribor / Slovenia

**Chairperson's introduction** (5 min) Jernej Lučev; Maribor / Slovenia

**Pathophysiology** (15 min) Maria Tsitskari; Nicosia / Greece

**Imaging of acute and chronic upper limb ischaemia** (15 min) Edit Dósa; Budapest / Hungary

**Endovascular treatment of acute and chronic upper limb ischaemia** (15 min) Elias Brountzos; Athens / Greece

Panel discussion: The role of endovascular treatment vs surgery? (10 min)







## JIIQ - Radiology Feud

Categories: Abdominal Viscera, Cardiac, Education, Emergency Imaging, General Radiology, Neuro ETC Level: LEVEL I+II Date: March 2, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

**Moderator:** Martin Reim; Tartu / Estonia

**Radiology Feud** (90 min) Martin Reim; Tartu / Estonia

#### The Simpsonographers Family

Antonella Del Gaudio; Durham, NC / United States Nick Janssen; Berchem / Belgium Carlos Manuel Baracaldo Silva; Valencia / Spain

**The Radiogriffins Family** Mariana Andreea Calota; Paris / France Davis Simanis Putrins; Riga / Latvia Luca Dóra Laszip; Budapest / Hungary

**Closing words** Martin Reim; Tartu / Estonia







#### RPS 2105 - Exploring the latest frontiers in machine learning techniques for MDCT advancements

Categories: Artificial Intelligence & Machine Learning, Imaging Methods, Multidisciplinary Date: March 2, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

Moderator: Rebeca Mirón Mombiela; Herlev / Denmark

Moderator introduction (6 min) Rebeca Mirón Mombiela; Herlev / Denmark

Coronary artery calcium scoring on the segment-level using deep active multi-task learning for time-efficient annotation (7 min) Bernhard Föllmer; Berlin / Germany

Auto-LSN: fully automated liver surface nodularity quantification for the diagnosis of advanced fibrosis in CT imaging (7 min) Sisi Yang; Paris / France

Assessing the accuracy of an AI-based coronary artery calcium score algorithm on non-gated chest CT images with varying slice thicknesses (7 min) Dan Mu; Nanjing / China

Deep learning decision-making research software prototype for automated inner ear classification (7 min) Andras Kedves; Innsbruck / Austria

Deep learning for estimating pulmonary nodule malignancy risk: how much data does AI need to reach radiologist level performance? (7 min) Bogdan Obreja; Nijmegen / Netherlands

SALT: Softmax for Arbitrary Label Trees (7 min) Giulia Baldini; Essen / Germany

Validation of an artificial intelligence software for automatic pulmonary nodule volumetry using micro-CT determined ground truth nodule volumes (7 min)

Louise D'hondt; Ghent / Belgium

Al-assisted detection of abdominal pathologies in chest CT scans (7 min)

Mikhail Belyaev; London / United Kingdom









Fully automatic Al-driven assessment in coronary CT angiography for intermediate stenosis: a comparative study with quantitative coronary angiography and fractional flow reserve (7 min)

Jung-In Jo; Seoul / Korea, Republic of

Artificial intelligence-based non-contrast-enhanced CT images for diagnosis of hepatic lesions: a multicentre study (7 min)

Zhuangxuan Ma; Shanghai / China







### **RPS 2101 - Acute abdominal pathologies: diagnosis and prediction**

Categories: Abdominal Viscera, Emergency Imaging, GI Tract Date: March 2, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

**Moderator:** Martina Scharitzer; Vienna / Austria

**Dual-Energy CT of acute bowel ischaemia: influence on diagnostic accuracy and reader confidence** (7 min) Moritz Oberparleiter; Basel / Switzerland

Hit and miss: locating the exact site of gastrointestinal tract perforations as a challenge (7 min) Tarik Binasa Plojović; Belgrade / Serbia

**CT** prognostic signs in emergency surgery for acute obstructive colonic cancer (AOCC) (7 min) Rosita Comune; Napoli / Italy

(HU)nt for truth: psoas muscle evaluation on CT imaging predicts 30-day survival in variceal bleed patients (7 min) Jędrzej Krawczyk; London / United Kingdom

**Diagnostic impact of AAST injury scale in the assessment of hepatic traumatic lesions** (7 min) Cesare Maino; Monza / Italy

Early IVIM-DWI for the prediction of post-pancreatectomy acute pancreatitis (7 min) Luca Fortuna; Vicenza / Italy

Time dependency and risk factors of splanchnic vein thrombosis development in the early phase of acute pancreatitis: a systematic review and meta-analysis (7 min) Zsolt Zsolt Borbély Ruben; Budapest / Hungary

**Extracellular volume fraction derived from dual-energy CT: a potential predictor for postpancreatectomy acute pancreatitis after pancreatoduodenectomy** (7 min) Xiaohan Bai; Nanjing / China







#### **RPS 2111 - Neurodegeneration and cognition**

Categories: Artificial Intelligence & Machine Learning, Hybrid Imaging, Neuro, Nuclear Medicine, Research Date: March 2, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

Moderator:

Esther Bron; Rotterdam / Netherlands

**Relationship between hippocampal subfield volumes and cognitive decline in healthy subjects** (7 min) Simon Doran; Dublin / Ireland

Differential atrophy along the longitudinal axis of the hippocampus in Alzheimer's disease and suspected non-Alzheimer's disease pathophysiology (SNAP) (7 min) Torcato Meira; Braga / Portugal

Grey matter atrophy mediates the association between tau pathology and cognition in Alzheimer's disease: a simultaneous PET/MRI study (7 min) Xinru Xu; Nanjing / China

Compensatory deregulation of attention and executive networks in prodromal Lewy body dementia. A resting-state functional magnetic resonance imaging study (7 min) Valeria Onofri; Rome / Italy

**Can AI augmented MRI replace FDG PET CT brain in the evaluation of patients with cognitive impairment** (7 min) Henry Dillon; Dublin / Ireland

**Brain tissue atrophy and cognitive decline in relation to serum uric acid variance** (7 min) Jing Sun; Beijing / China

White matter abnormalities in patients with mild cognitive impairment and post-acute sequelae of COVID- 19: preliminary results of a radiomics study (7 min) Melania Stubos; Trieste / Italy

**COVID-19 induces grey matter atrophy in patients with cognitive but also with only olfactory disorders** (7 min) Simonetta Gerevini; Cremona / Italy

**Brain age in healthy individuals and across multiple neurological disorders** (7 min) Li Chai; Beijing / China







### RC 2110 - Imaging of the knee

Categories: EuroSafe Imaging/Radiation Protection, General Radiology, Musculoskeletal ETC Level: LEVEL II+III Date: March 2, 2024 | 16:00 - 17:00 CET CME Credits: 1

**Moderator:** Ana Catarina Vieira; Porto / Portugal

**Chairperson's introduction** (5 min) Ana Catarina Vieira; Porto / Portugal

Imaging the menisci pre- and post-operative (15 min) Andrea Alcala-Galiano Rubio; Madrid / Spain

Knee ligament (15 min) Anagha P. Parkar; Bergen / Norway

Oedema in bone and soft tissues of the knee (15 min)

Edwin Oei; Rotterdam / Netherlands

Panel discussion: Are we imaging too many knees with MRI? (10 min)







## ST 20 - SOLACE Insight: Strengthening Lung Cancer Screening Across Europe

#### Categories: Research

Date: March 2, 2024 | 16:00 - 16:30 CET

The SOLACE project assesses the current state of policies, needs, and best practices of Lung Cancer Screening (LCS) in EU member states and produces a comprehensive guideline and implementation package covering all steps of the lung cancer screening pathway: evidence-based guidelines, technical papers, documents regarding quality assurance, methodology, benefit-harm balance, and cost-effectiveness. This package is used to showcase the new implementation methodology suggested. Moreover, SOLACE designs, plans, and rolls out three pilot projects in 10 member states with more than 12,000 participants with the aim to increase participation considering: gender aspects, inequalities regarding hard-to-reach populations (social, ethnic, geographical), and higher-risk individuals.

#### **Moderator:**

Mélisande Rouger; Bilbao / Spain

Interview (30 min) Helmut Prosch; Vienna / Austria









#### **RPS 2104 - Pulmonary nodules and lung cancer screening**

Categories: Artificial Intelligence & Machine Learning, Chest, Oncologic Imaging Date: March 2, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

Moderator: Cornelia M. Schaefer-Prokop; Amersfoort / Netherlands

**Quality assurance of national lung cancer screening in Taiwan** (7 min) Yeun-Chung Chang; Taipei / Taiwan, Chinese Taipei

**Impact of perifissural nodules on false positive rates in lung cancer screening with AI as the initial reader** (7 min) Daiwei Han; Groningen / Netherlands

**Prevalence of bronchiectasis, airway wall thickening and emphysema in Chinese low-dose CT Screening** (7 min) Zhenhui Nie; Groningen / Netherlands

External validation of an AI algorithm for pulmonary nodule malignancy risk estimation on a dataset of incidentally detected pulmonary nodules (7 min) Renate Dinnessen; Eindhoven / Netherlands

**Deep learning for growth prediction of pulmonary ground-glass nodules** (7 min) Yingli Sun; Shanghai / China

Real world impact of deep-learning supported CAD for routine thoracic CT showed higher agreements with expert peer review on management recommendations for incidental lung nodules (7 min) Maurits Peter Engbersen; Amsterdam / Netherlands

Comparison of two different DL-based CAD systems regarding pulmonary nodule detection, localisation and classification: a multi-reader study (7 min) Nina Wiescholek; Bern / Switzerland

Incidental detection of ground-glass nodules and primary lung cancer in patients with primary breast cancer: incidence and long-term follow-up on chest CT (7 min)

Hye Sun Ryu; Seoul / Korea, Republic of

Construction and validation of a risk score system for diagnosing invasive adenocarcinoma presenting as pulmonary pure ground-glass nodules: a multicentre cohort study in China (7 min) Qingcheng Meng; Zhengzhou / China

Qingcheng Meng; zhengzhoù / China















### HW 21Cd - Which cardiac findings every general radiologist should know

Categories: Cardiac, Chest, General Radiology, Imaging Methods

ETC Level: LEVEL II Date: March 2, 2024 | 16:00 - 17:30 CET

CME Credits: 1.5

To participate, a pre-congress Hands-on Workshop registration is required.

## Participants who have completed their workshop registration before ECR are requested to arrive at the workshop room 20 minutes before the scheduled start of the session to present their badge and complete their check-in.

We would like to thank our workshop sponsors. For more information click here.

Please note we will be utilising equipment from certain vendors during the workshop sessions; however, a wide range of alternative options from other vendors is also available.

#### Moderator:

Iacopo Carbone; Roma / Italy

#### Chairperson's introduction (10 min)

lacopo Carbone; Roma / Italy

Instructors (80 min) Marco Rengo; Roma / Italy Sue Thomas; Bournemouth / United Kingdom Nicola Galea; Roma / Italy







## OF 21T - Career development: building a research publication portfolio as a young radiologist

Categories: Education, General Radiology, Management/Leadership, Professional Issues, Research, Students

ETC Level: ALL LEVELS Date: March 2, 2024 | 16:00 - 17:00 CET CME Credits: 1

**Moderator:** Daniel Pinto Dos Santos; Frankfurt / Germany

**Chairperson's introduction** (4 min) Daniel Pinto Dos Santos; Frankfurt / Germany

How to make the most of research opportunities (12 min)

Marion Smits; Rotterdam / Netherlands

Building research publications: from the young radiologists' network perspective (12 min)

Vicky Goh; London / United Kingdom Anmol Gangi; Nottingham / United Kingdom

**Tips and tricks to get published** (12 min) Osman Öcal; Munich / Germany

Open forum discussion: Making the most of research opportunities as a young radiologist (20 min)







# EIBIR 21 - EUCAIM at the forefront: innovating radiology with Europe's cancer image infrastructure for artificial intelligence (AI)

Categories: Artificial Intelligence & Machine Learning, Oncologic Imaging, Professional Issues, Research ETC Level: LEVEL I+II Date: March 2, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

**Moderator:** Regina G. H. Beets-Tan; Amsterdam / Netherlands

**Chairperson's introduction** (5 min) Regina G. H. Beets-Tan; Amsterdam / Netherlands

The EUCAIM project: why is it needed? (12 min) Luis Marti-Bonmati; Valencia / Spain

## The European Cancer Imaging Initiative (10 min)

Saila Rinne; Luxembourg / Luxembourg

**EUCAIM and the EU Cancer Imaging Initiative: a look at the future** (12 min) Mario Aznar; Madrid / Spain

The view on EUCAIM: the ESR perspective (12 min) Carlo Catalano; Roma / Italy

**EUCAIM's Atlas of Cancer Images: present and future** (12 min) Ignacio Blanquer; Valencia / Spain

How to collaborate across Europe? (12 min) Katrine Riklund; Umeå / Sweden

Discussion (15 min)









### RC 2117 - Stroke and its mimics

Categories: Emergency Imaging, Neuro ETC Level: LEVEL II+III Date: March 2, 2024 | 16:00 - 17:00 CET CME Credits: 1

**Moderator:** Cem Çalli; Izmir / Turkey

**Chairperson's introduction** (5 min) Cem Çalli; Izmir / Turkey

**Radiological algorithms in stroke** (15 min) Danielle Byrne; Dublin / Ireland

**Perfusion CT mimics** (15 min) Koenraad Hans Nieboer; Brussels / Belgium

**MRI: the problem solver** (15 min) Ronni Mikkelsen; Aarhus / Denmark

Panel discussion: Time is brain - getting the most from state-of-the-art imaging (10 min)







## ESR eHealth 21 - How to critically appraise artificial intelligence (AI)/radiomics papers

Categories: Artificial Intelligence & Machine Learning, Imaging Informatics, Research

ETC Level: LEVEL II

Date: March 2, 2024 | 16:00 - 17:00 CET

#### CME Credits: 1

Every day, many scientific manuscripts regarding artificial intelligence and radiomics are published. To readers, it is not always clear how to best approach these papers, especially when many technical details are provided. This session will discuss strategies to critically appraise such manuscripts, what qualities to look for and how to identify potential issues in the statistical analyses. Currently, available reporting guidelines will be highlighted to provide readers, as well as potential authors and reviewers, with help objectively assessing a manuscript's reporting quality.

#### **Moderator:**

Constance De Margerie-Mellon; Paris / France

Chairperson's introduction (5 min)

Constance De Margerie-Mellon; Paris / France

#### On metrics and methods: perils and pitfalls in statistical analyses (15 min)

Nathaniel Mercaldo; Boston / United States

**Read avidly but think critically: must-have qualities to look for in radiomics research** (15 min) Renato Cuocolo; Napoli / Italy

Al reporting guidelines: how to focus on quality and reproducibility (15  $\mbox{min})$ 

Leonor Cerda Alberich; Valencia / Spain

Panel discussion: What can we learn from the literature so far? Where do we go next? (10 min)







### HW 21Mb - Ultrasound of the muscles and nerves of the lower limb

Categories: Imaging Methods, Musculoskeletal ETC Level: ALL LEVELS Date: March 2, 2024 | 16:00 - 17:00 CET CME Credits: 1

#### To participate, a pre-congress Hands-on Workshop registration is required.

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Please note we will be utilising equipment from certain vendors during the workshop sessions; however, a wide range of alternative options from other vendors is also available.

In this session participants will be able:

- 1. To become familiar with muscle and nerve anatomy of the lower limb with the usual landmarks.
- 2. To develop practical skills in performing ultrasound.
- 3. To understand the main limitations of ultrasound.
- 4. To learn tricks and tips to improve daily practice.

Instructors (60 min) Lionel Pesquer; Bordeaux / France Georgina Marian Allen; Oxford / United Kingdom

Tutors (6 min) Guillaume Lefebvre; Lille / France Maria Pilar Aparisi Gomez; Valencia / Spain Vito Chianca; Naples / Italy Salvatore Gitto; Milano / Italy Alberto Bazzocchi; Bologna / Italy Francesca Serpi; Milan / Italy Saulius Rutkauskas; Kaunas / Lithuania









## RC 2113 - How to communicate the risk and benefits of the use of shielding of patients and staff?

**Categories:** EuroSafe Imaging/Radiation Protection, Multidisciplinary, Physics in Medical Imaging, Professional Issues, Radiographers **ETC Level:** LEVEL I

Date: March 2, 2024 | 16:00 - 17:00 CET CME Credits: 1



**Moderator:** Shane J Foley; Dublin / Ireland

**Chairperson's introduction** (5 min) Shane J Foley; Dublin / Ireland

**Communication from the point of view of shielding patients** (15 min) Graciano Paulo; Coimbra / Portugal

**Risks and benefits of the staff shielding in image (fluoroscopy) guided interventions** (15 min) Gabriel Bartal; Tel Aviv-Yafo / Israel

The role of the regulator in the use of shielding for staff and patients (15 min) Jana Povolná; Prague / Czechia

Panel discussion: Shielding in the 21st century - science or sentiment? (10 min)







## SF 21b - Cardiac: clinical use of T2 mapping techniques

Categories: Cardiac, Imaging Methods, Research, Translational Imaging, Vascular ETC Level: LEVEL II+III Date: March 2, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

Moderator: Julian Alexander Luetkens; Bonn / Germany

**Chairperson's introduction** (5 min) Julian Alexander Luetkens; Bonn / Germany

**T2 mapping in myocardial disease** (20 min) Moritz Christian Halfmann; Mainz / Germany

Assessment of intracardiac shunts (20 min)

Aurelio Secinaro; Roma / Italy

**BOLD imaging** (20 min) Kady Fischer; Bern / Switzerland

Panel discussion: T2 mapping: all I need for cardiac MRI? (25 min)







## BS 21 - Making a difference: towards person-centred imaging, treatment, and care

Categories: Education, Evidence-Based Imaging, Multidisciplinary, Professional Issues, Radiographers Date: March 2, 2024 | 16:00 - 17:00 CET CME Credits: 1

Moderator: ELENI GEORGIADOU; Keratsini / Greece

**Chairperson's introduction** (4 min) ELENI GEORGIADOU; Keratsini / Greece

**Celebrating diversity in radiography: tips to support LGBTQ+ peoples' needs** (14 min) Gareth Robert Hill; Dundee / United Kingdom

**Enhancing older peoples' experiences of imaging and radiotherapy** (14 min) Niamh Moore; Cork / Ireland

**Eliminating weight stigma and enhancing the experience of overweight or obese patients** (14 min) Daniele Di Feo; Florence / Italy

It's time to talk about breast density in mammography (14 min) Deborah Mizzi; Msida / Malta







#### E<sup>3</sup> 2123 - Head and neck

Categories: Head and Neck ETC Level: LEVEL I+II Date: March 2, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

**Moderator:** Minerva Becker; Geneva / Switzerland

**Chairperson's introduction** (6 min) Minerva Becker; Geneva / Switzerland

**Temporal bone and skull base** (28 min) Alexandra Borges; Lisbon / Portugal

Nose, paranasal sinuses, and nasopharynx (28 min)

Tilak Das; Cambridge / United Kingdom

**Oral cavity, oropharynx, hypopharynx and larynx** (28 min) Minerva Becker; Geneva / Switzerland







#### E<sup>3</sup> 2120 - Complications and follow-up imaging after percutaneous ablation

Categories: Abdominal Viscera, Chest, Interventional Oncologic Radiology, Musculoskeletal, Oncologic Imaging

ETC Level: LEVEL III

Date: March 2, 2024 | 16:00 - 17:30 CET

#### CME Credits: 1.5

The session summarises the most common expected complications and their management after thermal ablation in several different organs. Moreover, the audience will familiarise themselves with the clinical and imaging follow-up needed after ablation.

#### Moderator:

Nicolas Frédéric Mathieu Villard; Lausanne / Switzerland

**Chairperson's introduction** (5 min) Nicolas Frédéric Mathieu Villard; Lausanne / Switzerland

Complications and follow-up imaging after lung ablation (24 min)

Georgia Tsoumakidou; Lausanne / Switzerland

#### Complications and follow-up imaging after liver and kidney ablation (24 min)

Fernando Gomez Muñoz; Valencia / Spain

## $\label{eq:complexity} \mbox{Complications and follow-up imaging after bone and soft-tissue ablation (24 min)}$

Roberto Luigi Cazzato; Stasbourg / France

#### Panel discussion: Which actions should be taken to prevent complications? (13 min)







## RC 2112 - Pros and Cons: there is always a place for intervention in paediatric stroke

Categories: Interventional Oncologic Radiology, Neuro, Paediatric, Vascular ETC Level: LEVEL III Date: March 2, 2024 | 16:00 - 17:00 CET CME Credits: 1

**Moderators:** Manoelle Kossorotoff; Paris / France Carlo Gandolfo; Genova / Italy

**Chairperson's introduction** (5 min) Carlo Gandolfo; Genova / Italy Manoelle Kossorotoff; Paris / France

**Pro** (10 min) Carlo Gandolfo; Genova / Italy

**Con** (10 min) Manoelle Kossorotoff; Paris / France

Panel discussion: What is the place for intervention in paediatric stroke? (25 min)







## SF 21a - United we stand, divided we fall: a multidisciplinary approach to endometriosis

Categories: Genitourinary, Nuclear Medicine ETC Level: LEVEL III Date: March 2, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

Moderator: Isabelle Thomassin-Naggara; Paris / France

**Chairperson's introduction** (10 min) Isabelle Thomassin-Naggara; Paris / France

**The gynaecologist's perspective** (20 min) Cyril Touboul; Paris / France

## The radiologist's perspective (US/MR) (25 min)

Luciana Chamie; Sao Paulo / Brazil

**Cryoablation** (15 min) Leo Razakamanantsoa; Paris / France

**The patient association's perspective** (5 min) Judy Birch; Poole / United Kingdom

Panel discussion: Endometriosis pathway: where are we at? (15 min)









# OF 21R - Unlocking research potential: empowering radiographers to make a difference through funded projects

Categories: Education, Management/Leadership, Professional Issues, Radiographers, Research

Date: March 2, 2024 | 16:00 - 17:00 CET

#### CME Credits: 1

This session is dedicated to fostering a culture of research engagement among radiographers. Comprising three illuminating talks, this session offers invaluable insights into the pursuit of funded projects, the associated benefits, challenges, and strategies to transform setbacks into achievements in the realm of radiography research. This empowering session should be of interest to radiographers, health professionals, educators and researchers. By providing practical guidance, addressing challenges, and sharing inspirational stories of success, this session aims to equip attendees with the knowledge and motivation needed to actively contribute to research endeavours and make a meaningful difference in the field of medical imaging and radiotherapy.

#### Moderator:

Claudia Sa Dos Reis; Lausanne / Switzerland

Chairperson's introduction (5 min)

Claudia Sa Dos Reis; Lausanne / Switzerland

## How to get involved in funded projects (16 min)

Andrew England; Cork / Ireland

#### Benefits, challenges and pitfalls for seeking research funding (16 min)

Ian C. Simcock; St Albans / United Kingdom

## Turning rejection into success: insights from the SAFE EUROPE and ECHOES projects (16 min)

Jose Guilherme Couto; Msida / Malta

Open forum discussion (7 min)







## E<sup>3</sup> 2121 - New directions in advanced cardiac imaging

Categories: Cardiac, Imaging Informatics, Imaging Methods, Physics in Medical Imaging ETC Level: LEVEL III Date: March 2, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

### Prognostic biomarkers in ischaemic heart disease (45 min)

Christian Loewe; Vienna / Austria

## Prognostic biomarkers in non-ischaemic cardiomyopathies (45 min)

Antonio Esposito; Milano / Italy









# PC 21 - Nothing about me without me: communication skills required for radiologists when communicating with their patients

Categories: Breast, Interventional Radiology, Oncologic Imaging, Paediatric, Professional Issues ETC Level: LEVEL II Date: March 2, 2024 | 16:00 - 17:30 CET CME Credits: 1.5

Moderator: Andrea Grace Rockall; Godalming / United Kingdom

**Chairperson's introduction** (5 min) Andrea Grace Rockall; Godalming / United Kingdom

**Communicating with patients in the context of breast imaging** (12 min) Ruchira Sinnatamby; Cambridge / United Kingdom

How to communicate uncertainty to patients with BIRADS 3 or 4 and share decision-making? (12 min) Judy Birch; Poole / United Kingdom

**Paediatric radiology: communicating with parents** (24 min) Julian H.W. Jurgens; Hamburg / Germany Ola Kvist; Stockholm / Sweden

Interventional radiology (12 min) Ruediger Schernthaner; Vienna / Austria

Panel discussion: How should we best teach clinical communication skills during radiology training? (25 min)









## ST 22 - Daily Wrap-up

Categories: General Radiology Date: March 2, 2024 | 17:00 - 17:15 CET Join our studio moderators as they look back on the day's highlights and offer a glimpse of what's still to come at ECR 2024.

#### Moderators:

Ben Giese; Chicago / United States Mélisande Rouger; Bilbao / Spain

Interview (30 min)







#### ST 23 - Morning Welcome with Carlo Catalano

Categories: Education, General Radiology, Multidisciplinary, Professional Issues

Date: March 3, 2024 | 07:50 - 08:00 CET

Grab your morning coffee and join our studio moderators as they discuss the most exciting highlights of the upcoming day with Congress President Prof. Carlo Catalano. Make a list of what not to miss and hear his insights on some of the biggest trends currently rocking the world of radiology.

#### Moderators:

Ben Giese; Chicago / United States Mélisande Rouger; Bilbao / Spain

Interview (30 min) Carlo Catalano; Roma / Italy









### **RC 2201 - Evaluation of liver metastases**

Categories: Abdominal Viscera, Imaging Methods, Multidisciplinary, Oncologic Imaging ETC Level: LEVEL I+II Date: March 3, 2024 | 08:00 - 09:00 CET CME Credits: 1

**Moderator:** Christoph Johannes Zech; Basel / Switzerland

**Chairperson's introduction** (5 min) Christoph Johannes Zech; Basel / Switzerland

Assessing response to systemic therapy in liver metastases (15 min) Federica Vernuccio; Palermo / Italy

**Imaging before and after locoregional treatment of liver metastases** (15 min) Monique Maas; Amsterdam / Netherlands

Panel discussion: What are the main challenges of imaging in treatment planning and response assessment? (10 min)







## RC 2217 - Vascular trauma in the abdomen and pelvis: a survival guide for the emergency

Categories: Emergency Imaging, Interventional Radiology, Vascular ETC Level: LEVEL II+III Date: March 3, 2024 | 08:00 - 09:00 CET CME Credits: 1

**Moderator:** Mariano Scaglione; Napoli / Italy

**Chairperson's introduction** (5 min) Mariano Scaglione; Napoli / Italy

Abdominal vascular trauma: solid organs and mesentery (15 min) Elizabeth Dick; London / United Kingdom

Pelvic vascular trauma (15 min) Sameer Bhimjibhai Raniga; Muscat / Oman

Role of IR in abdominopelvic vascular trauma (15 min) Roberto lezzi; Roma / Italy

Panel discussion: Plugging the leak: the ins and outs of the body interventionalist (10 min)







#### E<sup>3</sup> 22E - Traumatic lesions in the hand

Categories: Emergency Imaging, General Radiology, Musculoskeletal ETC Level: LEVEL I+II Date: March 3, 2024 | 08:00 - 09:00 CET CME Credits: 1

**Moderator:** Andrea B. Rosskopf; Zurich / Switzerland

**Chairperson's introduction** (2 min) Andrea B. Rosskopf; Zurich / Switzerland

**Finger injuries in sports** (25 min) Salvatore Gitto; Milano / Italy

Traumatic TFCC and ECU injuries (25 min)

Filippo Del Grande; Lugano / Switzerland

Panel discussion (8 min)









### E<sup>3</sup> 24E - New horizons for hybrid imaging

Categories: Hybrid Imaging, Molecular Imaging, Nuclear Medicine ETC Level: LEVEL II Date: March 3, 2024 | 08:00 - 09:00 CET CME Credits: 1

**Moderator:** Clemens C. Cyran; München / Germany

**Chairperson's introduction** (5 min) Clemens C. Cyran; München / Germany

**Total body PET/CT: a revolution for clinical routine?** (15 min) Axel Rominger; Bern / Switzerland

**The five future key applications of AI in hybrid imaging** (15 min) Thomas Küstner; Tübingen / Germany

**The magic forest: novel radiotracers on their way to clinical translation** (15 min) Lena Unterrainer; Munich / Germany

Panel discussion: Innovations in hybrid imaging - which one will turn out as the most transformative? (10 min)







#### RPS 2211 - Brain tumour imaging: from radiology to pathology

Categories: Artificial Intelligence & Machine Learning, Molecular Imaging, Neuro, Oncologic Imaging, Research Date: March 3, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderator: Jerzy Walecki; Warsaw / Poland

**Default mode network functional connectivity is sensitive to glioma WHO-grade** (7 min) Ahmed M. Radwan; Leuven / Belgium

**IDH status prediction in gliomas using machine-learning analysis of multiparametric MRI** (7 min) Vojtěch Sedlák; Humpolec / Czechia

DSC-PWI presurgical differentiation of Grade 4 astrocytoma and glioblastoma in young adults: unsupervised percentilic rCBV analysis across enhancing and non-enhancing regions (7 min) Ady Mildred Viveros; Barcelona / Spain

**Tumour-ipsilateral hemisphere T2 relaxometry predicts progression-free survival in patients with primary glioblastoma** (7 min) Josef Vymazal; Prague / Czechia

**Quantitative histopathological analysis of the periphery of glioblastoma based on ADC and rCBV** (7 min) Juan Romero Coronado; Madrid / Spain

Differentiating brain metastases, glioblastoma and primary central nervous system lymphoma non-invasively using artificial intelligence-based multiparametric MRI (7 min)

Junjie Li; Beijing / China







#### RPS 2214 - A focus on MRI and mammography practice and care

Categories: Breast, Imaging Methods, Radiographers Date: March 3, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderators:

Cecilia Aynes; Sabadell-Barcelona / Spain Eugen Divjak; Zagreb / Croatia

**Comparing radiologists' and radiographers' assessment of quality and justification of lower back MRI referrals** (7 min) Catherine Chilute Chilanga; Drammen / Norway

The most common patient-related and technical artefacts on breast MRI: how to recognise and overcome? (7 min) Zeljka Ljepoja; Belgrade / Serbia

A safety questionnaire to assess participant (paediatric and adult) experience of ultra-high-field MRI: theory, design, and implementation considerations (7 min) Philippa Bridgen; London / United Kingdom

**Comparison between 0.3 Tesla and 1.5 Tesla MRI modalities in knee imaging** (7 min) Matej Jurjević; Kisovec / Slovenia

Effect of noise exposure during 7 Tesla MRI (7 min) Linda Maria Viviann Wennberg; Lund / Sweden

Supplementary breast cancer screening in women with dense breasts: insights from European radiographers and radiologists (7 min) Deborah Mizzi; Msida / Malta

Mean glandular dose in mammography with breast implants (7 min)

Erna Alukić; Ljubljana / Slovenia

Assessing the potential of digital breast tomosynthesis as a primary breast cancer screening tool in Malta: identifying beneficiaries and advancements (7 min)

Maria Pule; Paola / Malta









# BS 22a - Thorax: all you need to know in daily clinical hospital practice

Categories: Chest, Imaging Methods ETC Level: LEVEL II Date: March 3, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderator: Jens Vogel-Claussen; Hannover / Germany

**Chairperson's introduction** (3 min) Jens Vogel-Claussen; Hannover / Germany

**CT imaging of common infectious diseases** (19 min) Andreas Christe; Bern / Switzerland

Tips and tricks about pulmonary nodules (19 min)

Marie-Pierre Revel; Paris / France

**Imaging recommendations and typical appearance of most frequent fibrosing interstitial lung diseases** (19 min) Sujal R. Desai; London / United Kingdom







#### **RPS 2210 - Bone density and spine imaging**

Categories: EuroSafe Imaging/Radiation Protection, Imaging Methods, Musculoskeletal Date: March 3, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderator: Üstün Aydingöz; Ankara / Turkey

**Application of a novel ultra-high resolution photon counting detector CT in assessing thoracolumbar vertebral anatomic structures** (7 min) Yufei Huang; Shanghai / China

Association between haemochromatosis genetic variants and vertebral fracture: a UK Biobank study (7 min) Lucy Banfield; Exeter / United Kingdom

MRI or low-dose CT in suspected axial spondyloarthritis: preliminary results of a comparative study (7 min) Dominik Deppe; Berlin / Germany

Straightening out scoliosis: how artificial intelligence assisted Cobb angle measurements on spine radiographs can support the clinical user (7 min) Willem Grootjans; Leiden / Netherlands

Assessment of the predictability of vertebral fractures in multiple myeloma in dual-layer CT (DLCT) with virtual noncalcium (VNCa) CT images and calculation of virtual calcium-only (VCa) images (7 min) Thuy Duong Do; Heidelberg / Germany

The role of dynamic magnetic resonance imaging in improving the diagnostic accuracy of degenerative diseases of the lumbosacral spine (7 min) Abdelfattah Saoud; Cairo / Egypt

**Opportunistic screening of osteoporosis using routine lumbar spine MRI: a retrospective comparative study** (7 min) Naser Mohammad Issa Obeidat; Irbid / Jordan

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## RPS 2215 - Aortic aneurysm and dissection research: from classification to management

Categories: Cardiac, Imaging Methods, Vascular Date: March 3, 2024 | 08:00 - 09:00 CET **CME Credits:** 1

Moderator: Katharina Mueller-Peltzer; Freiburg / Germany

Uncommon anatomy, uncommon ailment: right-sided aortic arch with aberrant retroesophageal subclavian artery and dissecting aortic aneurysms in youth (7 min)

Ahmed Monier Sherif; Abu Dhabi / United Arab Emirates

Comparative analysis of computational workstations for stent planning of thoracic aortic aneurysms (7 min) Vitali Koch; Frankfurt a. Main / Germany

Assessment of AAA morphology using relaxation-enhanced angiography without contrast and triggering (REACT): comparison with CTA (7 min) Wen Zeng; Chengdu / China

Revealing aortic health: a radiomic approach for early acute aortic syndrome detection on non-contrast computed tomography (7 min) Chiara Zanon; Padua / Italy

Dual-source photon-counting CTA of the thorax: impact of low energy virtual monoenergetic imaging on image quality, vascular contrast and diagnostic assessability (7 min)

Christian Booz; Frankfurt a. Main / Germany

Early insights into the use of dynamic computed tomography angiography for classifying challenging endoleaks (7 min) Ákos Bérczi; Budapest / Hungary

Value of dark-blood computed tomography angiography for the assessment of aortic wall disease in patients with acute aortic syndrome (7 min)

Na Li; Wuhan / China

Relaxation-enhanced angiography without contrast and triggering (REACT) MRA with deep learning-constrained compressed sensing in aorta aneurysm: a large field of view angiography (7 min) Wen Zeng; Chengdu / China









#### **RPS 2207 - Non-oncological genitourinary diseases**

Categories: Abdominal Viscera, Genitourinary, Imaging Methods Date: March 3, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderator:

Gertraud Heinz; St. Pölten / Austria

Revolutionising the diagnosis of congenital cervical malformations: a novel magnetic resonance imaging-based classification for streamlined standardised assessment (7 min)

Zhilin Yuan; Beijing / China

**Correlation between total fibrotic kidney volume and parasympathetic activity in autosomal-dominant polycystic kidney disease patients: a pilot study** (7 min) Antonella Borrelli; Rome / Italy

MRI of pelvic endometriosis: evaluation of the mr#Enzian classification and the importance of adenomyosis subtypes (7 min) Antonia-Maria Pausch; Zurich / Switzerland

The hidden connections: the relationship between endometrioma size, adenomyosis and deep infiltrating endometriosis (7 min) Hande Özen Atalay; Istanbul / Turkey

Photon-counting detector CT for kidney stone detection in contrast-enhanced urography: a comparison between virtual non-contrast and virtual non-iodine reconstructions in a 3D printed kidney phantom (7 min) Andre Euler; Baden / Switzerland

Quantitative measurement of renal artery spin labelling imaging: a non-invasive index to evaluate perfusion in patients with renal artery stenosis (7 min) Xiaoxiao Zhang; Beijing / China

Follow-up in acute pyelonephritis (PNA) using DWI sequences in MRI: our experience (7 min) Giuseppe Di Guardia; Verduno / Italy

Reliable volume measurements in polycystic kidneys: a comparison between 3D volumetry and Mayo clinic's kidney volume calculator based on the ellipsoid equation (7 min)

Claudia Gerlotti Slusnys; Madrid / Spain









## E<sup>3</sup> 2226 - Current applications in imaging-tailored therapy

Categories: Breast, Imaging Methods, Interventional Radiology, Oncologic Imaging ETC Level: LEVEL III Date: March 3, 2024 | 08:00 - 09:00 CET CME Credits: 1

**Moderator:** Thomas H. Helbich; Vienna / Austria

**Chairperson's introduction** (5 min) Thomas H. Helbich; Vienna / Austria

Image adjusted post-NAC treatment and therapy (15 min) Ritse Maarten Mann; Nijmegen / Netherlands

**Update on image-guided therapy** (15 min) Alexandra Athanasiou; Athens / Greece

**Image-guided de-escalation of treatment: the PROSPECT trial paradigm shift** (15 min) Bruce Mann; Parkville / Australia

Panel discussion: How does surgery look like in the near future? (10 min)

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## RC 2203 - Guidelines and patient management for stable coronary artery disease

Categories: Cardiac, Contrast Media, Imaging Methods, Professional Issues ETC Level: LEVEL II+III Date: March 3, 2024 | 08:00 - 09:00 CET CME Credits: 1

Moderator: Michelle Claire Williams; Edinburgh / United Kingdom

**Chairperson's introduction** (5 min) Michelle Claire Williams; Edinburgh / United Kingdom

**Guidelines for non-invasive imaging of stable coronary artery disease** (15 min) Ricardo P. J. Budde; Rotterdam / Netherlands

**CT for risk prediction and patient management in stable coronary artery disease** (15 min) Marc Dewey; Berlin / Germany

**MRI for risk prediction and patient management in stable coronary artery disease** (15 min) Eike Nagel; Eschborn / Germany

Panel discussion: For patients with stable chest pain, when should we use CT and when should we use MRI? (10 min)







# BS 22b - Genitourinary

Categories: General Radiology, Genitourinary, Imaging Methods ETC Level: LEVEL I+II Date: March 3, 2024 | 08:00 - 09:00 CET CME Credits: 1

**Moderator:** Michele Bertolotto; Trieste / Italy

**Chairperson's introduction** (3 min) Michele Bertolotto; Trieste / Italy

**Imaging of the kidney** (19 min) Carlos Nicolau; Barcelona / Spain

**Imaging of the prostate** (19 min) Olivier Rouviere; Lyon / France

**Imaging of the testis and penis** (19 min) Athina C Tsili; Ioannina / Greece









## US 23 - Contrast-enhanced ultrasound (CEUS) in the intervention

Categories: Education, EuroSafe Imaging/Radiation Protection, Evidence-Based Imaging, Imaging Methods, Interventional Radiology ETC Level: LEVEL III Date: March 3, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

Moderators:

Dean Huang; London / United Kingdom Markus Herbert Lerchbaumer; Berlin / Germany

**Chairpersons' introduction** (10 min) Dean Huang; London / United Kingdom Markus Herbert Lerchbaumer; Berlin / Germany

CEUS for biopsy and ablation (16 min)

Ole Graumann; Kolding / Denmark

**CEUS for drainage and endocavitary CEUS** (16 min) Timm Kleffel; Augsburg / Germany

**CEUS with fusion for intervention** (16 min) Markus Herbert Lerchbaumer; Berlin / Germany

**CEUS in a paediatric intervention** (16 min) Abhay Srinivasan; Philadelphia / United States

Novel applications for CEUS in an intervention (16 min) Dean Huang; London / United Kingdom







#### **RPS 2316 - Innovation in cancer research**

Categories: Imaging Methods, Oncologic Imaging, Research Date: March 3, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

Moderator:

Doenja Marina Johanna Lambregts; Amsterdam / Netherlands

Clinical added value of MRI to CT in patients scheduled for local therapy of colorectal liver metastases (CAMINO): an international multicentre prospective diagnostic accuracy trial (7 min) Burak Görgec; Amsterdam / Netherlands

Diagnostic value of very early diffusion weighted changes at MRI after single-dose ablative radiation therapy (SDART) for organ-confined prostate cancer (7 min)

Cammillo Roberto Giovanni Leopoldo Oreste Massimiliano Talei Franzesi; Milan / Italy

**Comparison between MRI and conventional CT scans in the prediction of peritoneal cancer index** (7 min) Michela Polici; Rome / Italy

**CT morphological phenotype of a tumour is influenced more by the host tissue environment than tumour type** (7 min) Sajjad Rostami; Amsterdam / Netherlands

Patient eligibility for trials with imaging response assessment at the time of molecular tumour board presentation (7 min) Nabeel Mansour; Munich / Germany

**Iodine maps concentration and LI-RADS classification: to a quantitative evaluation of HCC** (7 min) Alessandro Barbaro; Concorezzo / Italy

Stage IIIN2 NSCLC undergoing induction chemotherapy and subsequent surgery: preliminary results of CT morphologic prognostic factors (7 min) Nunzia Di Meglio; Siena / Italy

Dynamic contrast-enhanced ultrasound analysis in preoperative diagnosis between hepatocellular carcinoma and intrahepatic cholangiocarcinoma in non-cirrhotic liver (7 min) Yi Dong; Shanghai / China

Body CT scan for oncologic patients: the impact of subspecialty radiology in the clinical practice: a quality care study (7 min)





Luca Bonomo; Massagno / Switzerland



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**Comparison of iRECIST and RECIST 1.1 for response assessment of immune checkpoint inhibitor therapy** (7 min) Christian Nelles; Cologne / Germany







#### **RPS 2303 - Pre- and periprocedural imaging and new techniques**

Categories: Cardiac, Imaging Methods, Research Date: March 3, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

**Moderator:** Florian Wolf; Vienna / Austria

Early myocardial extracellular volume at CT imaging: prognostic value in patients undergoing transcatheter aortic valve implantation (7 min)

Francesco Rizzetto; Rho / Italy

Interrater variability of ML-based CT-FFR during TAVR-planning: influence of image quality and coronary artery calcifications (7 min) Robin F. Gohmann; Leipzig / Germany

**CT fluoroscopy-guided percutaneous biopsy of cardiac and pericardial masses** (7 min) Patrik Rogalla; Toronto / Canada

**Diagnostic accuracy of detecting significant mitral valve regurgitation on non-contrast thoracic CT** (7 min) Benedicta Mutiara Suwita; Uxbridge / United Kingdom

Impact of postprocedural CT evaluation of lead to valve angle on the development of cardiac implantable electrical devices related tricuspid regurgitation (7 min)

Vincenzo Scialò; Milan / Italy

Myocardial tissue characterisation with late contrast enhancement (LCE-CT) in patients presenting with acute symptoms and mild troponin rise (7 min) Davide Vignale; Milan / Italy

**Feasibility of T2 mapping for the detection of myocardial injury in hypertrophic cardiomyopathy** (7 min) Jiaxin Wang; Beijing / China

Fractal analysis on CMR: trabecular complexity as a new marker to predict outcomes in patients with dilated cardiomyopathy (7 min) Xiaorui Xiang; Beijing / China

Computed tomography angiography reconstructed with MBIR for TAVR planning as a comprehensive tool for the assessment of coronary arteries (7 min)





Cammillo Roberto Giovanni Leopoldo Oreste Massimiliano Talei Franzesi; Milan / Italy



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#### RPS 2305 - Cutting edge advances in AI for radiological imaging

Categories: Artificial Intelligence & Machine Learning, General Radiology, Imaging Methods, Research Date: March 3, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

#### Moderator:

Stefania Volpe; Milan / Italy

Automatic detection of bone fragility in radiographic images using deep-learning with multicentre cohort datasets (7 min) Guillaume Gatineau; Lausanne / Switzerland

Spectral CT fingerprinting: AI-based clustering of tissue signatures: proof of concept (7 min)

Nils Große Hokamp; Cologne / Germany

Pre-operative prediction of axillary lymph node status using ML applied to breast US: a multicentre study (7 min) Martina Caruso; Naples / Italy

Prediction of patient survival with residual convolutional neural network (ResNet) in unresectable synchronous liveronly metastatic colorectal cancer treated with bevacizumab-based chemotherapy (7 min) Sung-Hua Chiu; Taipei / Taiwan, Chinese Taipei

Predicting histological response in pancreatic adenocarcinoma treated with neoadjuvant chemotherapy: conventional clinicoradiological variables and added value of radiomics (7 min)

Junaid Mushtaq; Milan / Italy

Monitoring over time of pathological complete response to neoadjuvant chemotherapy in breast cancer patients through an ensemble vision transformers-based model (7 min) Maria Colomba Comes; Bari / Italy

Retrospective evaluation of interval breast cancer: can the number of interval carcinomas be reduced utilising AI diagnostic software? (7 min)

Jonas Subelack; St. Gallen / Switzerland

Exploring the potential of ChatGPT and a context-aware ChatGPT in gastrointestinal radiology: a differential diagnostic accuracy assessment (7 min) Stephan Rau; Freiburg / Germany

CT effective dose in intensive care unit patients: comparison between deep learning image reconstruction, filtered back projection and iterative algorithms (7 min)





Elena Agostini; Padua / Italy



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Insights from a commercial AI tool's performance in detecting common acute and chronic chest radiograph abnormalities in a multi-ethnic Singapore dataset using AimSG's automated auditing tools (7 min)

Timothy Shao Ern Tan ; Singapore / Singapore







# RC 2302 - Current applications of artificial intelligence (AI) in breast cancer imaging

Categories: Artificial Intelligence & Machine Learning, Breast ETC Level: LEVEL II Date: March 3, 2024 | 09:30 - 10:30 CET CME Credits: 1

**Chairperson's introduction** (5 min) Katja Pinker-Domenig; New York / United States

Artificial intelligence (AI) in breast imaging: where we stand? (15 min) Fredrik Strand; Stockholm / Sweden

Al in screening (15 min) Tamar Sella; Jerusalem / Israel

The role of radiomics and radio-genomics for breast cancer prognosis (15 min) Katja Pinker-Domenig; New York / United States

Panel discussion: Current challenges in the application of AI in screening (10 min)

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## RC 2308 - State-of-the-art post-operative temporal bone

Categories: Education, Head and Neck, Imaging Methods, Neuro ETC Level: LEVEL II+III Date: March 3, 2024 | 09:30 - 10:30 CET CME Credits: 1

**Moderator:** Salman Qureshi; Sale / United Arab Emirates

**Chairperson's introduction** (5 min) Salman Qureshi; Sale / United Arab Emirates

Imaging of the post-operative middle ear and mastoid (15 min)

Sabrina Kösling; Halle A.D. Saale / Germany

**Post-implant imaging for cochlear and brainstem implants** (15 min) Berit Verbist; Leiden / Netherlands

Post-treatment imaging for vestibular schwannomas (15 min)

Ayça Karaosmanoğlu; Ankara / Turkey

Panel discussion: Post-treatment imaging - how to overcome the artefacts and things I wished someone had told me (10 min)







# EU 23 - Communicating benefits and risks of medical radiation to patients undergoing radiological procedures

Categories: EuroSafe Imaging/Radiation Protection, Interventional Radiology, Professional Issues, Radiographers ETC Level: LEVEL II Date: March 3, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

Moderator: Claudio Granata; Trieste / Italy

**Chairperson's introduction** (5 min) Claudio Granata; Trieste / Italy

What radiology professionals should know about what patients, parents and carers would like to know (18 min) Erik Briers; Hasselt / Belgium

**Communicating with patients undergoing interventional radiology procedures** (18 min) Carolina Rio Bartulos; Braunschweig / Germany

What and how to communicate with pregnant patients (18 min) Ilze Apine; Riga / Latvia

How to communicate that patient contact shielding, in most cases, is no longer needed (18 min) Shane J Foley; Dublin / Ireland

Panel discussion: How to train radiology professionals to effectively communicate the benefits and risks of medical radiation with patients? (13 min)







### E<sup>3</sup> 2323 - Cardiac and vascular

Categories: Cardiac, Vascular ETC Level: LEVEL I+II Date: March 3, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

**Moderator:** Marco Francone; Milan / Italy

**Chairperson's introduction** (6 min) Marco Francone; Milan / Italy

**Cardiovascular imaging: coronary arteries** (28 min) Matthias Eberhard; Unterseen / Switzerland

**Cardiovascular imaging: myocardium** (28 min) Maja Pirnat; Maribor / Slovenia

Cardiovascular imaging: valves, endocardium, and aorta (28 min)

Christian Loewe; Vienna / Austria









# E<sup>3</sup> 2321 - Imaging of metastatic renal tumours

Categories: Genitourinary, Imaging Methods, Oncologic Imaging ETC Level: LEVEL II Date: March 3, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

**Staging strategies** (45 min) Gordana Ivanac; Zagreb / Croatia

**Evaluation of medical treatment** (45 min) Sandy Van Nieuwenhove; Brussels / Belgium









### RC 2314 - Recent developments in MR safety

Categories: Education, Imaging Methods, Professional Issues, Radiographers, Students Date: March 3, 2024 | 09:30 - 10:30 CET CME Credits: 1

Moderators:

Andrea Cradock; Dublin / Ireland Anna Pichiecchio; Pavia / Italy

**Chairpersons' introduction** (5 min) Andrea Cradock; Dublin / Ireland Anna Pichiecchio; Pavia / Italy

Making the case for formal MR Safety Officer training (15 min)

Kurt Van Belle; Sint Andries / Belgium

**Current safety considerations and practices for patients with implantable devices** (15 min) Vítor Manuel F. Silva; Porto / Portugal

What do patients need to understand about MR safety (15 min) Christos Tsiotsios; Limassol / Cyprus

Panel discussion: What are the key steps to improve the safety profile of MRI (10 min)







## **CB** - Case-Based Diagnosis Training

Categories: Education, General Radiology, Radiographers ETC Level: LEVEL I Date: March 3, 2024 | 09:30 - 12:00 CET CME Credits: 2.5

**Moderators:** Soraya Robinson; Wien / Austria Klaus M. Friedrich; Vienna / Austria

**Chairpersons' introduction** (5 min) Soraya Robinson; Wien / Austria Klaus M. Friedrich; Vienna / Austria

**Cardiac** (10 min) Dietrich Beitzke; Vienna / Austria

**Neuro** (10 min) Daniela Prayer; Vienna / Austria

**Paediatrics** (10 min) Janina Maria Patsch; Vienna / Austria

**Maxillofacial** (10 min) Soraya Robinson; Wien / Austria

**Genitourinary** (10 min) Michael Toepker; Wien / Austria

Interlude: The road less travelled: tracing clinical clues to a diagnosis (30 min) Burce Özgen Mocan; Chicago / United States

Head and neck (10 min) Ursula Schwarz-Nemec; Vienna / Austria

**Chest** (10 min) Helmut Prosch; Vienna / Austria









**Spine** (10 min) Klaus M. Friedrich; Vienna / Austria

Abdominal (10 min) Wolfgang Schima; Vienna / Austria

**Breast** (10 min) Paola Clauser; Vienna / Austria









# RC 2310 - Bone marrow imaging: new techniques for old clinical problems

Categories: Musculoskeletal ETC Level: ALL LEVELS Date: March 3, 2024 | 09:30 - 10:30 CET CME Credits: 1

Moderator: Apostolos H. Karantanas; Heraklion / Greece

Chairperson's introduction (5 min) Apostolos H. Karantanas; Heraklion / Greece

How to image bone marrow? (15 min) Bruno Vande Berg; Kessel-Lo / Belgium

**Bone marrow lesions: benign or malignant?** (15 min) Patrick Omoumi; Lausanne / Switzerland

**Bone marrow necrosis** (15 min) Charbel Mourad; Beyrouth / Lebanon

Panel discussion: Which protocol for which indication? (10 min)

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#### **RPS 2311 - Stroke: improving diagnosis through imaging**

Categories: Artificial Intelligence & Machine Learning, Interventional Radiology, Neuro, Research, Vascular Date: March 3, 2024 | 09:30 - 11:00 CET CME Credits: 1.5

Moderator:

Katarzyna Sklinda; Warsaw / Poland

Cerebral collaterals are associated with pre-treatment brain-blood barrier permeability in acute ischaemic stroke patients (7 min)

Alexandre Bani Sadr; Lyon / France

Accuracy of artificial intelligence for diagnosing intracranial haemorrhage: results of a year-long multicentre clinical monitoring study (7 min) Anna Nikolaevna Khoruzhaya; Moscow / Russia

Deep-learning augmented contrast enhancement improves the detection of cerebral vessel occlusions in CTangiography of acute stroke patients (7 min) Sebastian Steinmetz; Mainz / Germany

**Risk identification for the development of large-artery vasospasm after aneurysmatic subarachnoid haemorrhage: a multivariate, risk- and location-adjusted prediction model** (7 min) Julian Schwarting; Munich / Germany

**Cost-effectiveness of endovascular thrombectomy in acute ischaemic stroke with large infarct** (7 min) Julian Schwarting; Munich / Germany

Comparative evaluation of 5.0T and 3.0T TOF MRA in assessing collateral circulation in moyamoya disease: a focus on disease progression and diagnostic precision (7 min) Yijun Zhou; Beijing / China

**Generalisation to ultra low-field MRI of an algorithm for detection of acute cerebral infarcts** (7 min) Silvia Ingala; Copenaghen / Denmark

Spectral imaging and analysis of monophasic CT angiography for assessment of penumbra and infarct core in acute stroke (7 min) Schekeb Aludin; Kiel / Germany

Validation of the novel combined marker Haematoma Maturity Score for intracerebral haemorrhages (7 min)







Bárbara Teresa Catelani; Rosario / Argentina



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# **Improved neurovascular imaging using Advanced intelligent Clear-IQ Engine (AiCE)** (7 min) Sebastian Steinmetz; Mainz / Germany

# Assessment of cerebral blood flow distribution at different phases between different types of the circle of Willis using 4D Ffow imaging (7 min)

Binbin Sui; Beijing / China









#### RPS 2416 - Imaging advances in oncology: from diagnosis to therapy

Categories: Imaging Methods, Oncologic Imaging Date: March 3, 2024 | 11:30 - 12:30 CET **CME Credits:** 1

Moderator: Ravikanth Balaji; Chennai / India

An external validation study of the Birmingham atypical cartilage tumour imaging protocol for the management of solitary central cartilage tumours of the proximal humerus and around the knee (7 min)

Thomas Van Den Berghe; Lochristi / Belgium

Evaluation of the value of (dynamic) contrast-enhanced MRI for the diagnosis and follow-up of central cartilaginous tumours (7 min)

Thomas Van Den Berghe; Lochristi / Belgium

Changes in Deauville scores on delayed imaging with total-body 18F-FDG PET/CT scans: any association with outcome? (7 min) Yasser Gaber Abdelhafez; Sacramento / United States

Relaxation-compensated CEST imaging of the APT has greater predictive value in patients with glioma at baseline before radiotherapy, compared to imaging of the APTw and ssMT at 3T (7 min) Nikolaus von Knebel Doeberitz; Heidelberg / Germany

Therapeutic application of single-atom iron nanozymes in magnetic resonance imaging, synergistic chemodynamic therapy, and photothermal therapy in colorectal carcinoma (7 min) Jun Zhang; Shanghai / China

The value of DLSCT-based multi-parameters for assessment of VETC and MVI in hepatocellular carcinoma (7 min) Angi Li; Guangzhou / China

Node reporting and data system 1.0 (Node-RADS): validation on abdominal lymph nodes (7 min) Elena Grimaldi; Milan / Italy

Evaluation of sarcopenia as predicting factor of perioperative chemotherapy toxicity and response to treatment in patients with locally advanced gastric cancer (7 min)

Stefano Nardacci; Rome / Italy









# BS 24a - Neuroradiology in daily clinical practice

Categories: General Radiology, Neuro ETC Level: LEVEL II Date: March 3, 2024 | 11:30 - 12:30 CET CME Credits: 1

Moderator: Philippe Demaerel; Leuven / Belgium

**Chairperson's introduction** (3 min) Philippe Demaerel; Leuven / Belgium

Imaging of vascular malformations of the brain (19 min)

Jose Luis Munuera del Cerro; Barcelona / Spain

Imaging of intracranial infectious and inflammatory diseases (19 min)

Alexandre Krainik; Grenoble / France

Imaging of ischaemic diseases of the brain (19 min) Karl-Olof Loevblad; Geneva / Switzerland









# RPS 2403 - Spectral CT: new developments and clinical applications (part 2)

Categories: Cardiac, Imaging Methods, Research Date: March 3, 2024 | 11:30 - 12:30 CET CME Credits: 1

**Moderator:** Moritz Christian Halfmann; Mainz / Germany

Coronary artery calcium scoring using virtual vs true non-contrast images from photon-counting coronary CT angiography (7 min) Jan Robert Kröger; Minden / Germany

In vitro study of the quality of multi-parameter coronary stent images on second-generation dual-layer detector spectral CT (7 min) Lihong Chen; Xi'an / China

Ultra-high resolution coronary CT angiography on photon-counting detector CT: impact of quantum iterative reconstruction (7 min) Milán Vecsey-Nagy; Budapest / Hungary

Feasibility of coronary CT angiography-based fractional flow reserve using a clinical photon-counting detector CT system (7 min) Emese Zsarnóczay; Budapest / Hungary

Impact of reconstruction parameters on the accuracy of myocardial extracellular volume quantification on a firstgeneration photon-counting detector CT (7 min) Chiara Gnasso; Milan / Italy

Impact of photon-counting CT-based virtual mono-energetic imaging on detecting myocardial late iodine enhancement: comparison with MRI reference (7 min)

Chiara Gnasso; Milan / Italy

Dual-layer spectral CT-based quantification of myocardial extracellular volume fraction using CMR as a reference in aortic valve disease (7 min)

Gang Wang; Lanzhou / China

Quantification of myocardial extracellular volume and aortic valve calcification scores using dual-layer spectral CT to identify severe aortic regurgitation in patients with aortic valve disease (7 min) ZiXian Chen; Lanzhou / China









#### RPS 2401 - Artificial intelligence in abdominal imaging: current directions

Categories: Abdominal Viscera, Artificial Intelligence & Machine Learning, Oncologic Imaging Date: March 3, 2024 | 11:30 - 12:30 CET CME Credits: 1

## Moderator:

Pietro Andrea Bonaffini; Monza / Italy

Risk stratification of gallbladder masses by ML-based ultrasound radiomics models: a prospective and multi-institutional study (7 min) Chong-Ke Zhao; Shanghai / China

Development and validation of comprehensive nomogram based on imaging features and MRI radiomics to predict microvascular invasion and overall survival in patients with intrahepatic cholangiocarcinoma (7 min) Gengyun Miao; Shanghai / China

Automatic detection and segmentation of IPMN pancreatic cysts in MRI with a multi-sequence cascaded deep learning pipeline (7 min) Leo Joskowicz; Jerusalem / Israel

**Delta CT-radiomics derived response prediction in advanced pancreatic ductal adenocarcinoma** (7 min) Felix N. Harder; Munich / Germany

**Radiomic feature profiles to define treatment response in rectal cancer: not just a tumour matter** (7 min) Ana Marhuenda; Valencia / Spain

Effect of artificial intelligence-aided differentiation of benign and premalignant colorectal polyps as a second reader at CT colonography (7 min) Sergio Grosu; Munich / Germany

A radiomics model for the preoperative prediction of lymph node metastasis in colorectal carcinoma (7 min) Alba Salgado-Parente; Madrid / Spain

Development and validation of CT-based radiomics deep-learning signatures to preoperatively predict lymph node metastasis in non-functional pancreatic neuroendocrine tumour: a multi-cohort study (7 min) Wei Tang; Shanghai / China







## RC 2412 - The paediatric liver

Categories: Abdominal Viscera, Paediatric ETC Level: LEVEL II Date: March 3, 2024 | 11:30 - 12:30 CET CME Credits: 1

**Moderator:** Stéphanie Franchi-Abella; Le Kremlin-Bicêtre / France

**Chairperson's introduction** (2 min) Martijn V Verhagen; Groningen / Netherlands

Imaging of the paediatric liver (12 min) Greg Chambers; Leeds / United Kingdom

**Liver transplant** (12 min) Martijn V Verhagen; Groningen / Netherlands

Fontan-associated liver disease (FALD) (12 min) Charlotte de Lange; Gothenburg / Sweden

**Quantification of fat and iron in the liver** (12 min) Seema Toso; Geneva / Switzerland

Panel discussion: Where does ultrasound end and MRI begin? (10 min)







#### **RPS 2405 - AI in breast cancer screening**

Categories: Artificial Intelligence & Machine Learning, Breast, Oncologic Imaging, Physics in Medical Imaging Date: March 3, 2024 | 11:30 - 12:30 CET CME Credits: 1

Moderator: Susan Mary Astley; Altrincham / United Kingdom

Bimodal CADx assessment in mammography and tomosynthesis: a standalone study for breast screening (7 min) Hubert Beaumont; Nice / France

Are Al-detected interval cancers actionable for recall in a real screening setting? An informed review of 120 interval cancer cases with high AI scores in breast screen Norway (7 min) Henrik Wethe Koch; Stavanger / Norway

Integration of artificial intelligence (AI) in double-read population-based mammography screening: simulated replacement of one reader and beyond (7 min) Mohammad Talal Elhakim; Odense / Denmark

RSNA 2023 screening mammography breast cancer detection AI challenge results (7 min) Yan Chen; Nottingham / United Kingdom

Improving breast cancer recurrence forecasts: combining multi-time-point mammography and medical reports (7 min) Chunyao Lu; Amsterdam / Netherlands

Microwave breast cancer screening and early detection: SAFE clinical study (7 min) Aleksandar Janjic; Istanbul / Turkey

Clinical and operational benefits of artificial intelligence (AI) in prospective UK breast screening service evaluation (7 min) Gerald Lip; Aberdeen / United Kingdom

Adding artificial intelligence (AI) case scoring in a breast screening programme to overcame delay in most probably true positive cases: a retrospective study (7 min) Andrea Nitrosi; Reggio Emilia / Italy









## BS 24b - Formal and informal advanced practice roles for radiographers

Categories: Management/Leadership, Multidisciplinary, Professional Issues, Radiographers, Students Date: March 3, 2024 | 11:30 - 12:30 CET CME Credits: 1

Moderator: Safora F Johansen; Oslo / Norway

**Chairperson's introduction** (6 min) Safora F Johansen; Oslo / Norway

**Established and novel advanced practice roles for radiographers** (18 min) Claire Senior; Exeter / United Kingdom

**Exploring opportunities and informal roles to advance radiographers' practice** (18 min) Patrick Vorlet; Lausanne / Switzerland

Advance practice roles in radiotherapy (18 min) Celeste Marques Oliveira; Porto / Portugal

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## RC 2401 - Non-IBD intestinal inflammation: the role of imaging

Categories: GI Tract ETC Level: LEVEL II+III Date: March 3, 2024 | 11:30 - 12:30 CET CME Credits: 1

**Moderator:** Andrea Laghi; Roma / Italy

**Chairperson's introduction** (5 min) Andrea Laghi; Roma / Italy

Infectious enteritis and colitis (15 min) Jordi Rimola Gibert; Barcelona / Spain

Intestinal graft versus host disease (15 min)

Francesca Maccioni; Rome / Italy

**Drug-induced enteritis and colitis** (15 min) Ingrid Millet; Montpellier / France

Panel discussion: Is GI imaging a problem-solving tool in the multidisciplina discussion of non-IBD intestinal inflammation? (10 min)







# EIBIR 24 - Artificial intelligence (AI), real impact: redefining clinical decision making based on medical images

Categories: Artificial Intelligence & Machine Learning, Breast, Oncologic Imaging, Research, Vascular ETC Level: LEVEL I+II Date: March 3, 2024 | 11:30 - 12:30 CET CME Credits: 1

**Moderator:** Oliver Diaz; Barcelona / Spain

**Chairperson's introduction** (5 min) Oliver Diaz; Barcelona / Spain

RadioVal: international clinical validation of radiomics AI for breast cancer treatment planning (15 min) Oliver Diaz; Barcelona / Spain

**ODELIA: open-source swarm learning for decentralised medical AI for breast cancer detection** (15 min) Daniel Truhn; Aachen / Germany

AI-POD: trustworthy AI tools for the prediction of obesity-related vascular diseases (15 min) Ulrike I. Attenberger; Bonn / Germany Georg Langs; Vienna / Austria







### E<sup>3</sup> 25E - Topics in aortic imaging

Categories: Vascular ETC Level: LEVEL I Date: March 3, 2024 | 11:30 - 12:30 CET CME Credits: 1

**Moderator:** Dominika Suchá; Utrecht / Netherlands

**Chairperson's introduction** (5 min) Dominika Suchá; Utrecht / Netherlands

Atherosclerotic disease of the aorta (15 min)

Rodrigo Salgado; Antwerpen / Belgium

**Genetic aortic syndromes** (15 min) Julius Matthias Weinrich; Hamburg / Germany

Vasculitis (15 min) Ricardo P. J. Budde; Rotterdam / Netherlands

Panel discussion (10 min)

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## RC 2410 - Ultrasound in musculoskeletal radiology

Categories: Imaging Methods, Musculoskeletal ETC Level: ALL LEVELS Date: March 3, 2024 | 11:30 - 12:30 CET CME Credits: 1

**Moderator:** Rebeca Mirón Mombiela; Herlev / Denmark

**Chairperson's introduction** (5 min) Rebeca Mirón Mombiela; Herlev / Denmark

High-frequency and ultra-high frequency ultrasound (15 min) Luca Maria Sconfienza; Milano / Italy

**MSK elastography** (15 min) Žiga Snoj; Ljubljana / Slovenia

Interventional MSK ultrasound (15 min) Elena E. Drakonaki; Heraklion / Greece

Panel discussion: New clinical roles for musculoskeletal ultrasound (10 min)

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