



# **REVIEW 2021**

Dear Colleagues,

ESOR has already completed fifteen challenging and rewarding years of uninterrupted commitment and continuous investment in radiological education in Europe and worldwide.



Despite the challenges that the COVID-19 pandemic has brought, ESOR continues to adapt to the times and offer the same quality of education through an online format.

I am happy that ESOR online activities have proven to be very successful. Despite missing face to face interaction, online education also shows many benefits, particularly as it has allowed access to a large international audience. This year, ESOR courses have taken advantage of such strengths and responded adequately to the needs of radiologists around the world.

During 2021, ESOR has delivered training to residents and board-certified radiologists by offering 11 Foundation courses. The well-established Asklepios courses were also taught online this year on the topics of Head and Neck MR, Oncologic Imagine, and MR Imaging of MSK. The online format of courses also allowed us to have two international Asklepios courses. The first was a joint course hosted by the Radiological Societies of Thailand and the Philippines on the topic of Oncology of the Abdomen and Pelvis held in July and a second international Asklepios course hosted by the Chinese Society of Radiology on the topic of Oncologic Imaging held in September.

The two successful AIMS courses held this year also showed our commitment to supporting radiological education. One was held in April in Mexico on the topic of Ultrasound and the second in Korea on Breast Cancer Screening and Clinical Trials.

Moreover, the GALEN Foundation course on Neuroradiology and the four GALEN courses had a total number of 444 viewers from over 45 countries around the world.

Many scholars and fellows who had to interrupt their trainings in 2020 due to the pandemic were able to finish them in 2021. Because of the on-going pandemic no new scholarship and fellowship opportunities were offered this year.

ESOR would like to express its appreciation for the unlimited support of its friends, lecturers, training centres, host organizers, national societies, and industry partners. We thank them for their belief in lifelong learning, ESOR is greatly indebted to them all.

In this report, all activities of 2021 are presented.



Professor Valérie Vilgrain
ESOR Scientific/Educational Director

# **ESOR STEERING COMMITTEE**

March 2021 - July 2022

#### Scientific/Educational Director

Valérie Vilgrain, Paris/FR

#### **Steering Committee Members**

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Vicky Goh, London/UK

Christian Loewe, Vienna/AT

Marie-Pierre Revel, Paris/FR

Koenraad Verstraete, Ghent/BE

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2<sup>nd</sup> Vice President of ESR

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Executive Director ESR

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Regina Beets-Tan, Amsterdam/NL

Thomas Helbich, Vienna/AT

Ioana Lupescu, Bucharest/RO

Roberto Maroldi, Brescia/IT

Celso Matos, Lisbon/PT

Katrine Riklund, Umeå/SE

Andrea Rockall, London/UK

Valentin Sinitsyn, Moscow/RU

Johan Van Goethem, Antwerp/BE ESNR European Course of Neuroradiology

Carlo Cosimo Quattrocchi, Rome/IT

ESMRMB School of MRI

Kai Vilanova, Girona/ES

ESMRMB School of MRI



# **FOUNDATION COURSES**

In 2021, ESOR organized 11 **online Foundation Courses** dealing with specific topics adhered to the European Training Curriculum, level I-II.

Each course includes topics consisting of theory and case presentations followed by Q&A sessions for interaction with the faculty members.

The ESOR Foundation Courses are aimed at residents in their  $4^{th}$  and  $5^{th}$  year of training in radiology and recently board-certified radiologists.

CME credits are available for each live streamed course.





# FOUNDATION Courses

# CARDIAC IMAGING

January 13, 2021 Online on ESR Connect

## **Topics and Faculty:**

Cardiac CT in stable angina

C. Loewe, Vienna/AT

Role of Cardiac MR in and after acute coronary syndromes

R. Salgado, Antwerp/BE

Imaging in acute aortic syndromes

C. Loewe, Vienna/AT

Imaging different phenotypes in non-ischemic cardiomyopathies: CMR role in differential diagnosis

R. Salgado, Antwerp/BE

MR and CT angiography in peripheral arterial disease

C. Loewe, Vienna/AT

Carotid disease

R. Salgado, Antwerp/BE

# Number of participants: 151

## **Country Statistics**

Romania 14, Switzerland 14, Belgium 10, United Kingdom 10, Germany 9, Greece 7, Spain 7, Italy 6, Netherlands 6, Austria 5, Latvia 5, Portugal 5, India 4, Estonia 3, Poland 3, Sweden 3, United Arab Emirates 3, Egypt 2, Ireland 2, Serbia 2, Slovakia 2, South Africa 2, Turkey 2, Ukraine 2, United States 2, Australia 1, Benin 1, Chile 1, Colombia 1, Croatia 1, Cyprus 1, Czech Republic 1, Finland 1, France 1, Israel 1, Republic of Korea 1, Lithuania 1, Montenegro 1, Morocco 1, Nigeria 1, Norway 1, Russian Federation 1, Singapore 1, Taiwan 1, Thailand 1, Vietnam 1



# **FOUNDATION**

# Courses

# **HYBRID IMAGING**

January 20, 2021 Online on ESR Connect

## **Topics and Faculty:**

Introduction to hybrid imaging

K. Riklund, Umeå/SE

Lymphoma

L. Umutlu, Essen/DE

Head and Neck

K. Riklund, Umeå/SE

Neuro

L. Umutlu, Essen/DE

Lung cancer

K. Riklund, Umeå/SE

Cardiac

L. Umutlu, Essen/DE

## Number of participants: 132

#### **Country Statistics**

Romania 13, Belgium 11, Spain 10, Switzerland 10, Netherlands 9, United Kingdom 8, Greece 6, Germany 5, Austria 4, Italy 4, Latvia 4, Sweden 4, Turkey 4, Slovakia 3, Cyprus 2, Egypt 2, Finland 2, India 2, Lithuania 2, Poland 2, South Africa 2, United Arab Emirates 2, United States 2, Argentina 1, Australia 1, Chile 1, Croatia 1, Czech Republic 1, Estonia 1, Gibraltar 1, Hong Kong 1, Israel 1, Montenegro 1, Myanmar 1, Norway 1, Pakistan 1, Portugal 1, Serbia 1, Singapore 1, Thailand 1, Ukraine 1, Vietnam 1





# **FOUNDATION**Courses

# **HEAD AND NECK RADIOLOGY**

January 27, 2021 Online on ESR Connect

### **Topics and Faculty:**

**Sudden hearing loss: how to approach?**B. Verbist, Leiden/NL

Imaging of the oropharynx and hypopharynx B. Schuknecht, Zurich/CH

Proptosis: imaging approach B. Verbist, Leiden/NL

Facial nerve palsy: the role of imaging B. Schuknecht, Zurich/CH

Key information in inflammatory lesions of the paranasal sinuses

B. Verbist, Leiden/NL

A slow-growing lump in the neck: key imaging features

B. Schuknecht, Zurich/CH

## Number of participants: 226

### **Country Statistics**

Romania 25, Switzerland 19, United Kingdom 16, Belgium 15, Germany 11, Spain 11, Austria 10, Greece 10, Netherlands 7, Latvia 6, Norway 6, Portugal 6, India 5, Italy 4, Poland 4, Slovakia 4, Croatia 3, France 3, Hong Kong 3, Lithuania 3, Russian Federation 3, Serbia 3, Sweden 3, Ukraine 3, Australia 2, Cyprus 2, Czech Republic 2, Egypt 2, Finland 2, Slovenia 2, South Africa 2, Turkey 2, United Arab Emirates 2, United States 2, Bahamas 1, Bangladesh 1, Brazil 1, Chile 1, Colombia 1, Denmark 1, Ecuador 1, El Salvador 1, Estonia 1, Hungary 1, Ireland 1, Israel, 1Kuwait 1, Malaysia 1, Montenegro 1, Morocco 1, Myanmar 1, Nigeria 1, Oman 1, Pakistan 1, Paraguay 1, Singapore 1, Vietnam 1



# **FOUNDATION**

# Courses

# CHEST IMAGING

February 10, 2021 Online on ESR Connect

### **Topics and Faculty:**

#### Chest trauma

N. Sverzellati, Parma/IT

# Single and multiple pulmonary nodules and their management

J. Biederer, Heidelberg/DE

# Pattern approach towards diffuse parenchymal lung disease

N. Sverzellati, Parma/IT

# COVID-pneumonia and differential diagnoses

J. Biederer, Heidelberg/DE

# Chronic inflammatory and obstructive diseases of the airways

N. Sverzellati, Parma/IT

## Diseases of the great thoracic vessels

J. Biederer, Heidelberg/DE

# Number of participants: 256

## **Country Statistics**

Romania 22, United Kingdom 22, Switzerland 18, Greece 17, Belgium 15, Austria 14, Spain 14, Netherlands 11, Germany 8, Portugal 7, Latvia 6, Norway 6, Poland 5, Denmark 4, Hong Kong 4, Italy 4, Lithuania 4, Russian Federation 4, Slovakia 4, Australia 3, Czech Republic 3, Egypt 3, Estonia 3, Finland 3, India 3, Serbia 3, Slovenia 3, Sweden 3, United Arab Emirates 3, Chile 2, Colombia 2, Croatia 2, Cyprus 2, France 2, Hungary 2, Kuwait 2, Turkey 2, Ukraine 2, United States 2, Canada 1, Ecuador 1, Ireland 1, Israel 1, Japan 1, Republic of Korea 1, Mexico 1, Montenegro 1, Nigeria 1, Oman 1, Pakistan 1, Panama 1, Saudi Arabia 1, Singapore 1, South Africa 1, Thailand 1, Vietnam 1



# FOUNDATION Courses

# **BREAST IMAGING**

February 17, 2021 Online on ESR Connect

### **Topics and Faculty:**

**BIRADS** update

T. Helbich, Vienna/AT

Breast cancer screening: ready to be

personalised?

S. Vinnicombe, Cheltenham/UK

Preoperative imaging: MG or MRI?

T. Helbich, Vienna/AT

US: from B mode to elastography

S. Vinnicombe, Cheltenham/UK

Image-guided interventions

T. Helbich, Vienna/AT

**B3 lesions: how to manage?**S. Vinnicombe, Cheltenham/UK

# Number of participants: 231

### **Country Statistics**

Switzerland 25, Romania 22, Netherlands 18, Belgium 16, Greece 14, Austria 11, United Kingdom 11, Germany 8, Portugal 7, Spain 7, Finland 5, India 5, Latvia 5, Poland 5, Ukraine 5, France 4, Hong Kong 4, Saudi Arabia 4, Slovakia 4, Sweden 4, Croatia 3, Ireland 3, Malaysia 3, Norway 3, Serbia 3, Cyprus 2, Egypt 2, Italy 2, Russian Federation 2, Singapore 2, Thailand 2, United Arab Emirates 2, United States 2, Brazil 1, Colombia 1, Czech Republic 1, Denmark 1, Ecuador 1, Estonia 1, Iceland 1, Israel 1, Japan 1, Kosovo 1, Kuwait 1, Montenegro 1, Oman 1, Pakistan 1, Turkey 1, Vietnam 1



# FOUNDATION

# Courses

# PAEDIATRIC RADIOLOGY

February 24, 2021 Online on ESR Connect

### **Topics and Faculty:**

Oncologic body imaging in paediatrics P. Petit, Marseille/FR

Imaging of metabolic diseases of the brain K. Mankad, London/UK

**Imaging of skeletal tumours in children** P. Petit, Marseille/FR

Imaging of inflammatory and demyelinating diseases

K. Mankad, London/UK

Interventional radiology in paediatrics P. Petit, Marseille/FR

Imaging paediatric brain trauma K. Mankad, London/UK

**Number of participants: 227** 

#### **Country Statistics**

Romania 24, Switzerland 22, Belgium 16, United Kingdom 16, Germany 15, Spain 13, Greece 9, Netherlands 9, Austria 8, Latvia 7, Italy 6, Norway 6, Slovakia 6, India 5, Sweden 4, Ukraine 4, Czech Republic 3, Finland 3, Hong Kong 3, Portugal 3, United States 3, Croatia 2, Cyprus 2, Egypt 2, Estonia 2, France 2, Kuwait 2, Poland 2, Serbia 2, Slovenia 2, South Africa 2, Turkey 2, United Arab Emirates 2, Australia 1, Chile 1, Colombia 1, Denmark 1, Gibraltar 1, Iceland 1, Ireland 1, Israel 1, Japan 1, Malaysia 1, Montenegro 1, Oman 1, Pakistan 1, Panama 1, Saudi Arabia 1, Singapore 1, Thailand 1, Vietnam 1



# **FOUNDATION**Courses

# **NEURORADIOLOGY**

April 28, 2021 Online on ESR Connect

### **Topics and Faculty:**

**Spine and spinal cord malformations** M. Severino, Genoa/IT

Spine pain: degenerative spine disease and differential diagnosis
P. Vilela, Lisbon/PT

Paediatric hipoxico-ischemic lesions M. Severino, Genoa/IT Acute headache imaging at the emergency room P. Vilela, Lisbon/PT

Brain malformations M. Severino, Genoa/IT

Interventional Neuroradiology: major endovascular treatments P. Vilela, Lisbon/PT

Number of participants: 298

# **Country Statistics**

Romania 33, Switzerland 29, Spain 18, United Kingdom 17, Belgium 16, Germany 16, Greece 15, Latvia 10, Slovakia 10, Austria 9, Italy 9, Netherlands 8, Poland 8, Ukraine 6, Croatia 5, France 5, India 5, Ireland 4, Norway 4, Russian Federation 4, Sweden 4, Australia 3, Czech Republic 3, Finland 3, Hong Kong 3, Lithuania 3, Philippines 3, Saudi Arabia 3, Serbia 3, Turkey 3, Cyprus 2, Denmark 2, Egypt 2, Estonia 2, Georgia 2, Hungary 2, Kuwait 2, Portugal 2, Slovenia 2, Thailand 2, United States of America 2, Vietnam 2, Botswana 1, Brazil 1, Chile 1, Costa Rica 1, Israel 1, Oman 1, Pakistan 1, Paraguay 1, Qatar 1, Singapore 1, South Africa 1, United Arab Emirates 1





# **FOUNDATION**

# Courses

# **UROGENITAL RADIOLOGY**

May 19, 2021 Online on ESR Connect

#### **Topics and Faculty:**

**Anatomic variations and benign uterine masses** R. Forstner, Salzburg/AT

Adnexal mass characterization on US and MRI G. Masselli, Rome/IT

**Endometriosis and adenomyosis** R. Forstner, Salzburg/AT

Acute presentation of gynaecological pathology G. Masselli, Rome/IT

**Staging of cervix cancer and endometrial cancer** R. Forstner, Salzburg/AT

Complications during pregnancy: placental, adnexal and non-adnexal G. Masselli, Rome/IT

**Number of participants: 322** 

## **Country Statistics**

Switzerland 31, Romania 26, United Kingdom 23, Spain 21, Greece 19, Netherlands 16, Belgium 15, Germany 14, Italy 11, Austria 10, Slovakia 10, Norway 7, Czech Republic 6, Finland 6, India 6, Sweden 6, Estonia 5, Latvia 5, Poland 5, Ukraine 5, Ireland 4, Serbia 4, Canada 3, Egypt 3, Hungary 3, Lithuania 3, Philippines 3, Portugal 3, Russian Federation 3, Saudi Arabia 3, Turkey 3, Chile 2, Croatia 2, Cyprus 2, Denmark 2, France 2, Hong Kong 2, Paraguay 2, Slovenia 2, South Africa 2, Trinidad and Tobago 2, Vietnam 2, Botswana 1, Brazil 1, El Salvador 1, Gibraltar 1, Indonesia 1, Israel 1, Jamaica 1, Kuwait 1, Malaysia 1, Montenegro 1, Oman 1, Pakistan 1, Rwanda 1, San Marino 1, Singapore 1, Thailand 1, United Arab Emirates 1, United States 1



# **FOUNDATION**Courses

# INTERVENTIONAL RADIOLOGY

September 1, 2021 Online on ESR Connect

### **Topics and Faculty:**

Non-invasive imaging of vascular disease R. Schernthaner, Vienna/AT

IR infrastructure and procedure planning M. de Bucourt, Berlin/DE

IR protection, complication management and emergencies

R. Schernthaner, Vienna/AT

Diagnostic angiographiy/venography M. de Bucourt, Berlin/DE

Vascular intervention I - arterial revascularisation procedures

R. Schernthaner, Vienna/AT

Vascular intervention II - arterial embolization procedures

M. de Bucourt, Berlin/DE

#### **Number of participants: 148**

### **Country Statistics**

France 11, Greece 10, Malaysia 10, India 9, Russian Federation 9, United Kingdom 6, Germany 5, Finland 5, Myanmar 5, Austria 4, Slovakia 4, Czech Republic 4, Norway 4, Denmark 4, Switzerland 3, Spain 3, Romania 3, Portugal 3, Slovenia 3, Italy 3, Saudi Arabia 3, Belgium 2, Poland 2, Netherlands 2, Brazil 2, Sweden 2, Latvia 2, Albania 2, Turkey 2, Cyprus 2, Hungary 2, Ukraine 1, Serbia 1, Estonia 1, Hong Kong 1, Pakistan 1, Egypt 1, Canada 1, Montenegro 1, Vietnam 1, South Africa 1, Bosnia and Herzegovina 1, Colombia 1, Georgia 1, Oman 1, Morocco 1, Singapore 1



# **FOUNDATION**

# Courses

# ABDOMINAL IMAGING

September 8, 2021 Online on ESR Connect

#### **Topics and Faculty:**

CT and MRI enterography G. Masselli, Rome/IT

MR imaging for rectal cancer staging
I. Santiago, Lisbon/PT

Imaging small bowel obstruction G. Masselli, Rome/IT MR imaging for rectal cancer restaging I. Santiago, Lisbon/PT

Imaging of small bowel tumours

G. Masselli, Rome/IT

Imaging of biliary disease
I. Santiago, Lisbon/PT

## Number of participants: 323

## **Country Statistics**

Romania 25, Switzerland 24, Spain 22, United Kingdom 19, Belgium 17, Greece 16, Germany 12, Netherlands 12, Austria 10, India 10, Italy 10, Finland 9, Latvia 8, Norway 7, Portugal 7, Slovakia 7, Russian Federation 6, Slovenia 6, Sweden 6, Ukraine 6, Ireland 5, Poland 5, Brazil 4, Czech Republic 4, Serbia 4, Croatia 3, Denmark 3, Estonia 3, France 3, Hong Kong 3, Lithuania 3, Malaysia 3, Philippines 3, Saudi Arabia 3, Vietnam 3, Albania 2, Canada 2, Cyprus 2, Egypt 2, Montenegro 2, South Africa 2, Thailand 2, United States 2, Armenia 1, Australia 1, Benin 1, Chile 1, Colombia 1, Costa Rica 1, Georgia 1, Hungary 1, Iceland 1, Kuwait 1, Monaco 1, Morocco 1, Oman 1, Rwanda 1, Singapore 1, Turkey 1





# FOUNDATION Courses

# MUSCULOSKELETAL RADIOLOGY

October 13, 2021 Online on ESR Connect

### **Topics and Faculty:**

MRI imaging of the knee A. Parkar, Bergen/NO

Imaging of juvenile idiopathic arthritis I. Sudoł-Szopińska, Warsaw/PL

Myotendinous junction/muscle anatomy and injury imaging
A. Parkar, Bergen/NO

Imaging of psoriatic arthritis

I. Sudoł-Szopińska, Warsaw/PL

CT and MRI shoulder imaging A. Parkar, Bergen/NO

Imaging of gout

I. Sudoł-Szopińska, Warsaw/PL

## **Number of participants: 279**

# **Country Statistics**

Romania 27, Switzerland 26, Spain 20,
United Kingdom 20, Austria 16, Belgium 13,
Germany 11, India 9, Slovakia 9, Greece 8,
Italy 7, Netherlands 7, Latvia 6, Poland 6,
Sweden 6, Ukraine 6, Philippines 5, Portugal 5,
France 4, Ireland 4, Norway 4, Serbia 4,
Denmark 3, Finland 3, Hong Kong 3, Slovenia 3,
Albania 2, Australia 2, Brazil 2, Bulgaria 2,
Croatia 2, Cyprus 2, Czech Republic 2, Egypt 2,
Lithuania 2, Russian Federation 2, Singapore 2,
Thailand 2, Turkey 2, United States 2, Vietnam 2,
Benin 1, Bosnia and Herzegovina 1, Canada 1,
Costa Rica 1, Kenya 1, Kuwait 1, Montenegro 1,
Oman 1, Pakistan 1, Peru 1, Qatar 1, Rwanda 1,
Saudi Arabia 1, South Africa 1





Greek: Γαληνός

Latin: Claudius Galenus of Pergamum

Arabic: Jalinos

Galen was an ancient Greek physician whose teaching was influential all the way up to the Renaissance. His views dominated European medicine for over a thousand years and Galen's work can be seen as building on the Hippocratic theories of the body.

The **online GALEN Courses** are structured into the GALEN foundation courses, which are focused on the early years of training and the regular GALEN courses which are aimed at the later years of training and young radiologists. Each programme consists of several lecture topics divided into theory and interactive cases delivered by internationally renowned European faculties, ensuring ESOR's signature course format of lectures and discussions. In 2021, one foundation and three regular courses were organized, reaching a total number of 444 live viewers.

# **GALEN FOUNDATION COURSE**

Galen Foundation courses are aimed at residents in their first, second, or third year of training in radiology. This year, one GALEN foundation course was held on the topic of Neuroradiology. It was watched by a total of 129 participants from 42 countries.

## **GALEN COURSES**

Four GALEN courses were held which were aimed at residents in their fourth or fifth year of training or their early years of practice. The four courses were dedicated to Cardiovascular Imaging, Emergency Radiology, Abdominal CT, and Interventional Radiology. They were attended by 315 doctors from over 129 countries.



# **GALEN FOUNDATION**

Course

# **NEURORADIOLOGY**

November 24, 2021 Online on ESR Connect

#### **Moderator:**

J. Van Goethem Antwerp/BE

#### **Topics and Faculty:**

Brain metastases: Screening, imaging and follow-up M. Smits, Rotterdam/NL

Glioblastoma: Minimal required advanced imaging at initial imaging and follow-up P. Sundgren, Lund/SE

Cranial nerves

K. Popovic, Ljubljana/SI

Degenerative disc disease including nomenclature and grading C. Calli, Izmir/TR Spinal stenosis including nomenclature and grading

L. Manfrè, Catania/IT

Autoimmune CNS diseases

M. Thurnher, Vienna/AT

CT in acute stroke

A. van der Lugt, Rotterdam/NL

Cerebral amyloid angiopathy

J. Van Goethem, Antwerp/BE

Hydrocephalus

A. Ramos, Madrid/ES

### Number of participants: 129

# **Country Statistics**

United Kingdom 13, Romania 12, Switzerland 10, Belgium 8, Austria 7, Poland 6, Italy 5, Spain 5, Netherlands 5, Germany 5, Slovakia 4, Portugal 4, Norway 3, Ireland 3, Greece 2, France 2, Saudi Arabia 2, Serbia 2, Singapore 2, South Africa 2, India 2, Israel 2, Albania 1, Argentina 1, Armenia 1, Benin 1, Brazil 1, Chile 1, Colombia 1, Croatia 1, Estonia 1, Finland 1, Hungary 1, Iceland 1, Latvia 1, Lithuania 2, Peru 1, Philippines 1, Russian Federation 1, Slovenia 1, Sudan 1, Ukraine 2, Uzbekistan 1



# CARDIOVASCULAR IMAGING

September 22, 2021 Online on ESR Connect

### **Moderator:**

C. Loewe Vienna/AT

#### **Topics and Faculty:**

Coronary arteries: from normal to pathological the unusual normal C. Loewe, Vienna/AT

Coronary arteries: from normal to pathological – the usual abnormal / pathology

R. Salgado, Antwerp/BE

Modern (minimal invasive treatment) - planning and follow up of minimal invasive valvular repair R. Salgado, Antwerp/BE

Modern (minimal invasive treatment) – planning and follow up of minimal invasive aortic repair A. Redhuil, Paris/FR The myocard – tissue characterisation from a technical point of view

M. Francone, Milan/IT

The myocard – the phenotypic approach to cardiomyopathies

A. Redhuil, Paris/FR

The myocard - imaging of acute myocardial injury

A. Kalifatidis, Thessaloniki/GR

The emergency – imaging of acute coronary syndrome

M. Francone, Milan/IT

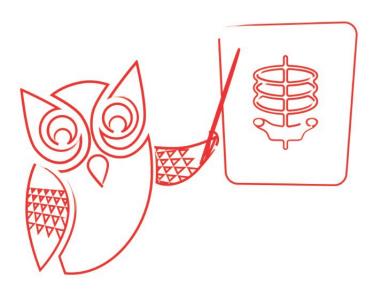
The emergency - acute aortic syndrome

C. Loewe, Vienna/AT



# **Country Statistics**

Australia 1, Austria 7, Belgium 2, Benin 1, Czech Republic 8, Denmark 1, Egypt 1, Germany 4, Greece 4, Hungary 1, Indonesia 1, Malaysia 1, Malta 1, Morocco 2, Netherlands 2, New Zealand 2, Norway 7, Philippines 1, Poland 21, Portugal 1, Romania 1, Russian Federation 1, Serbia 1, Singapore 1, Slovakia 3, Slovenia 1, South Africa 2, Spain 2, Sweden 1, Switzerland 3, United Kingdom 1, United States 1





# **EMERGENCY RADIOLOGY**

October 20, 2021 Online on ESR Connect

#### **Moderator:**

I. Millet Montpellier/FR

#### **Topics and Faculty:**

Spine injuries: when should we go to MRI? S. Choudhary, Birmingham/UK

Emergency radiology: don't forget to look at the heart with CT!

N. Planken, Amsterdam/NL

CT angiography and severe haemoptysis: protocol, role and signs for an accurate diagnosis Bargellini, Pisa/IT

Trauma and elderly: some specific fractures that must not be missed!

S. Choudhary, Birmingham/UK

How do I manage a non-traumatic hemoperitoneum in emergency?

R. Basilico, Chieti/IT

Gynaecological emergencies: when can CT give you the answer?

I. Millet, Montpellier/FR

CT role for assessing acute pancreatitis

J. Wessling, Münster/DE

Mesenteric ischemia: how can we improve our diagnostic performances?

T. Lehtimäki, Helsinki/FI

Small bowel obstruction, a standardised analysis using CT for a relevant report

I. Millet, Montpellier/FR

# Number of participants: 84

# **Country Statistics**

Greece 8, Poland 6, Belgium 6, Denmark 5, Austria 5, Slovakia 5, Germany 5, Spain 5, Switzerland 4, Italy 3, Netherlands 3, Ireland 2, Portugal 2, United Kingdom 2, Romania 2, Oman 2, Lithuania 2, Finland 2, Sweden 1, Iceland 1, South Africa 1, Cyprus 1, Luxembourg 1, Serbia 1, Norway 1, Ukraine 1, Egypt 1, Nigeria 1, Hungary 1, Brazil 1, France 1, Benin 1, Singapore 1



# ABDOMINAL CT FROM A TO Z

November 10, 2021 Online on ESR Connect

#### **Moderator:**

M. Zins Paris/FR

# **Topics and Faculty:**

Why we need Dual Energy CT and other innovations in abdominal exploration? D. Caruso, Rome/IT

Acute non traumatic abdomen M. Zins, Paris/FR

Abdominal trauma I. Millet, Montpellier/FR

Liver diseases R. Cannella, Palermo/IT Pancreatic and biliary diseases G. Zamboni, Verona/IT

CT of the small bowel S. Taylor, London/U

CTC: Colonic exploration T. Mang, Vienna/AT

Kidney diseases I.A. Dekkers, Leiden/NL

Post-operative abdomen I. Santiago, Lisbon/PT

# **Number of participants: 87**

## **Country Statistics**

Belgium 9, Romania 7, United Kingdom 7, Slovakia 5, Switzerland 5, Spain 4, Austria 4, Netherlands 3, Denmark 3, Portugal 3, Serbia 3, Poland 3, Armenia 2, Finland 2, Croatia 2, Norway 2, Ireland 2, Slovenia 2, France 2, Italy 2, Greece 2, Lithuania 2, Bulgaria 1, Hungary 1, Germany 1, Malaysia 1, Hong Kong 1, Nigeria 1, Ukraine 1, Moldova 1, Panama 1, Egypt 1, Oman 1



# INTERVENTIONAL RADIOLOGY

December 15, 2021 Online on ESR Connect

## **Moderator:**

C. Loewe Vienna/AT

#### **Topics and Faculty:**

Fundamentals: hemostaseology  $\slash$  rheology for interventionalists

M. Krokidis, Athens/GR

Fundamentals: well prepared for an intervention

P. Reimer, Karlsruhe/DE

Fundamentals: patient comfort during interventions

F. Wolf, Vienna/AT

Non-vascular basics: image guided biopsy /

drainage

C. Loewe, Vienna/AT

Non-vascular basics: image guided tumour ablation

M. Krokidis, Athens/GR

Vascular basics: the ABC of wires, catheters and

other materials for vascular treatment

M. de Bucourt, Berlin/DE

Vascular basics: vascular access and closure

C. Loewe, Vienna/AT

Basic procedures: treatment of peripheral arteries

P. Reimer, Karlsruhe/DE

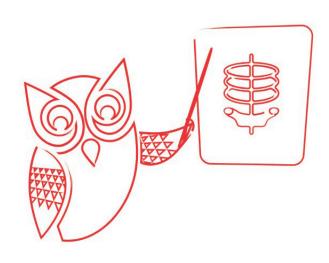
Basic procedures: basic principles of embolization

F. Wolf, Vienna/AT

# **Number of participants: 58**

#### **Country Statistics**

Poland 8, Greece 2, Philippines 1, Mexico 2, Finland 1, Switzerland 3, United Kingdom 3, Saudi Arabia 1, Belgium 2, Austria 2, Germany 3, Slovakia 2, Serbia 1, Colombia 2, Italy 2, North Macedonia 1, Australia 1, Guatemala 1, Norway 1, Netherlands 3, Bulgaria 1, Spain 2, Egypt 1, Panama 1, Sweden 2, Denmark 1, Malta 2, Slovenia 1, Iraq 1, Israel 1, Peru 1, South Africa 1, Tunisia 1







**Greek:** Åσκληπιός **Latin:** Aesculapius

Asklepios (or Asclepius) was the God of Medicine and reputed ancestor of the Asklepiades, the ancient Greek doctors' guild.

Asklepios represents the healing aspect of medical arts. He had four daughters: Aglaa/Agle, goddess of natural beauty and fitness, Hygieia, goddess of disease prevention, Panacea, goddess of healing (literally, "all-healing"), and laso, goddess of recuperation from illness.

Healing temples and "sancturies" called Asclepieia became increasingly popular around 300 BC where pilgrims flocked to Asclepieia to be healed. Asclepius' most famous sanctuary was in Epidaurus. Another famous "asclepieion" was on the island of Kos where Hippocrates, the legendary Father of Medicine, is said to have begun his career. Asklepios statues may be recognised by the presence of serpents.

# **ASKLEPIOS COURSES IN EUROPE**

This year's programme included four ASKLEPIOS courses, one on-site and three online, which were tailored to serve professional development by addressing recognised needs in the context of continuous radiologic education. The topics were very diverse aiming at general radiologists and private practitioners.

The only on-site course in 2021 was a course organised in Sochi, Russia, on the topic of Emergency Radiology. It was attended by 61 participants from 4 countries. Moreover, the long-term partnership with GE Healthcare continued with three online courses on Head and Neck MR, which attracted 82 live viewers from 32 countries, MR Imaging of the MSK with 153 participants from 56 countries and Oncologic Imaging delivered to 175 live viewers from 46 countries.



# **ASKLEPIOS**Courses

# HEAD AND NECK MR IMAGING

October 6, 2021 Online on ESR Connect

#### **Moderator:**

R. Maroldi Brescia/IT

### **Topics and Faculty:**

MR imaging of sensorineural hearing loss B. Verbist, Leiden/NL

**MR imaging of orbital masses in children** F. D'Arco, London/UK

MR imaging of sino-nasal masses: Key information for treatment planning R. Hermans, Leuven/BE

MR imaging of nasopharyngeal tumours: Key information for treatment planning D. Farina, Brescia/IT MR imaging of a parotid mass

R. Maroldi, Brescia/IT

MR imaging of carotid space masses: The essential information S. Robinson, Vienna/AT

MR imaging of oral cavity and oropharynx cancer: Key information for treatment planning A. Borges, Lisbon/PT

Are there indications for MR in lesions of larynx and hypopharynx?

M. Becker, Geneva/CH

Non-nodal mass of the infra-hyoid neck T. Beale, London/UK

# **Number of participants: 82**

#### **Country Statistics**

Romania 12, Slovakia 9, United Kingdom 7, Spain 5, Italy 5, Poland 4, Austria 4, Norway 3, Czech Republic 3, Switzerland 2, Sweden 2, New Zealand 2, Lithuania 2, France 2, Finland 2, Belgium 2, United Arab Emirates 1, Ukraine 1, Singapore 1, Serbia 1, Saudi Arabia 1, Russian Federation 1, Portugal 1, Pakistan 1, Oman 1, Netherlands 1, Israel 1, Ireland 1, Hungary 1, Greece 1, Costa Rica 1, Benin 1



# **ASKLEPIOS**

# Courses

# **EMERGENCY RADIOLOGY**

October 14-15, 2021 Sochi/Russia

## Host organiser:

V. Sinitsyn Moscow/RU

## **Topics and Faculty:**

October 14, 2021

CT protocols for polytrauma patients

A.Palkó, Szeged/HU

Advanced CT of acute stroke

Y. Berthezène, Lyon/FR

Cardiac and coronary CT and MRI in acute coronary syndrome

C. Loewe, Vienna/AT

Workshops

(A. Palkó, Y. Berthezène, C. Loewe)

Hypersensitivity and anaphylactic reactions to contrast agents: fundamentals and treatment

O. Clément, Paris/FR

Imaging of acute spinal trauma

G. Bierry, Strasbourg/FR

Sport injury: joints and muscles

A. Uchevatkin, Moscow/RU

Workshops

(O. Clément, G. Bierry, A. Uchevatkin)

**Number of participants: 61** 

**Country Statistics** 

Russia 57, Kazakhstan 2, Armenia 1, Tajikistan 1

## October 15, 2021

Acute pelvic pain in women

D. Akata, Ankara/TR

Bowel obstruction: role of CT

C. Stoupis, Maennedorf/CH

Acute vascular abdominal emergencies

V. Sinitsyn, Moscow/RU

Workshops

(D. Akata, C. Stoupis, V. Sinitsyn)





# **ASKLEPIOS**Courses

# **ONCOLOGIC IMAGING**

November 3, 2021 Online on ESR Connect

#### Moderator:

V. Goh London/UK

## **Topics and Faculty:**

Brain tumours: Essentials for practice M. Smits, Rotterdam/NL

Head and neck cancer: What the clinicians want

to know M. Becker, Geneva/CH

Lung cancer screening: Pearls and pitfalls

H.-U. Kauczor, Heidelberg/DE

Imaging uterine tumours: Pearls and pitfalls

R. Forstner, Salzburg/AT

O-RADS MRI: How to apply this?

A. Rockall, London/UK

Imaging nodes in cancer: Introducing node-RADS

F. Elsholtz, Berlin/DE

Renal lesions: Benign or malignant?

D. Prezzi, London/UK

Prostate cancer: An update on PSMA imaging

G. Cook, London/UK

Whole body MRI for oncologic imaging

V. Goh, London/UK

Number of participants: 89

## **Country Statistics**

Poland 28, United Kingdom 7, Romania 6, Moldova 6, Denmark 4, Spain 3, Germany 3, Belgium 2, Lithuania 2, Switzerland 2, South Africa 2, Austria 2, Italy 2, Latvia 2, Israel 2, Greece 2, Cyprus 1, Slovakia 1, Turkey 1, Colombia 1, Serbia 1, Canada 1, Finland 1, Egypt 1, Panama 1, Vietnam 1, Oman 1, Philippines 1, Netherlands 1, Ukraine 1



# **ASKLEPIOS** Courses

# MR IMAGING OF THE MSK

December 1, 2021 Online on ESR Connect

#### **Topics and Faculty:**

Bone tumors

K. Verstraete, Ghent/BE

Soft tissue tumors

F. Vanhoenacker, Antwerp/BE

Bone marrow lesions

K. Vilanova, Girona/ES

Spinal degenerative disease

V. Cassar-Pullicino, Oswestry/UK

Spinal infection

P. Tyrrell, Oswestry/UK

Spinal inflammation

L. Jans, Ghent/BE

MR imaging sequences in MSK - beyond T1 and T2

C. Glaser, Munich/DE

Shoulder instability

E. McNally, Oxford/UK

MRI in evaluation of ankle pain

N. Mamisch-Saupe, Zurich/CH

## Number of participants: 153

### **Country Statistics**

Poland 24, Austria 17, Netherlands 9, Romania 9, Switzerland 8, Spain 8, Belgium 8, Italy 6, Greece 5, Germany 5, United Kingdom 4, Norway 4, Lithuania 4, Bulgaria 3, Slovakia 2, Peru 2, Philippines 2, Egypt 2, Republic of Korea 2, Russian Federation 2, Portugal 2, Singapore 2, Denmark 1, Armenia 1, Algeria 1, United States 1, Hungary 1, Luxembourg 1, Ireland 1, Canada 1, Serbia 1, Brazil 1, Nigeria 1, Ukraine 1, Malaysia 1, Slovenia 1, Indonesia 1, Estonia 1, Vietnam 1, Finland 1, South Africa 1, Uruguay 1, Oman 1, Benin 1, Moldova 1







## **AIMS SEMINARS**

The Advanced Imaging Multimodality Seminars (AIMS) have been set up by ESOR to create educational links and exchange between the European Society of Radiology and national radiological societies outside of Europe. The AIMS programmes are aimed at board-certified radiologists. In 2021, ESOR held two AIMS sessions, the first was materialised in partnership with the Korean Society of Radiology (KSR) on the topic of Updates on Breast Cancer Screening Clinical Trials and had 84 participants. The second was held on the topic of Ultrasound in partnership with Mexican Federation of Radiology (FMRI) and the Mexican Society of Radiology (SMRI) and had 724 participants. The seminars were made possible through an unrestricted educational grant from Bracco. Both AIMS sessions were held online this year.

# INTERNATIONAL ASKLEPIOS COURSES

ESOR also organized two online Asklepios courses this year in partnership with international radiological societies. The first was on the topic of Oncology of the Abdomen and Pelvis which was organized in partnership with the Philippine College of Radiology (PCR) and the Royal College of Radiologists of Thailand (RCTRT) and had 671 participants while the second international course was on the topic of Oncologic Imaging and held in partnership with the Chinese Society of Radiology and had 111 participants.



# **ADVANCED SEMINAR**

Mexico 2021

# **ULTRASOUND**

April 14, 2021 Online on ESR Connect

#### **Moderator:**

L. Marti-Bonmati Valencia/ES

#### **Topics and Faculty:**

Recent advances in ultrasound: elastography, contrast, fusion J.-M. Correas, Paris/FR

Liver US: indications and role of quantification O. Lucidarme, Paris/FR

Thyroid US: indications and role of TI-RADS E. Sardá Inman, Zapopan/MX **GU ultrasound: prostate and testis** D.-A. Clevert, Munich/DE

**Echography of rotator cuff footprints**J.J. Mendoza Ruiz, Mexico City/MX

**US in paediatrics**P. Sidhu, London/UK

# Number of participants: 724

# **Country Statistics**

Mexico 610, Colombia 20, Costa Rica 20, Brazil 17, Spain 7, Belgium 5, Italy 5, Peru 4, Austria 3, Bolivia 2, Chile 2, Estonia 2, Greece 2, Guatemala 2, Portugal 2, Switzerland 2, United States 2, Uruguay 2, Argentina 1, Belize 1, Croatia 1, Czechia 1, Denmark 1, Ecuador 1, Honduras 1, India 1, Ireland 1, Latvia 1, Norway 1, Saudi Arabia 1, Serbia 1, Slovenia 1, United Kingdom 1



# **ESOR AIMS**

# Korea 2021

# **UPDATES ON BREAST CANCER SCREENING CLINICAL TRIALS**

July 3, 2021 Online

## **Topics and Faculty:**

**Breast ultrasound 2021** B. Brkljačić, Zagreb/HR

Breast cancer screening guideline and current practice in Korea

J. Chung, Seoul/KR

Al-based CAD application in mammography screening

J. Hyun Yoon, Seoul/KR

Update on breast cancer screening trials

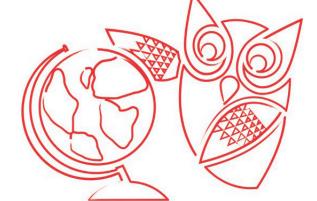
E. Fallenberg, Munich/DE

Multimodality screening in women with personal history of breast cancer

S. Min Ha, Seoul/KR

MR screening in women at higher risk than average

I. Thomassin-Naggara, Paris/FR



**Number of participants: 84** 

**Country Statistics** 

Republic of Korea 75, Austria 4, Bahrain 1, Belgium 1, Germany, 1, India 1, Mexico 1



# **ASKLEPIOS**Course 2021

# ONCOLOGY OF THE ABDOMEN AND PELVIS

Organized in partnership with the Philippine College of Radiology (PCR) and the Royal College of Radiologists of Thailand (RCTRT)

July 7, 2021 Online on ESR Connect

## **Topics and Faculty:**

Liver metastases

V. Vilgrain, Clichy/FR

Pancreatic adenocarcinoma

C. Valls, Stockholm/SE

Rectal cancer

A. Laghi, Rome/IT

Prostate cancer

R. Renard Penna, Paris/FR

Renal cancer

R. Fragante, Manila/PH

Ovarian carcinoma

K. Sasiwimonphan, Bangkok/TH

Number of participants: 671

## **Country Statistics**

Philippines 339, Thailand 174, Vietnam 34, Taiwan 29, China 23, India 19, Indonesia 16, Australia 7, Austria 3, United Kingdom 3, Brunei Darussalam 2, Poland 2, Singapore 2, Benin 1, Bulgaria 1, Cambodia 1, Denmark 1, Egypt 1, Germany 1, Hong Kong 1, Hungary 1, Israel 1, Italy 1, Malaysia 1, Nepal 1, Oman 1, Pakistan 1, Portugal 1, Slovakia 1, Spain 1, Ukraine 1



# **ASKLEPIOS INTERNATIONAL**

# Course 2021

# ONCOLOGIC IMAGING

Organized in partnership with the Chinese Society of Radiology

September 15, 2021 Online on ESR Connect

### **Topics and Faculty:**

Diagnosis of liver metastases

V. Vilgrain, Clichy/FR

Rectal cancer

R. Beets-Tan, Amsterdam/NL

Differential diagnosis of ovarian diseases

H. Zhang, Changchun/CN

Lymphoma in the abdomen: spectrum of imaging

findings

S. Ju, Nanjing/CN

Prostate cancer

J. Futterer, Nijmegen/NL

Malignant disease of the uterus and ovaries

H. Xue, Beijing/CN

Lymphoma in the neurological system: spectrum

of imaging findings

H. Nan, Beijing/CN

**Tumour response** 

V.Goh, London/UK

# Number of participants: 111

## **Country Statistics**

China 34, Vietnam 24, Thailand 7, Austria 5, Hong Kong 5, United Kingdom 4, Germany 3, Slovakia 2, Latvia 2, Switzerland 2, Brazil 2, Philippines 2, Taiwan 1, Brunei Darussalam 1, Pakistan 1, Serbia 1, Israel 1, Denmark 1, Finland 1, Norway 1, India 1, Estonia 1, Italy 1, Australia 1, Armenia 1, France 1, Kenya 1, Russian Federation 1, Benin 1, Singapore 1, Chile 1





# **ESOR TRAINING PROGRAMMES**

The year 2021 was strongly characterized by the Covid-19 pandemic which unfortunately did not allow the implementation of the ESOR Visiting Scholarship Programme Europe nor the ESOR Exchange Programmes for Fellowships. Despite the ongoing difficult situation, several ESOR Scholars and Bracco Fellows who were awarded a grant in 2020 but had to postpone the start of their training period due to the outbreak of the Coronavirus, finally managed to complete their training in the course of 2021. ESOR was very pleased to offer the three below mentioned training programmes in 2021:



# ALEXANDER R. MARGULIS FELLOWSHIP ON MR IMAGING

On the occasion of the 100<sup>th</sup> birthday of Prof. Alexander R. Margulis, a world-renowned radiologist and MRI expert, the European Society of Radiology (ESR) launched a new fellowship aimed at young radiologists from Eastern and South-Eastern Europe who recently completed their board certification or are about to complete their residency soon. Dedicated to the ground-breaking clinical and scientific achievements of Prof. Alexander R. Margulis, this fellowship provides applicants with a twelve-month training in clinical MRI as well as in planning, performing and publishing MRI research projects at the Department of Biomedical Imaging and Image-Guided Therapy at the Medical University of Vienna under the chairmanship of Prof. Christian J. Herold. One grant was awarded in 2021.

# NICHOLAS GOURTSOYIANNIS TEACHING FELLOWSHIP

The Nicholas Gourtsoyiannis Teaching Fellowship, established by the European Radiology Private Foundation, is aimed at radiologists with clinical and academic experience, who wish to enhance their teaching and training skills, by delivering lectures and undertaking interactive workshops in a foreign environment. The fellowship consists of two visits, at two different radiology departments and/or universities chosen by the fellow. At each site, the fellow is asked to deliver two lectures/workshops. The fellow must prepare different lectures/workshops for each of the hosting centres. One grant was awarded in 2021.

# **ONE-YEAR FELLOWSHIPS**

In 2021, ten One-Year Fellowships were made available in cooperation with several renowned training centers throughout Europe. Within the framework of this programme, qualified radiologists are given a unique opportunity to enter competitive, thematic, structured and certified proper fellowships at major European reference centres, which are funding the programme. During 12 months of training the fellows are incorporated in the specific departments to work on a dedicated, detailed programme supervised by specialised academic tutors.

A special word of thanks goes to the highly esteemed academic training centres and tutors, who enabled more than 4,270 trainees to apply for these programmes over the last fifteen years.



# CITIES/COUNTRIES VISITED 2006-2020 EUROPE

- 1 Budapest/Hungary
- 2 Krakow/Poland
- 3 Heraklion/Greece
- 4 Dubrovnik/Croatia
- 5 Prague/Czech Republic
- 6 Alexandroupolis/Greece
- 7 Rome/Italy
- 8 Lublin/Poland
- 9 Berlin/Germany
- 10 Stockholm/Sweden
- 11 Bucharest/Romania
- 12 Amsterdam/The Netherlands
- 13 Sofia/Bulgaria
- 14 Sarajevo/Bosnia and Herzegovina
- 15 Ankara/Turkey
- 16 Latina/Italy
- 17 Belgrade/Serbia
- 18 London/United Kingdom
- 19 Sochi/Russia
- 20 Rotterdam/The Netherlands

- 21 Athens/Greece
- 22 Novi Sad/Serbia
- 23 Bratislava/Slovakia
- 24 Paris/France
- 25 Tallinn/Estonia
- 26 Sibiu/Romania
- 27 Milan/Italy
- 28 Lisbon/Portugal
- 29 Pisa/Italy
- 30 Saint Petersburg/Russia
- 31 Warsaw/Poland
- 32 Madrid/Spain
- 33 Umeå/Sweden
- 34 Barcelona/Spain
- 35 Brussels/Belgium
- 36 lasi/Romania
- 37 Vilnius/Lithuania
- 38 Padua/Italy
- 39 Kaliningrad/Russia
- 40 Lille/France

- 41 Munich/Germany
- 42 Vienna/Austria
- 43 Geneva/Switzerland
- 44 Riga/Latvia
- 45 Turin/Italy
- 46 Odessa/Ukraine
- 47 Cluj-Napoca/Romania
- 48 Porto/Portugal
- 49 Izmir/Turkey
- 50 Helsinki/Finland
- 51 Rostov-on-don/Russia
- 52 Salzburg/Austria
- 53 Palermo/Italy
- 54 Wroclaw/Poland
- 55 Moscow/Russia
- 56 Maastricht/The Netherlands
- 57 Zagreb/Croatia
- 58 Kayseri/Turkey
- 59 Graz/Austria
- 60 Plovdiv/Bulgaria

- 61 Dublin/Ireland
- 62 Suzdal/Russia
- 63 Kazan/Russia
- 64 Thessaloniki/Greece
- 65 Valencia/Spain
- 66 Kiev/Ukraine
- 67 Serock/Poland
- 68 Ekaterinburg/Russia
- 69 Yerevan/Armenia
- 70 Split/Croatia
- 71 Zurich/Switzerland
- 72 Heidelberg/Germany
- 73 Minsk/Belarus
- 79 Pilitisky Delai us
- 74 Kuşadası/Turkey
- 75 Ghent/Belgium
- 76 Tbilisi/Georgia
- 77 Malmö/Sweden
- 78 Tübingen/Germany
- 79 Varna/Bulgaria







# **EDUCATION IN PARTNERSHIP**

Although not all programmes could be realised due to the COVID-19 pandemic, we thank our partner societies, national societies, institutions, ESR subspecialty societies and industry partners for their continuous support and collaboration.



















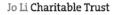




















































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# ENTOY EDUCATION

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