



# ANNUAL REPORT 2018





## Education in partnership





































































Radboudumc















Thank you!



## **REVIEW 2018**

Dear Colleagues,

On behalf of ESOR, I would like to report on yet another productive and creative year during which ESOR continued to play a leading role in providing complementary radiological education of high standards, both in Europe and worldwide.



During 2018, ESOR has expanded its range of activities by adding new course series and training programmes to its portfolio, to accommodate the ever-evolving needs for radiological education. New to this year's programme was the first ever ESOR activity in south-east Asia with an ASKLEPIOS course in Bangkok/Thailand, two re-introduced courses in China and two new fellowship programmes: the "Bracco Fellowships", which offers 90 grants to residents and young board-certified radiologists over a period of three years (2018-2020) and the Nicholas Gourtsoyiannis Fellowship, which is aimed at radiologists who wish to enhance their teaching skills. Altogether this was the most comprehensive ESOR programme offered, with 36 courses and 116 scholarship and fellowship programmes.

Outcomes once more emphasise the importance of establishing a long-term commitment for education in partnership and the value of delivering structured modular and mentored opportunities to learn from exchange, in moving forward with an informed body of luminaries, the ESOR community.

2018 marked also the celebration of twelve challenging years of ESOR in action, during which ESOR contributed significantly to raising the scientific profile of radiological education, while promoting the importance of subspecialisation as well as the introduction of fellowships in radiology in Europe.

ESOR is indebted and would like to express its profound appreciation and thanks to all its devoted friends, believers in lifelong learning in radiology with whom ESOR has worked together in vision and in practice throughout these years: industry, host organisers, lecturers and teachers, heads of departments, mentors and tutors, reference training centres, subspecialty and national societies. Their contribution and support is the backbone of ESOR's success and in fact the most valuable evidence that justifies our existence.

In this report all activities, established and continued or newly introduced during 2018 are presented. You are provided with a snapshot of the educational programmes attended by more than 2,200 residents, fellows and board-certified radiologists along with a brief description of experiences gained from their participation and interaction.



Professor Valérie Vilgrain
ESOR Scientific/Educational Director

## **ESOR STEERING COMMITTEE**

March 2018 - March 2019

Scientific/Educational Director

Valérie Vilgrain, Clichy/FR

**Steering Committee Members** 

Boris Brkljačić, Zagreb/HR

Vicky Goh, London/UK

Hans-Ulrich Kauczor, Heidelberg/DE

Christian Loewe, Vienna/AT

Luis Marti-Bonmati, Valencia/ES

**Ex-Officio Members** 

Michael Fuchsjäger, Graz/AT

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

Nikoleta Traykova, Plovdiv/BG

Chairperson of the Communication and External Affairs Committee

Carlo Catalano, Rome/IT

Chairperson of the Education Committee

Atis Svare, Jelgava/LV

Representative of RTF

Peter Baierl, Vienna/AT

Executive Director ESR

Brigitte Lindlbauer, Vienna/AT

Administrative Director ESOR

## **Programme Planning Committee Members**

Maria Argyropoulou, Ioannina/GR

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

Majda Thurnher, Vienna/AT

ESNR European Course of Neuroradiology

Siegfried Trattnig, Vienna/AT

ESMRMB School of MRI

Koenraad Verstraete, Ghent/BE





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 GALEN courses are scheduled to rotate among representative venues throughout Europe. In terms of content and aim they are structured into foundation courses, focusing on the early years of training and advanced courses, directed at the later years of training and young radiologists. Each programme is structured along the lines of lecture series and interactive case discussions (workshops), assigned to internationally renowned European faculties. In 2018, one foundation and three advanced courses were organised, covering topics across the modalities reaching a total number of 262 participants.

## **GALEN FOUNDATION COURSE**

One GALEN Foundation Course aimed at residents in their first, second or third year of training in radiology took place in partnership with Bracco and was dedicated to neuro-radiology. It was attended by a total of 76 residents from 32 countries.

## **GALEN ADVANCED COURSES**

The three GALEN Advanced Courses were aimed at residents in their fourth or fifth year of training and/or general radiologists in their early years of practice and took place in partnership with Bracco. The courses were dedicated to topics in cross-sectional imaging (imaging in vascular diseases, oncologic imaging of the abdomen, musculoskeletal radiology) and were attended by 186 doctors from 37 countries.



## **GALEN FOUNDATION**

Course

## LEVEL I+II

## **NEURORADIOLOGY**

April 26-28, 2018 Paris/France

## **Host Organisers:**

J.-F. Meder, Paris/FR C. Oppenheim, Paris/FR

## **Topics and Faculty:**

MRI in aneurisms, arteriovenous malformations and fistula

M. Edjlali, Paris/FR

Imaging of dementia

D. Dormont, Paris/FR

Brain cysts imaging

A. Krainik, Grenoble/FR

Cross-sectional anatomy of the brain revisited

T. Yousry, London/UK

Pattern recognition in neuroradiology

L. van den Hauwe, Antwerp/BE

Congenital anomaly of the brain

M. Argyropoulou, Ioannina/GR

Neuroimaging in patients with traumatic brain

injury: a practical guide

P.M. Parizel, Antwerp/BE

Brain tumours: what is each technique telling us

about the tumour

M. Thurnher, Vienna/AT

CNS infections: from image to pathogen

C. Calli, Izmir/TR

Stroke: diagnosis and therapy

P. Vilela, Lisbon/PT

Imaging in epilepsy

P. Sundgren, Lund/SE

White matter diseases

F. Bonneville, Toulouse/FR

Number of participants: 76

Country statistics: Afghanistan 1, Austria 1, Belgium 9, Croatia 1, Denmark 2, Estonia 1, France 3, Georgia 1, Germany 2, Greece 2, Hong Kong 1, Ireland 1, Israel 1, Italy 9, Japan 1, Luxembourg 1, Norway 2, Poland 1, Portugal 3, Romania 3, Russian Federation 1, Slovakia 2, Slovenia 1, South Africa 1, Spain 3, Switzerland 3, The Netherlands 1, Turkey 10, Ukraine 1, United Arab Emirates 1, United Kingdom 5, United States of America 1



## **GALEN ADVANCED**

## Courses

## LEVEL II+III

## **IMAGING IN VASCULAR DISEASES**

May 17-18, 2018 Lublin/Poland

## **Host Organisers:**

M. Szczerbo-Trojanowska, Lublin/PL T. Jargiello, Lublin/PL

### **Topics and Faculty:**

CTA and MRA in vascular diseases: when to do what C. Loewe, Vienna/AT

Imaging of acute aortic syndrome

T. Jargiello, Lublin/PL

Imaging of atherosclerosis and identification of patients at risk (plaque imaging, whole body angiography)

V. Sinitsyn, Moscow/RU

Imaging peripheral arterial occlusive disease (CT, MR)

C. Loewe, Vienna/AT

Imaging of carotid artery disease - balance between science and practice (CT, MR)

C. Catalano, Rome/IT

Imaging of vascular trauma (CT, MR)

M. Scaglione, Castel Volturno/IT

Vascular abdominal emergencies

A. Palkó, Szeged/HU

Pulmonary vascular diseases

I. Tyurin, Moscow/RU

Imaging of venous diseases: an update

M. Krokidis, Cambridge/UK

Number of participants: 35

Country statistics: Greece 1, Poland 31, Romania 1, Serbia 1, The Netherlands 1



## **GALEN ADVANCED**

Courses

## LEVEL II+III

## ONCOLOGIC IMAGING OF THE ABDOMEN

September 13-14, 2018 Athens/Greece

### **Host Organisers:**

C. Triantopoulou, Athens/GR S. Gourtsoyianni, Athens/GR

## **Topics and Faculty:**

MR technical advances in oncologic imaging of the abdomen

N. Papanikolaou, Lisbon/PT

New Western guidelines for hepatocellular carcinoma

V. Vilgrain, Clichy/FR

Assessing colorectal liver metastasis burden

L. Marti-Bonmati, Valencia/ES

Cystic tumours of the pancreas: depiction, characterisation and clinical role of imaging

N. Kartalis, Stockholm/SE

CT/MRI of renal tumours: detection, characterisation and staging

R. Pozzi Mucelli, Verona/IT

Multiparametric MRI in diagnosis and staging of prostate cancer

D. Regge, Candiolo/IT

GIST's: diagnosis, staging and assessment of treatment response

A. Laghi, Rome/IT

Imaging assessment of rectal cancer complete

response

R. Beets-Tan, Amsterdam/NL

MRI/PET in abdominal oncology

V. Goh, London/UK

## **Number of participants: 74**

Country statistics: Australia 1, Austria 2, Canada 1, Chile 1, Croatia 2, Cyprus 1, Czech Republic 1, Denmark 1, Estonia 3, France 3, Germany 1, Greece 25, Hungary 2, Israel 1, Latvia 1, Lithuania 3, Norway 3, Pakistan 2, Poland 2, Romania 7, Slovenia 1, Sweden 1, Switzerland 1, Thailand 2, The Netherlands 1, Ukraine 2, United Kingdom 3



## **GALEN ADVANCED**

## Courses

## LEVEL II+III

## MUSCULOSKELETAL RADIOLOGY

October 18-19, 2018 Ghent/Belgium

## **Host Organiser:**

K. Verstraete Ghent/BE

### **Topics and Faculty:**

New CT tools in MSK imaging

A. Blum, Nancy/FR

Imaging of the wrist injuries: tips and tricks

M. Maas, Amsterdam/NL

Imaging of the upper limb nerves

C. Martinoli, Genoa/IT

MR imaging of soft tissue tumours

A. Saifuddin, Stanmore/UK

MR imaging of shoulder instability

R. Sutter, Zurich/CH

What you should know about congenital bone disease

F.M. Vanhoenacker, Antwerp/BE

Hip osteoarthritis in young adults: imaging investigation

A. Karantanas, Heraklion/GR

Rheumatoid arthritis: what do MRI and US show

J. Teh, Oxford/UK

Multimodality imaging of bone marrow

K. Verstraete, Ghent/BE

## **Number of participants: 77**

Country statistics: Austria 1, Belgium 27, Czech Republic 1, Denmark 1, Finland 1, France 2, Germany 4, Iceland 1, India 1, Italy 1, Latvia 1, Lithuania 3, Luxembourg 1, Norway 3, Poland 4, Portugal 4, Romania 4, Slovenia 2, Switzerland 2, The Netherlands 8, Turkey 2, United Kingdom 2, Uzbekistan 1





In 2018, ESOR has continued to organise foundation courses to prepare/assist those entering examinations for the European Diploma in Radiology. A series of courses were organised at the ESR Learning Centre in Vienna/Austria in November. The format included nine courses, each one dealing with a specific organ/system-oriented theme, targeting 25 participants per module. The learning objectives for each of the topics were strictly adhered to the European Training Curriculum.

Nine such courses were offered this year, covering abdominal, breast, cardiac, chest, head and neck, hybrid, musculoskeletal, neuro and paediatric radiology. In total 59 participants from 23 countries attended the ESOR Courses for EDIR, some of them taking part in all nine courses.



LEVEL II

## **NEURORADIOLOGY**

November 5, 2018 Vienna/Austria

## **Topics and Faculty:**

Anatomy and congenital malformations of the brainstem and cerebellum
C. Calli, Izmir/TR

## Malformations of cortical development

A. Krainik, Grenoble/FR

## Subarachnoid haemorrhage

C. Calli, Izmir/TR

## Dementia

A. Krainik, Grenoble/FR

## Meningioma and mimics

C. Calli, Izmir/TR

## Extrapyramidal syndromes

A. Krainik, Grenoble/FR

Number of participants: 23

Country statistics: Austria 5, Bulgaria 2, Finland 1, Hungary 1, Kuwait 1, Macedonia 1, Poland 6, Slovenia 1, Spain 2, Sweden 1, Switzerland 1, The Netherlands 1



## LEVEL II

## **HEAD AND NECK RADIOLOGY**

November 6, 2018 Vienna/Austria

## **Topics and Faculty:**

Acute and chronic rhinosinusitis

R. Maroldi, Brescia/IT

Congenital disorders of the temporal bone and deafness

B. Verbist, Leiden/NL

Oral cavity neoplasms

R. Maroldi, Brescia/IT

Tumours of the temporal bone

B. Verbist, Leiden/NL

Lymph nodes of the head and neck

R. Maroldi, Brescia/IT

How to approach skull base neoplasms

B. Verbist, Leiden/NL

Number of participants: 26

Country statistics: Austria 4, Bulgaria 2, Finland 1, Germany 2, Hungary 2, Kuwait 1, Poland 6, Slovenia 1, Spain 3, Sweden 1, Switzerland 2, The Netherlands 1



## LEVEL II

## **HYBRID IMAGING**

November 7, 2018 Vienna/Austria

## **Topics and Faculty:**

Introduction and head and neck

K. Riklund, Umeå/SE

**Breast cancer** 

L. Umutlu, Essen/DE

Lung cancer

K. Riklund, Umeå/SE

Neuroradiology (oncologic and non-oncologic)

K. Riklund, Umeå/SE; L. Umutlu, Essen/DE

Lymphoma

K. Riklund, Umeå/SE

Malignancies of the pelvis

L. Umutlu, Essen/DE

Number of participants: 19

Country statistics: Austria 3, Bulgaria 3, Germany 1, Hungary 1, Italy 1, Kuwait 1, Poland 6, Slovenia 1, Sweden 1, The Netherlands 1



## LEVEL II

## **CARDIAC IMAGING**

November 8, 2018 Vienna/Austria

## **Topics and Faculty:**

Cardiac CT technique: basics and practical tips C. Loewe, Vienna/AT

Congenital heart diseases: a primer for radiologists

A. Redheuil, Paris/FR

Acute coronary syndrome

C. Loewe, Vienna/AT

MR in coronary artery disease

A. Redheuil, Paris/FR

Cardiac tumours and tumour mimics

C. Loewe, Vienna/AT

MR of aortic diseases

A. Redheuil, Paris/FR



## LEVEL II

## PAEDIATRIC RADIOLOGY

November 9, 2018 Vienna/Austria

## **Topics and Faculty:**

Imaging of hypoxia-ischemia of the brain in neonates

M. Argyropoulou, Ioannina/GR

Imaging of abdominal emergencies

M. Alison, Paris/FR

Imaging of spinal cord tumours in children

M. Argyropoulou, Ioannina/GR

Imaging of the knee

M. Alison, Paris/FR

Imaging of juvenile idiopathic arthritis

M. Argyropoulou, Ioannina/GR

Imaging of soft tissue lesions

M. Alison, Paris/FR

Country statistics: Austria 2, Bulgaria 2, Finland 1, Germany 1, Hungary 1, Jordan 1, Kuwait 1, Poland 6, Sweden 1, The Netherlands 1



## LEVEL II

## **BREAST IMAGING**

November 10, 2018 Vienna/Austria

### **Topics and Faculty:**

Risk factors for breast cancer and risk adapted screening

S. Vinnicombe, Gloucester/UK

Novel mammographic techniques (DBT, CESM)

T. Helbich, Vienna/AT

Abbreviated MRI

S. Vinnicombe, Gloucester/UK

Imaging during neoadjuvant chemotherapy (NAC)

T. Helbich, Vienna/AT

Practical aspects of indeterminate (B3) lesions

S. Vinnicombe, Gloucester/UK

Image guided interventions

T. Helbich, Vienna/AT

Number of participants: 18

Country statistics: Austria 2, Bulgaria 1,

Czech Republic 2, Finland 1, Germany 1, Hungary 2, Kuwait 1, Poland 4, Sweden 1, The Netherlands 2,

United Kingdom 1



LEVEL II

## **CHEST IMAGING**

November 12, 2018 Vienna/Austria

## **Topics and Faculty:**

**Solitary and multiple pulmonary nodules** J. Vlahos, London/UK

Lung cancer on the chest X-ray - a survival guide N. Howarth, Chêne-Bougeries/CH

HRCT: micronodular lung disease J. Vlahos, London/UK

Imaging of pulmonary infection N. Howarth, Chêne-Bougeries/CH

**Pulmonary vascular disease** J. Vlahos, London/UK

HRCT: patterns of interstitial lung disease N. Howarth, Chêne-Bougeries/CH

Number of participants: 26

Country statistics: Austria 5, Belgium 1, Bulgaria 4, Denmark 1, Finland 1, Germany 2, Hungary 1, Jordan 1, Kuwait 1, Norway 1, Poland 3, Serbia 1, Sweden 2, Switzerland 1, The Netherlands 1



## LEVEL II

## MUSCULOSKELETAL RADIOLOGY

November 13, 2018 Vienna/Austria

### **Topics and Faculty:**

MSK variants and pitfalls

F.M. Vanhoenacker, Antwerp/BE

Knee injuries: central pivot

A. Karantanas, Heraklion/GR

Imaging of the shoulder joint

F.M. Vanhoenacker, Antwerp/BE

Early osteoarthritis of the hip and knee:

role of radiologist

A. Karantanas, Heraklion/GR

Imaging of the ankle joint

F.M. Vanhoenacker, Antwerp/BE

Rheumatoid arthritis and differentials:

back to basics

A. Karantanas, Heraklion/GR

Number of participants: 26

Country statistics: Austria 5, Bulgaria 3, Denmark 1, Germany 3, Hungary 1, Jordan 1, Kuwait 1, Latvia 1, Norway 1, Poland 3, Slovenia 2, Sweden 2, Switzerland 1, The Netherlands 1



## LEVEL II

## **ABDOMINAL IMAGING**

November 14, 2018 Vienna/Austria

## **Topics and Faculty:**

How to perform a liver MRI

G. Brancatelli, Palermo/IT

Focal lesions in the non-cirrhotic liver

M. Ronot, Clichy/FR

Focal lesions in the cirrhotic liver

G. Brancatelli, Palermo/IT

Pancreatic cystic masses

M. Ronot, Clichy/FR

Pancreatic solid masses

G. Brancatelli, Palermo/IT

Imaging of mesenteric ischemia

M. Ronot, Clichy/FR

**Number of participants: 25** 

Country statistics: Austria 4, Belgium 1, Bulgaria 2, Denmark 1, Finland 1, Germany 2, Hungary 1, Iraq 1, Jordan 1, Kuwait 1, Norway 1, Poland 3, Slovenia 2, Sweden 2, Switzerland 1, The Netherlands 1





Greek: Άσκληπιός 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 eight ASKLEPIOS courses in Europe and Russia, which were tailored to serve professional development by addressing recognised needs in the context of continuous radiologic education. The topics were very diverse, aiming, in particular, at general radiologists and private practitioners.

The long-term partnership with Affidea continued with one ASKLEPIOS Course on Women's Imaging which was held in Bucharest/Romania and was attended by 83 participants from 16 countries.

Additionally, ESOR continued the partnership with Lancet in Russia, which resulted in an ESOR Course on Advanced Cardio-Thoracic Imaging. The course took place in Sochi, Krasnaya Polyana and was attended by 64 radiologists.

The partnership with GE Healthcare led to a course on Infectious and Inflammatory Disorders which was held in Krakow/Poland with 38 participants from 7 countries.

In 2018, ESOR was proud to hold another course on Introduction to Hybrid Imaging in Oncology for the third year in a row. The course was organised in partnership with the European Society for Hybrid, Molecular and Translational Imaging (ESHIMT) in Vienna/ Austria and was attended by 109 participants from 34 countries.

Moreover, ESOR's portfolio included a course on Cardiac Imaging embedded within the successful ESOR Graz Tutorial; a symposium on Imaging Hallmarks of Cancer in Lisbon/ Portugal, which was realised in collaboration with the Champalimaud Foundation and attended by more than 200 interested participants as well as a course on Cardio-Thoracic Imaging Biomarkers in Valencia/Spain.

Furthermore, after six successful courses from 2012 to 2017, ESOR organised another course on Multidisciplinary Approach to Cancer Imaging jointly with the European Society for Radiotherapy and Oncology (ESTRO), which was aimed at radiologists, radiation-oncologists and surgeons. The course took place in Rome/Italy and was attended by 60 participants from 22 countries.



## **ASKLEPIOS**Courses

## LEVEL II+III

## **WOMEN'S IMAGING**

May 11-12, 2018 Bucharest/Romania

### **Host Organiser:**

I. Lupescu Bucharest/RO

### **Topics and Faculty:**

Personalised screening: mammography alone or more

T. Helbich, Vienna/AT

Innovations in breast ultrasound: added value in clinical practice

A. Athanasiou, Athens/GR

MRI of the breast: state of the art

M. Fuchsjäger, Graz/AT

Imaging and management of the axilla

F. Kilburn-Toppin, Cambridge/UK

Breast imaging interventions

B. Brkljačić, Zagreb/HR

Cancer of uterus and cervix: diagnosis, staging and detection of recurrence

D. Akata, Ankara/TR

Non-neoplastic diseases of the pelvis

R. Forstner, Salzburg/AT

Imaging and staging of ovarian cancer

L. Moulopoulos, Athens/GR

PET MRI in gynaecological oncology

E. Sala, Cambridge/UK

### **Number of participants: 83**

Country statistics: Austria 1, Bulgaria 1, Estonia 1, Greece 5, Hungary 2, Lithuania 2, Malta 1, Portugal 1, Romania 60, Russian Federation 1, Saudi Arabia 1, Serbia 2, Spain 2, Switzerland 1, The Netherlands 1, United Arab Emirates 1



## **ASKLEPIOS**

## Courses

## LEVEL II+III

## ADVANCED CARDIO-THORACIC IMAGING

June 21-22, 2018 Sochi, Krasnaya Polyana/Russia

## **Host Organiser:**

V. Sinitsyn Moscow/RU

### **Topics and Faculty:**

Beyond the coronary stenosis: functional CT for diagnosis for CAD
V. Sinitsyn, Moscow/RU

MRI in myocarditis

R. Maksimovic, Belgrade/RS

CT and MRI after CAD treatment

M. Francone, Rome/IT

The essential cardiac findings on chest CT

C. Loewe, Vienna/AT

MRI for diagnosis of cardiomyopathies:

challenges and solutions

E. Mershina, Moscow/RU

Interstitial lung disease: role of CT for diagnosis and assessment of treatment response

C. Schaefer-Prokop, Amersfoort/NL

Pulmonary tuberculosis in immune compromised patients

I. Tyurin, Moscow/RU

Pulmonary nodules: what to do and what not

M. Prokop, Nijmegen/NL

Role of imaging for diagnosis, staging and assessment of treatment response of lung cancer

H.-U. Kauczor, Heidelberg/DE

Number of participants: 64 Country statistics: Armenia 1, Russian Federation 63



## **ASKLEPIOS**Courses

## LEVEL III

## INTRODUCTION TO HYBRID IMAGING IN ONCOLOGY

August 30-31, 2018 Vienna/Austria

### **Host Organisers:**

K. Riklund, Umeå/SE C.J. Herold, Vienna/AT

## **Topics and Faculty:**

The basics of hybrid imaging

T. Beyer, Vienna/AT

Hybrid imaging in head and neck cancer

M. Becker, Geneva/CH

Hybrid imaging in prostate cancer

H.-P. Schlemmer, Heidelberg/DE

Cardiac MRI/PET

M. Gutberlet, Leipzig/DE

Hybrid imaging in haematological disorders

M. Mayerhöfer, Vienna/AT

PET CT in lung cancer

K. Riklund, Umeå/SE

Hybrid imaging in gynaecological cancer

A. Rockall, London/UK

Hybrid imaging in paediatric oncology

S. Gatidis, Tübingen/DE

MRI PET present and future

L.M. Sawicki, Düsseldorf/DE

## Number of participants: 109

Country statistics: Albania 1, Armenia 2, Austria 2, Belarus 4, Belgium 2, Bosnia and Herzegovina 2, Bulgaria 3, Croatia 1, Cyprus 1, Czech Republic 1, Egypt 5, Estonia 2, France 1, Georgia 1, Germany 2, Greece 1, Hungary 3, Ireland 2, Italy 2, Kazakhstan 1, Lithuania 2, Malta 1, Montenegro 1, Poland 9, Portugal 4, Romania 27, Russian Federation 2, Serbia 4, Slovenia 2, Spain 9, Sweden 1, Turkey 2, Ukraine 1, United Kingdom 5



## **ASKLEPIOS**

## Courses

## LEVEL II+III

## INFECTIOUS AND INFLAMMATORY DISORDERS

September 27-28, 2018 Krakow/Poland

## **Host Organiser:**

A. Urbanik Krakow/PL

### **Topics and Faculty:**

CNS infections: from image to pathogen

M. Thurnher, Vienna/AT

Community-acquired pneumonia

I. Tyurin, Moscow/RU

Imaging of steatohepatitis

L. Marti-Bonmati, Valencia/ES

Infectious and inflammatory disorders

of the bile ducts

N. Kartalis, Stockholm/SE

Pelvic inflammatory disorders

R. Manfredi, Rome/IT

Inflammatory diseases of the bowel

S. Gourtsoyianni, Athens/GR

Imaging acute pancreatitis and its complications

V. Vilgrain, Clichy/FR

Infections in immunocompromised patients

H.-U. Kauczor, Heidelberg/DE

Bone infection and inflammation in children

M. Raissaki, Heraklion/GR

**Number of participants: 38** 

Country statistics: Denmark 1, Hungary 4, Poland 28, Portugal 1, Romania 1, The Netherlands 1, United Kingdom 2



## **ASKLEPIOS**Courses

## LEVEL II+III

## CARDIAC IMAGING

October 17-19, 2018 Graz/Austria

### **Host Organiser:**

M. Fuchsjäger Graz/AT

### **Topics and Faculty:**

Cardiac CT techniques

C. Artzner, Tübingen/DE

Cardiac CT in the challenging patient

C. Loewe, Vienna/AT

Coronary anatomy and anomalies

M. Francone, Rome/IT

Cardiac CT in stable angina (+FFR and perfusion)

C. Artzner, Tübingen/DE

Cardiac CT after treatment (bypasses and stents)

V. Sinitsyn, Moscow/RU

Cardiac CT in the acute setting

C. Artzner, Tübingen/DE

TAVI planning

V. Sinitsyn, Moscow/RU

Acute aortic syndromes

C. Loewe, Vienna/AT

Pulmonary embolism and pulmonary hypertension

M. Francone, Rome/IT

Case presentations cardiac CT and MRI

G. Adelsmayr, Graz/AT; J. Schmid, Graz/AT;

M. Fuchsjäger, Graz/AT

Cardiac MR techniques and protocols

U. Reiter, Graz/AT

Number of participants: 48

Country statistics: Armenia 2, Austria 10, Belgium 1, Bulgaria 1, Croatia 1, Estonia 2, Finland 2, Hungary 1, Kazakhstan 3, Moldova 1, Norway 5, Romania 5, Russian Federation 6, Slovenia 2, Switzerland 1, Turkey 3, Ukraine 1, Uzbekistan 1 Cardiac MRI assessment of cardiac and myocardial functions

J. Schmid, Graz/AT

Cardiac MRI in ischemic heart disease

C. Loewe, Vienna/AT

Cardiac MRI in the diagnosis of myocarditis

M. Francone, Rome/IT

Cardiac MRI in the diagnosis of non-ischemic cardiomyopathy

V. Sinitsyn, Moscow/RU

Myocardial relaxation time mapping: a clinical perspective with cardiac MRI live session

U. Reiter, Graz/AT

Diagnostic work-up of cardiac tumours

E. Talakic, Graz/AT

Cardiac MRI flow imaging: methods and applications

G. Reiter, Graz/AT

Assessment of diastolic dysfunction with CMR and echo

C. Reiter, Graz/AT

Imaging of congenital heart diseases

G. Apfaltrer, Graz/AT

CMR live session

U. Reiter, Graz/AT; G. Reiter, Graz/AT

Cardiac MRI in the challenging patient

G. Reiter, Graz/AT

Case presentations cardiac MRI

G. Adelsmayr, Graz/AT; J. Schmid, Graz/AT;

E. Talakic, Graz/AT; U. Reiter, Graz/AT;

M. Fuchsjäger, Graz/AT



## **ASKLEPIOS**

## Courses

## LEVEL III

## SYMPOSIUM ON IMAGING HALLMARKS OF CANCER

October 18-19, 2018 Lisbon/Portugal

### **Host Organiser:**

C. Matos Lisbon/PT

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

Keynote lecture

Chair: C. Matos, Lisbon/PT

Changes in the evaluation of medical tests: from results to consequences

P. Bossuyt, Amsterdam/NL

Interlude

Imaging marine animals

J.L. Crespo, Valencia/ES

Pre clinical MR imaging

Chair: C. Matos, Lisbon/PT

New strategies for probing malignancy and pre-metastatic niches at ultra-high field

N. Shemesh, Lisbon/PT

Mapping pre-metastatic niches using advanced

DW MRI at ultra-high field

R. Simoes, Lisbon/PT

Mapping N-stages in colorectal cancer using multiexponential T2\*

I. Santiago, Lisbon/PT

Mapping the pancreas in-vivo using spatially

encoded MRI

S. Gonçalves, Lisbon/PT

**Radiomics** 

Chair: N. Papanikolaou, Lisbon/PT

What the radiologist needs to know

L. Fournier, Paris/FR

Biological correlation and clinical challenges

E. Sala, Cambridge/UK

Building an imaging biobank in the era

of radiomics

E. Neri, Pisa/IT

**Number of participants: 208** 

Country statistics: Austria 3, Belarus 2, Brazil 2,

Egypt 2, France 1, Germany 4, Hungary 1, Italy 2,

Latvia 1, Lithuania 1, Malaysia 1, Morocco 1,

Poland 9, Portugal 149, Romania 12, Serbia 1,

Slovenia 1, Spain 4, Sweden 1, Switzerland 1,

Turkey 4, Ukraine 1, United Kingdom 2,

United States of America 1, Unknown 1



Imaging strategies for improving cancer screening

Chair: V. Vilgrain, Clichy/FR

Breast cancer

T. Helbich, Vienna/AT

Lung cancer

H.-U. Kauczor, Heidelberg/DE

Colon cancer

A. Laghi, Rome/IT

Prostate cancer

J. Futterer, Nijmegen/NL

Whole body MRI in clinical oncology: where are we now?

Chair: F. Caseiro Alves, Coimbra/PT

Metastatic bone disease

F. Lecouvet, Brussels/BE

Multiple myeloma

S. Punwani, London/UK

Lymphoma

M. Mayerhöfer, Vienna/AT

Oncologic imaging: future perspectives

Chair: L. Marti-Bonmati, Valencia/ES

MR elastography to investigate cancer cell proliferation and metastases

R. Sinkus, London/UK

Mass spectrometry imaging for clinical research

and cancer surgery
R. Heeren, Maastricht/NL



## **ASKLEPIOS**

## Courses

## LEVEL III

## MULTIDISCIPLINARY APPROACH TO CANCER IMAGING

November 5-6, 2018 Rome/Italy

#### **Host Organisers:**

R. Beets-Tan, Amsterdam/NL V. Valentini, Rome/IT

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

Imaging technology in radiotherapy for radiologists: Basic principle in radiation technology

U. van der Heide, Amsterdam/NL

Imaging technology in radiotherapy for radiologists: Clinical application

V. Valentini, Rome/IT

Imaging technology in radiology for radiotherapists: Basic imaging technology in radiology for radiotherapists

N. Papanikolaou, Lisbon/PT

Imaging technology in radiology for radiotherapists: Basic MR imaging in radiology for radiotherapists

D. Regge, Candiolo/IT

Advanced imaging technology in radiotherapy for radiotherapists: Radiation technology for radiotherapists

U. van der Heide, Amsterdam/NL

Advanced imaging technology in radiotherapy for radiotherapists: Radiation technology for radiotherapists V. Valentini, Rome/IT

Advanced imaging technology in radiology for radiologists: MR physics for radiologists

N. Papanikolaou, Lisbon/PT

Advanced imaging technology in radiology for radiologists: Advanced MR in oncology: DWI, IVIM, perfusion, elastography - how to apply them in clinics
M. Ronot, Clichy/FR

Liver - borderline resectable colorectal liver metastases: CT and MRI of liver tumours M. Ronot, Clichy/FR

Liver - borderline resectable colorectal liver metastases: How to manage treatment invasive and non-invasive F. Giuliante, Rome/IT

Liver - borderline resectable colorectal liver metastases: How to manage treatment radiation and systemic A.G. Morganti, Bologna/IT

Pancreas - borderline resectable pancreatic cancer: Anatomy of pancreas and nodal regions S. Alfieri, Rome/IT

## Number of participants: 60

Country statistics: Australia 2, Austria 1, Belgium 1, Denmark 2, France 2, Germany 2, Iceland 1, India 1, Ireland 1, Italy 9, Macedonia 1, Poland 10, Romania 1, Serbia 1, Slovakia 1, Slovenia 3, Switzerland 3, The Netherlands 8, Turkey 4, Ukraine 1, United Kingdom 3, United States of America 2



Pancreas - borderline resectable pancreatic cancer: CT and MRI of pancreatic tumours R. Manfredi, Rome/IT

Pancreas - borderline resectable pancreatic cancer: How to manage treatment radiation and systemic A.G. Morganti, Bologna/IT

Workshop - Multidisciplinary tumour board 1: The management of CRC liver metastases

M. Ronot, Clichy/FR F. Giuliante, Rome/IT V. Valentini, Rome/IT

Workshop - Multidisciplinary tumour board 2: The management of borderline resectable pancreatic tumour

S. Alfieri, Rome/IT R. Manfredi, Rome/IT A.G. Morganti, Bologna/IT

Prostate cancer: Staging with imaging H.-P. Schlemmer, Heidelberg/DE

Prostate cancer: How to manage treatment - surgery

H. van Poppel, Leuven/BE

**Prostate cancer: Radiotherapy** P. Hoskin, London/UK

Workshop - Multidisciplinary tumour board: The management of early and advanced stage prostate cancer

H.-P. Schlemmer, Heidelberg/DE H. van Poppel, Leuven/BE P. Hoskin, London/UK

Rectal cancer: How to manage treatment - surgery

C. van de Velde, Leiden/NL

Rectal cancer: How to manage treatment - radiation treatment
V. Valentini, Rome/IT

Rectal cancer: MRI of rectal cancer R. Beets-Tan, Amsterdam/NL

Workshop 1 - MRI rectal cancer: how to do and interpret
R. Beets-Tan, Amsterdam/NL

Workshop 2 - How to manage cT3 tumours C. van de Velde, Leiden/NL V. Valentini, Rome/IT



## **ASKLEPIOS**

## Courses

## LEVEL III

## CARDIO-THORACIC IMAGING BIOMARKERS

December 10-11, 2018 Valencia/Spain

### **Host Organiser:**

L. Marti-Bonmati Valencia/ES

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

#### **GENERAL CONCEPTS**

Concept and development of radiomics and imaging biomarkers

L. Marti-Bonmati, Valencia/ES

Measurement, accuracy, precision, confusion and validation

A. Alberich-Bayarri, Valencia/ES

Structure report in cardiac and thoracic imaging and quantitation

L. Marti-Bonmati, Valencia/ES

## **LUNG ONCOLOGY**

Lung cancer: biology, genetics, imaging, therapy H.-U. Kauczor, Heidelberg/DE

Metrics in lung cancer oncology

S. Schäfer, Heidelberg/DE

**Tumour response** 

H.-U. Kauczor, Heidelberg/DE

CARDIAC DISEASES Myocardial fibrosis

C. Loewe, Vienna/AT

Imaging extracted parameters in cardiac magnetic resonance imaging

U. Reiter, Graz/AT

Valvular diseases

C. Loewe, Vienna/AT

**CLINICAL TRIALS** 

Imaging biomarkers in clinical trials and treatment effects

Y. Liu, Valbonne/FR

LUNG DIFFUSE DISEASES

COPD: biology, imaging, therapy

C. Muñoz Núñez, Valencia/ES

Quantitative diffuse lung biomarkers

A. Alberich-Bayarri, Valencia/ES

Diffuse interstitial pulmonary disease

C. Muñoz Núñez, Valencia/ES

**CLINICAL TRIALS** 

Imaging biomarkers in clinical trials and drug toxicity

Y. Liu, Valbonne/FR

Number of participants: 30

Country statistics: Belgium 2, Canada 1, Korea 2, Serbia 2, Spain 19, Switzerland 1, The Netherlands 1, Turkey 1, United Kingdom 1





## LEVEL II+III

## VISITING PROFESSORSHIP

## Programme Armenia within the ESR Support Initiative

This Visiting Professorship Programme was organised within the frame of the ESR Support Initiative. This project, launched and announced in November 2014, aims to improve access to radiological training and educational resources for aspiring physicians and scientists in less affluent regions in Europe, with the goal of ensuring better healthcare for future generations in those regions. In 2018, Armenia was selected by the ESR Board of Directors as the fourth country of this initiative.

The professorship was aimed at senior residents, board-certified radiologists and fellows interested in abdominal oncologic imaging. It was designed as an intense one-day programme, directly linked to the Armenian Congress of Radiology, as part of the ESR Support Initiative. A particular focus was on the applications of the latest imaging techniques, diagnostic criteria, staging principles and clinical role of imaging in liver, pancreatic, ovarian and prostate cancer. Renowned European experts ensured a high-quality teaching programme, combining lectures and workshops, allowing for interactive case discussions.

## ABDOMINAL ONCOLOGIC IMAGING

#### **Date and Venue:**

June 29, Yerevan/AM

#### **Host Organiser:**

K. Galumyan, Yerevan/AM

### **Topics and Faculty:**

Diffusion MRI in the liver: why so important?

V. Vilgrain, Clichy/FR

Cystic pancreatic tumours: differential diagnosis and current guidelines

C. Triantopoulou, Athens/GR

Ovarian cancer: role of imaging in treatment selection and planning

E. Sala, Cambridge/UK

New European guidelines for hepatocellular carcinoma

V. Vilgrain, Clichy/FR

Imaging evaluation of pancreatic cancer after treatment

C. Triantopoulou, Athens/GR

Prostate cancer imaging and MRI protocol optimisation

E. Sala, Cambridge/UK

**Number of participants: 89**Country statistics: Armenia 89



## LEVEL II+III

## VISITING PROFESSORSHIP

## Programme Balkan Congress within the ESR Support Initiative

This Visiting Professorship Programme was aimed at senior residents, board-certified radiologists and fellows interested in urogenital radiology. It was designed as an intense one-day programme, directly linked to the Balkan Congress of Radiology, as part of the ESR Support Initiative. A practical focus was on the most important clinical questions, which need to be answered by optimised imaging strategies for patients with hematuria, focal renal lesions, testicular tumours, or prostate, cervical and ovarian neoplasms. Renowned European experts ensured a high quality teaching programme, combining lectures and interactive case-based discussions.

## **UROGENITAL RADIOLOGY**

#### **Date and Venue:**

October 4, Kuşadası/TR

#### **Host Organiser:**

N. Elmas, Izmir/TR

## **Topics and Faculty:**

Imaging of haematuria

L. Derchi, Genoa/IT

#### Differential diagnosis of focal renal lesion

J. Futterer, Nijmegen/NL

## Cervical cancer: initial detection and depiction of recurrence

A. Rockall, London/UK

### Imaging testicular tumours

L. Derchi, Genoa/IT

### Multiparametric imaging of prostate

J. Futterer, Nijmegen/NL

#### Imaging and staging of ovarian cancer

A. Rockall, London/UK

Number of participants: 91

Country statistics: Belgium 1, Bulgaria 6, Greece 4, Macedonia 1, Turkey 77, United Kingdom 1, Unknown 1



## **LEVEL III**

## **ASKLEPIOS**

## Course International Thailand

This ASKLEPIOS course was implemented with great support and partnership of Guerbet and RCRT (Royal College of Radiologists of Thailand). It was aimed to discuss the most important topics in neuroradiology. Experienced neuroradiologists gave an update on Computed tomography (CT) and magnetic resonance imaging (MRI) techniques and introduced imaging algorithms for vascular, infectious, inflammatory and demyelinating diseases of the central nervous system (CNS).

## **NEURORADIOLOGY**

#### **Date and Venue:**

July 20-21, Bangkok/TH

#### **Host Organiser:**

A. Churojana, Bangkok/TH

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

Neuroimaging in patients with traumatic brain injury: a practical guide

P.M. Parizel, Antwerp/BE

CNS infections: a roadmap from imaging to pathogen

M. Thurnher, Vienna/AT

Venous ischemia, pathophysiology and diagnosis

P. Vilela, Lisbon/PT

Presurgical and postoperative evaluation of brain tumours

P.M. Parizel, Antwerp/BE

Emerging inflammatory and autoimmune CNS diseases

M. Thurnher, Vienna/AT

Multiple Sclerosis: where do we stand?

J.-P. Pruvo, Lille/FR

Recanalization and reperfusion in acute cerebral ischemia: controlled studies and guidelines

P. Vilela, Lisbon/PT

Adjunct value of vessel wall imaging in clinical practice: experience at Siriraj Hospital

O. Chawalparit, Bangkok/TH

Thrombectomy in stroke

J.-P. Pruvo, Lille/FR

Number of participants: 140

Country statistics: Philippines 8, Thailand 120, Vietnam 12



## LEVEL II+III

## **ASKLEPIOS**

## Courses International Brazil

This ASKLEPIOS Course was implemented with great support and partnership of Bayer and CBR (Brazilian College of Radiology). It was aimed at senior residents, board-certified radiologists and fellows interested in MR imaging and it focused on the most successful technical consideration to acquire high-quality images in oncologic patients. It further concentrated on the evaluation of updated diagnostic findings, stratifying criteria and staging principles as well as treatment strategies and effects assessment. The clinical role of MR imaging in liver, rectal, renal and prostate cancer were presented. A special focus was devoted to the applications of the latest technical advances and newer European guidelines for MR imaging in these oncologic situations. Internationally renowned European and Brazilian experts ensured a high-quality teaching programme combining plenary lectures and workshops allowing for interactive case discussion.

## **ADVANCES IN MRI**

#### **Dates and Venues:**

August 24, Recife/BR August 25, Brasilia/BR

#### **Host Organisers:**

F. Vasco Aragão, Recife/BR L. Farage, Brasilia/BR

### **Topics and Faculty:**

Why MRI is crucial in patients with resectable liver metastases

V. Vilgrain, Clichy/FR

Hepatocellular carcinoma insights from morphological and biological imaging: a guideline to radiologists L. Marti-Bonmati, Valencia/ES

Rectal cancer - MR-based management

C. Ortega, São Paulo/BR

MR technical advances in the field of oncologic imaging

N. Papanikolaou, Lisbon/PT

Kidney neoplasms - what is really important?

V.F. Muglia, Ribeirao Preto/BR

Advances in MR imaging of prostate

D. Regge, Candiolo/IT

**Number of participants Recife: 69** Country statistics: Brazil 69 Number of participants Brasilia: 100 Country statistics: Brazil 100



## LEVEL II

## **ASKLEPIOS**

## Courses International China

This ASKLEPIOS course was implemented with great support and partnership of Guerbet and CSR (Chinese Society of Radiology). It was aimed at senior residents, board-certified radiologists and fellows interested in high-quality abdominal oncologic imaging. This intense one-day programme was articulated on imaging strategies for liver, pancreas and bile ducts diseases, with emphasis in technical strategies and reporting guidelines. Latest cross-sectional imaging techniques were discussed regarding lesion detection, characterisation, staging and follow-up with radiological-pathological correlation. The most common differentials were illustrated. Renowned European and Chinese lecturers ensured a high-quality teaching programme, combining lectures and workshops, allowing for interactive case discussion.

## ABDOMINAL ONCOLOGIC IMAGING

#### **Date and Venue:**

September 19. Chenadu/CN

#### **Host Organiser:**

Bin Song, Chengdu/CN

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

Current guidelines on the diagnosis of HCC Valérie Vilgrain, Clichy/FR

How to diagnose a focal lesion in cirrhosis Giuseppe Brancatelli, Palermo/IT

HCC and intrahepatic cholangiocellular carcinoma: imaging-based differential diagnosis

Bin Song, Chengdu/CN

Fuhua Yan, Shanghai/CN

Cholangiocarcinoma: diagnosis and pitfalls Carlos Valls, Stockholm/SE

Pancreatic carcinoma: diagnosis and staging

Pancreatic carcinoma: imaging in assessing response to treatment

Marc Zins, Paris/FR

#### **Date and Venue:**

September 21, Beijing/CN

#### **Host Organisers:**

Zheng Yu Jin, Beijing/CN Huadan Xue, Beijing/CN

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

Current guidelines on the diagnosis of HCC

Valérie Vilgrain, Clichy/FR

How to diagnose a focal lesion in cirrhosis Giuseppe Brancatelli, Palermo/IT

Pancreatic cystic lesion: diagnosis and differential diagnosis

Huadan Xue, Beijing/CN

Cholangiocarcinoma: diagnosis and pitfalls

Carlos Valls, Stockholm/SE

Renal cell carcinoma: MR imaging findings with pathologic correlation

Huiyi Ye, Beijing/CN

Pancreatic carcinoma: imaging in assessing

response to treatment

Marc Zins, Paris/FR

Number of participants Chengdu: 169

Country statistics: China 169

Number of participants Beijing: 50

Country statistics: China 50





## Visiting Seminars in Asia

## **AIMS**

# ADVANCED IMAGING MULTIMODALITY SEMINARS

This year's Advanced Imaging Multimodality Seminar (AIMS) was organised jointly with the Korean Society of Radiology (KSR) and was supported by Bracco. The seminar was aimed at participants from Korea, in particular final-year residents, board-certified radiologists and fellows interested in paediatric radiology. It was designed to provide an in-depth review and an update on focused and demanding subjects regarding the paediatric body, including congenital lung disease, 4D thoracic CT, paediatric IBD, neonatal cholestasis, congenital genitourinary abnormalities and abdominal tumours in children. An outstanding European and Korean faculty ensured a high-quality teaching programme, combining lectures and workshops, allowing for interactive case discussions. The seminar on Multimodality Paediatric Body Imaging took place in Seoul and attracted 76 Korean radiologists.





#### **AIMS KOREA**

## MULTIMODALITY PAEDIATRIC BODY IMAGING

#### Date and Venue:

July 7, Seoul/KR

#### **Host Organiser:**

Gye Yeon Lim, Seoul/KR

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

Chest imaging for congenital lung disease Maria Pilar García-Peña, Barcelona/ES

#### 4D thoracic CT in children

Hyun Woo Goo, Seoul/KR

#### Multimodality imaging for paediatric IBD

YoungHun Choi, Seoul/KR

#### Imaging for neonatal cholestasis

Tae Yeon Jeon, Seoul/KR

#### Congenital genitourinary anomalies:

US and MR urography

Maria Raissaki, Heraklion/GR

#### Paediatric abdominal tumours:

 $multimodality\ imaging\ including\ CEUS$ 

Philippe Petit, Marseille/FR



## Visiting Seminars in Latin America

## **AIMS**

# ADVANCED IMAGING MULTIMODALITY SEMINARS

After a very successful start of the AIMS Seminars in Mexico in 2013, this long-term initiative was continued and again realised in partnership with the Mexican Federation of Radiology (FMRI) and the Mexican Society of Radiology (SMRI). The seminars were organised with the invaluable support of our long-term partner Bracco. The AIMS Seminars were designed for participants from Mexico, in particular final-year residents, board-certified radiologists and fellows, interested in chest and abdominal oncology. They were articulated on advanced imaging strategies, diagnostic criteria and challenges when dealing with some of the most important chest and abdominal malignancies. An outstanding European and Mexican faculty ensured a high-quality teaching programme, combining lectures and interactive case discussions. The seminars on Chest and Abdominal Oncologic Imaging took place in Mexico City and Guadalajara and were attended by 85 and 59 participants respectively, a total of 144 participants.





#### **AIMS MEXICO**

## CHEST AND ABDOMINAL ONCOLOGIC IMAGING

#### **Dates and Venues:**

April 11, Mexico City/MX April 13, Guadalajara/MX

#### **Host Organisers:**

G. Villegas López, Mexico City/MXB. González Ulloa, Guadalajara/MXM. Figueroa, Guadalajara/MX

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

Lung cancer screening M.-P. Revel, Paris/FR

#### Multimodality imaging of lung cancer

L.F. Alva Lopez, Mexico City/MX

## Diagnosis and staging of HCC: from guidelines to clinical practice

F. Caseiro Alves, Coimbra/PT

#### Role of MRI in anorectal cancer

S. Gourtsoyianni, Athens/GR

#### Neuroendocrine tumours of the abdomen

V. Vilgrain, Clichy/FR

#### Differential diagnosis of focal renal lesions

V.M. Garcia-Gallegos, Guadalajara/MX

**Number of participants Mexico City: 85** 

Country statistics: Costa Rica 1, Mexico 83,

Nicaragua 1

Number of participants Guadalajara: 59

Country statistics: Mexico 59



## VISITING PROFESSORSHIP

## Programme Uzbekistan

The aim of this one-day intense multi thematic course was to enhance and consolidate the tutorials in Central Asia and further the educational opportunities for senior residents, board-certified radiologists and fellows from Uzbekistan and neighbouring countries. It was designed to update professional knowledge of current imaging options and strategies in a number of selected clinical conditions in abdominal, cardiac radiology and paediatric neuroradiology. Renowned European experts ensured a high-quality teaching programme.

#### ABDOMINAL AND PAEDIATRIC IMAGING

#### **Date and Venue:**

May 31, Tashkent/UZ

#### **Host Organiser:**

M. Khodjibekov, Tashkent/UZ

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

Imaging of hypoxia-ischemia in the neonatal brain

M. Argyropoulou, Ioannina/GR

How to make a perfect cardiac CT study: tips and tricks

V. Sinitsyn, Moscow/RU

Diffusion MR in the liver: why so important?

V. Vilgrain, Clichy/FR

Imaging of congenital malformations of the brain

M. Argyropoulou, Ioannina/GR

Liver pseudo-lesions on CT and MRI: how to recognise and classify them

V. Sinitsyn, Moscow/RU

Atypical haemangiomas of the liver: keys to diagnose?

V. Vilgrain, Clichy/FR

Imaging of paediatric brain tumours

M. Argyropoulou, Ioannina/GR

New European guidelines for hepatocellular carcinoma

V. Vilgrain, Clichy/FR

New developments in kidney imaging

V. Sinitsyn, Moscow/RU

Cardiac MRI and CT in diagnosis of cardiac masses

M. Maksudov, Tashkent/UZ

Number of participants: 57

Country statistics: Uzbekistan 57



## VISITING PROFESSORSHIP

## Programme Colombia

This Visiting Professorship Programme was aimed at senior residents, board-certified radiologists and fellows, as well as practicing radiologists interested in the interpretation of emergency imaging. It was designed as an intense, one-day course and addressed current effective imaging techniques of the acute injured or ill patient. The expert faculty comprised excellent international teachers in the field. This course gave the unique opportunity to detect important pathologies in the emergency radiology setting, providing a systematic pattern to approach the correct diagnosis, avoiding common interpretation pitfalls. Updates in imaging, with respect to pathophysiology, clinical presentation and emergency management care of patients were emphasised. The combination of didactic lectures with interactive workshops, gave the attendees the opportunity of an educative experience and an exchange possibility with the faculty. The course in Cartagena was directly linked to the Colombian Congress of Radiology, while the course in Bogotá was held at the ESR Office Latin America.

#### **EMERGENCY RADIOLOGY**

#### **Dates and Venues:**

July 31, Bogotá/CO August 2, Cartagena/CO

#### **Host Organisers:**

A.M. Quintero, Bogotá/CO F. Lubinus, Bucaramanga/CO

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

#### Brain injury

M. Thurnher, Vienna/AT

Beyond the coronary stenosis: functional CT for diagnosis for CAD

V. Sinitsyn, Moscow/RU

Imaging and management in acute pancreatitis

C. Stoupis, Maennedorf/CH

Non-traumatic neuroradiology emergencies beyond stroke

M. Thurnher, Vienna/AT

CTA and MRA in imaging acute pulmonary embolism: an update

V. Sinitsyn, Moscow/RU

Acute appendicitis and its mimics

C. Stoupis, Maennedorf/CH

**Number of participants Bogotá: 35**Country statistics: Colombia 35

Number of participants Cartagena: 101

Country statistics: Colombia 101



#### LEVEL II+III / ASTANA LEVEL I+II / GRAZ

## **TUTORIALS**

In 2018, two ESOR Tutorials were organised in Astana/Kazakhstan and Graz/Austria.

The ESOR Astana Tutorial was organised by the National Research Cardiac Surgery Centre in Astana under the chairmanship of Dr. T. Dautov, and was sponsored by Siemens Healthineers. For two weeks, 15 participants were offered practical and theoretical knowledge and the opportunity to be integrated in the activities of an academic department of radiology. The tutorial comprised lectures on a variety of topics, covering modern diagnostic and interventional radiology. Mentored hands-on workshops in ultrasound, CT and MRI were also included. The ESOR Astana Tutorial was aimed at radiologists from Central Asia, including Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan.

The ESOR Graz Tutorial was organised by the Medical University Graz under the chairmanship of Prof. M. Fuchsjäger and supported by the ESR. The aim of the tutorial was to further the experience of young radiologists, residents in their last year of training and board-certified radiologists, in daily radiological practice through intense teaching and exchange in a European reference centre. The participants, 11 radiologists from Russia and CIS countries, were offered one week of practical and theoretical knowledge and the opportunity to be integrated in the activities of an academic department of radiology.





## **ESMRMB** SCHOOL OF MRI

With its wide range of activities and fruitful engagement with its partners, ESOR has built up a network of quality assured European educational activities in radiology in Europe and beyond, including a partnership with the School of MRI of the European Society for Magnetic Resonance in Medicine and Biology (ESMRMB). The ESMRMB School of MRI programme is targeted at physicians and radiographers/technicians and offers advanced clinical courses in the field of MRI. The courses offer the opportunity to enhance knowledge and to get prepared for the need of modern daily MR business. 50% of the total teaching time is used for repetition sessions and case discussions in small groups in order to intensify the learning experience.

In 2018, 11 School of MRI courses took place, with approximately 300 participants from over 40 different countries. For the first time, the ESMRMB offered an advanced online educational course in applied MR techniques. Over the course of six weeks, the course concerned one topic per lesson (1.5 h) and was generally aimed at medical doctors (e.g. residents in radiology), biologists or technicians who work with MRI or have an interest in using MRI for research and would like to deepen their basic knowledge. The great advantage of this web-based teaching is not only its steady global increase but also the possibility to learn from anywhere. The basic and advanced eLearning courses will be part of the programme once again in 2019.

Overall, thanks to the continuing commitment of the organisers and speakers, the ESMRMB has held 179 courses since the year 2000. The cooperation between ESOR and the ESMRMB School of MRI has been of high value to both and is therefore being continued.

Course	Venue	Date	Participants
Advanced MR Imaging of the Musculoskeletal System	Budapest/HU	May 17-19, 2018	34
Advanced Head and Neck MR Imaging	Oslo/NO	May 24-26, 2018	19
Clinical fMRI and dMRI - Theory and Pratice	Cardiff/UK	June 28-30, 2018	cancelled
Advanced MR Imaging of the Abdomen	Coimbra/PT	September 6-8, 2018	31
Advanced Pelvic MR Imaging	Rome/IT	September 6-8, 2018	15
Advanced Cardiac MR Imaging	Rome/IT	September 13-15, 2018	18
Advanced Neuro Imaging: Diffusion, Perfusion, Spectroscopy	Leuven/BE	September 27-29, 2018	28
MR Safety	Vienna/AT	October 18-20, 2018	21
Curso Avanzado de Imagen por RM Músculo-Esquelético	Barcelona/ES	November 8-10, 2018	65
eLearning: Basic Course on Applied MR Techniques	7 Modules	September 10 - October 22	2, 2018 26
eLearning: Advanced Course on Applied MR Techniques	6 Modules	November 5 - December 17	7, 2018 31



## **FURTHER ACTIVITIES**

## CONTRIBUTION TO "ESR EDUCATION ON DEMAND"

ESOR is contributing to the ESR Education on Demand platform with several online courses, which have the goal to offer radiologists high-quality teaching from home. In 2018, 30 online courses were available on the ESR Education on Demand platform, all of which included e-learning content in the form of recorded lectures with presentation material.

# PARTNERSHIPS WITH THE EUROPEAN SOCIETY OF NEURORADIOLOGY, DIAGNOSTIC AND INTERVENTIONAL (ESNR)

The European Society of Neuroradiology, Diagnostic and Interventional (ESNR) and its European Course of Neuroradiology (ECNR) has finished the 4<sup>th</sup> module of the 14<sup>th</sup> cycle "Trauma, Infection and Degenerative Disease" held in spring in Antwerp, Belgium with 364 participants from 50 countries. The 1<sup>st</sup> module of the 15<sup>th</sup> cycle has been held in autumn in Dubrovnik, Croatia, on "Anatomy and Embryology" with 349 participants from 53 countries.



# VISITING SCHOLARSHIP PROGRAMMES EXCHANGE PROGRAMMES FOR FELLOWSHIPS ONE-YEAR FELLOWSHIPS BRACCO FELLOWSHIPS NICHOLAS GOURTSOYIANNIS TEACHING FELLOWSHIP

#### VISITING SCHOLARSHIP PROGRAMMES

In 2018, 38 places were available in Europe with the support of Bracco, the ESR and the Spanish Foundation of Radiology. Two of these scholarships were offered to Armenian residents within the ESR Support Initiative.

Additionally, the Memorial Sloan Kettering Cancer Center (MSKCC) in New York and the Case Western Reserve University in Cleveland have continued to support three scholars by offering an intense training course. Furthermore, one Chinese radiologist again had the opportunity to complete a three-month intense training course in the UK, thanks to a grant supported by the Jo Li Trust.

In total more than 275 residents have applied for the various programmes.

#### **EXCHANGE PROGRAMMES FOR FELLOWSHIPS**

In partnership with the European subspecialty societies, 32 junior radiologists had the possibility to pass modular training in their chosen subspecialty. The programmes included abdominal radiology (ESGAR - nine trainees), breast radiology (EUSOBI - three trainees), cardiac radiology (ESCR - two trainees), head and neck radiology (ESHNR - four trainees), hybrid imaging (ESHI<sup>MT</sup> - one trainee), musculoskeletal radiology (ESSR - two trainees), neuroradiology (ESNR - four trainees), oncologic imaging (ESOI - one trainee), paediatric radiology (ESPR - four trainees) and thoracic radiology (ESTI - two trainees). In total 147 young radiologists applied for the various topics.

Additionally, the Memorial Sloan Kettering Cancer Center (MSKCC) in New York supported two fellows by offering a six-month training programme on breast imaging.

#### ONE-YEAR FELLOWSHIPS

In 2018, ESOR continued to organise the full one-year fellowships. This programme allowed nine recently board-certified radiologists to undertake a twelve-month training at some of the most renowned European training centres.

#### **BRACCO FELLOWSHIPS**

In 2018, a new programme, devoted to the professional and scientific development of young radiologists, has been created on the occasion of the 90th anniversary of Bracco. In its first year, 30 radiology residents and young radiologists have benefitted of the Bracco Fellowships programme (Clinical – 22 trainees; Management – one trainee; Research – 6 trainees). In total 41 residents and radiologists have applied.

#### NICHOLAS GOURTSOYIANNIS FELLOWSHIP

The Nicholas Gourtsoyiannis Teaching Fellowship has also been established in 2018, by the European Radiology Private Foundation. The programme allowed one fellow to enhance her teaching and training skills.

To that end, a special word of thanks is due to the highly esteemed academic training centres and tutors, who enabled more than 3400 trainees to apply for these programmes over the last twelve years.



## VISITING SCHOLARSHIP PROGRAMMES

## My experience



Zuzanna Aleksander-Markuszewska

Maria Skłodowska-Curie Memorial Cancer Center, Institute of Oncology, Warsaw/Poland Topic: Oncologic Imaging

Training Centre: European Institute of Oncology, Milan/Italy

I would like to express my gratitude to ESOR for providing me with an amazing opportunity of a 3-month scholarship in Oncologic Imaging at the European Institute of Oncology in Milan. During my stay I can participate in all activities of the department: multidisciplinary meetings, radiology reporting of all modalities and educational lectures. I have an opportunity to observe many CT guided biopsy procedures, especially of lung malignancies, as well as broaden my knowledge in mpMRI of prostate and whole body MRI that I believe I will be able to use in my own Institute. Furthermore, I am involved in a very interesting ongoing research project in the field of neuroendocrine tumors. At this point I would like to express special appreciation to my tutor Dr. Luigi Funicelli for this amazing opportunity and for his great sense of humour, support and time shown to me during the scholarship. I would also like to thank all specialists and residents for making me feel welcome and for their willingness to share their knowledge. These three months of scholarship are an excellent chance to improve my skills and intensify my interest in the field of oncologic radiology. It is a very important experience in my professional and personal life.



Natalie Antunes Hospital de Santa Marta, Lisbon/Portugal Topic: Chest Radiology

Training Centre: Heidelberg University Medical Center, Heidelberg/Germany

I was extremely fortunate to be able to participate in the ESOR Visiting Scholarship Programme 2018 on the topic of Chest Radiology at the Thoraxklinik in Heidelberg, Germany. The Thoraxklinik is one of the largest European centers completely dedicated to lung and chest disease and is fully integrated in the academic and scientific community of the University of Heidelberg. During my scholarship, I was able to participate in several research projects and was fully integrated in the multidisciplinary meetings and academic lectures that occurred on a daily basis. It was also an honor to learn and work with Prof. Heussel, thanking him for the kindness and willingness to share his knowledge with me.





Giovanni Barchetti
Policlinico Umberto I, Rome/Italy
Topic: Head and Neck Radiology
Training Centre: Hôpital Purpan - Centre Hospitalier Universitaire (CHU) de Toulouse,
Toulouse/France

I am very grateful to the ESOR committee for giving me the chance to spend three months at the Neuroradiology Department of the University Hospital in Toulouse. While attending the Department I had the opportunity to be involved in a variety of different activities that took place every day, especially the multidisciplinary meeting with neurologists, neurosurgeons and pediatric neurologists and oncologists. I also had the opportunity to attend the neuro-interventional unit, which is so well-known all around the world. I would expecially like to thank Prof. Bonneville for being always available and extremely encouraging as a tutor. I would also like to thank all the senior and junior radiologists alike, as every one of them helped me to improve my skills. During the three months I spent at the Department I could really grasp a lot about basic and more advanced concepts in Neuroradiology. I do really hope that other residents in the future can benefit of the same great opportunity to attend the University Hospital in Toulouse.



Berrak Barutcu
Gazi University School of Medicine, Ankara/Turkey
Topic: Neuroradiology
Training Centre: Pitié-Salpêtrière University Hospital, Paris/France

I am sincerely grateful to ESOR for awarding me with this great learning opportunity. I felt very fortunate to spend a three-month training in neuroradiology at Pitié-Salpêtrière University Hospital. I would like to express my gratitude to the Head of Department, Prof. Didier Dormont, my tutor, Dr. Nadya Pyatigorskaya, and to other great radiologists for their warm welcome and hospitality. During this period, I was able to participate in all activities of the department, including reporting sessions, teaching lectures and weekly department meetings. It was also a great honor for me to be able to attend clinical cases meetings led by Prof. Damien Galanaud. All the department staff, especially Prof. Damien Galanaud's, kindness and willingness to share their knowledge and experience provided me with a high level training. Apart from taking part in routine daily activities, I have participated in a scientific project about glioblastoma multiforme and worked with advanced diagnostic imaging tools. Working with such a great team and learn much more about advanced MR imaging methods broadened my horizons. I had also the opportunity to live in one of the most beautiful city in the world, Paris. I believe that this excellent educational experience will indelibly contribute to my future academic career. It was a pleasure to work with well-experienced radiologists at Pitié-Salpêtrière University Hospital and I hope we will be working together in the future. I must say that I will remember this once-in-a-lifetime experience.





Sonia Benítez Rivero

Hospital Universitario Nuestra Señora de Candelaria, Tenerife/Spain

Topic: Neuroradiology

Training Centre: Cambridge University Hospitals NHS Trust - Addenbrooke's Hospital,

Cambridge/United Kingdom

First of all, I would like to express my gratitude to ESOR and ESR for giving me the opportunity to spend three months being part of a team of excellent professionals in the Neuroradiology Department at Addenbrooke's Hospital, Cambridge. On my arrival, I was warmly welcomed by my tutor, Dr. Tomasz Matys. During my training period, I had the opportunity to participate in all the daily activities: an extensive variety of multidisciplinary meetings, educational lectures, conferences and radiology reporting. Definitely, this has been a great experience to improve my skills in neuroradiology and to learn from outstanding radiologists and it has undoubtedly contributed to my professional and personal growth. I would like to thank all the members of the team for the warm welcome, support and for sharing all their knowledge with me. I truly recommend this unique experience and strongly encourage all residents/fellows to apply for this great opportunity offered by ESOR.



Willem Guillermo Calderon Miranda

Hospital General Dr. Manuel Gea González, Mexico City/Mexico

Topic: Paediatric Radiology

Training Centre: Hospital Sant Joan de Deu, Barcelona/Spain

I am very grateful to ESOR for giving me the opportunity to train at Hospital Sant Joan de Deu, which is viewed as one of the premier radiology training centers in the world. Dr. Ignasi Barber served as my mentor during my stay and I am deeply grateful for his willingness to share his knowledge and expertise in pediatric radiology with me. I am honored to have had the opportunity to participate in the scientific work entitled "Efficacy of MEK Inhibitors in Plexiform Neurofibromas Radiological Evaluation". Every day we had clinical sessions with the different services of the Hospital Sant Joan de Deu and on a weekly basis, we reviewed cases with the honorable Dr. Javier Lucaya. This has been a wonderful opportunity, from a professional, academic and personal point of view, and I am most grateful that ESOR has given me the opportunity to receive this training at the Sant Joan de Deu Hospital.



**Emma Canniff** 

St James Hospital, Dublin/Ireland Topic: Abdominal Radiology

Training Centre: Hôpital Archet, Nice/France

It was a privilege to be allowed to be part of Professeur Chevallier's radiology team in Hopital Archet 2 in Nice, France. My main schedule was organised between Interventional Radiology and Cross-sectional Imaging. Other activities included multidisciplinary team and radiology meetings. In Interventional Radiology I learned about techniques and protocols which were different to those in my home Radiology Department and this has opened my mind to new concepts. In cross-sectional imaging I received a lot of teaching in hepatobiliary MRI which has enhanced my understanding of pathology in liver, pancreas, bowel and prostate. It was an invaluable learning experience for me which I really enjoyed.





Chinky Chatur
Yashoda Hospital, Somajiguda, Hyderabad/India
Topic: Paediatric Radiology
Training Centre: Royal Hospital for Children, Glasgow/United Kingdom

I will be forever grateful to ESOR for providing me with this exceptional learning opportunity. Getting to learn the basics and advances of paediatric radiology from the very knowledgeable and experienced staff at the Royal Hospital for Children, Glasgow was indeed an enriching and enlightening experience. RHC is a part of the Queen Elizabeth University Hospital, which is operated by NHS Greater Glasgow and Clyde and is one of the largest hospital campuses in Europe. RHC is recognized as the sole provider in Scotland, for a number of specialized services. I would like to thank the entire staff of Department of Imaging at RHC, who made me feel welcome and integrated me into the work of their proficient team. I want to express my sincere gratitude to my tutor and Head of the Department, Dr. Andrew Watt for sharing his amazing knowledge with me and for always being so helpful and positive. He not only helped me in learning about the basics of each and every aspect of paediatric radiology but also gave me an opportunity to attend additional sessions of paediatric neuroradiology with Dr. Kirsten Forbes and paediatric musculoskeletal radiology with Dr. Greg Irwin and Dr. Thomas Savage, because of my interest in the aforementioned fields. I would also like to thank Dr. Ruth Allen for not only sharing pearls of paediatric cardiac imaging with me but also motivating me to take part in scientific work. Under her guidance, I have prepared an educational exhibit on Vigabatrin associated brain abnormalities on MRI (VABAM) for the annual conference of British Society of Paediatric Radiology (BSPR 2018). During my training, I was actively involved in diagnostic imaging, interventional procedures and attended several lectures for trainees, multidisciplinary meetings, tumour boards and research seminars. This training met and surpassed my expectations, broadened my horizons and would definitely influence my professional career and future life. I shall always cherish the fond memories of the time spent at RHC and in the beautiful country of Scotland.



Mariana Correia
Hospital Curry Cabral, Lisbon/Portugal
Topic: Interventional Radiology
Training Centre: Hospital Clinic of Barcelona, Barcelona/Spain

I am very grateful for the opportunity to spend a three-month period in the Interventional Radiology Department of Clínic Hospital, for the ESOR Visiting Scholarship Programme. This experience has truly enriched my last year of residency. Since the beginning, I was actively involved in the Department activities, willing to participate in the discussions of clinical indications, interventional strategies and the selection of the best devices for each patient. I had the opportunity to participate in all kinds of different body interventional procedures, mainly in the angio-suite, improving not only my knowledge but also my skills in this field. This was a great experience and surely I encourage all the residents to apply in the next year!



Aurelio Cosentino
Azienda Ospedaliera Cittá della Salute e della Scienza di Torino, Turin/Italy
Topic: Emergency Radiology
Training Centre: King's College Hospital, London/United Kingdom

The visiting scholarship in Emergency Radiology at the King's College Hospital in London was an immense opportunity to advance my training in the field. As part of the radiology team, I have been involved in all the educational activities, including multidisciplinary meetings, lectures and case-by-case discussions. In the biggest trauma centre in London, I have seen an extremely wide range of interesting and engaging cases. I am particularly grateful to my tutor, Dr. Lisa Meacock, a highly expert radiologist and a great and friendly teacher. I would like to thank ESOR for giving me the possibility to have this significant experience that will be of immense help for my future work and career.





**Evelyn Dappa**Universitätsmedizin Mainz, Mainz/Germany
Topic: Urogenital Radiology

Training Centre: Instituto Portugues de Oncologia de Lisboa Francisco Gentil, Lisbon/Portugal

I am very grateful to ESOR for awarding me a three-month scholarship in Urogenital Radiology at Instituto Português de Oncologia Francisco Gentil in Lisbon. During my training period, I had the opportunity to participate in the daily clinical work and the weekly multidisciplinary meeting, which helped me acquire a solid theoretical background of various gynaecological pathologies. I am especially thankful to my tutor Dr. Teresa Margarida Cunha for her willingness to share her knowledge with me. It has been a unique experience in my career, which further strengthened my interest in urogenital radiology.



Nicolas De Vos Ghent University Hospital - UZG, Ghent/Belgium Topic: Abdominal Radiology Training Centre: Hôpital Beaujon, Clichy/France

I am very grateful to ESOR for giving me the unique opportunity to attend the Visiting Scholarship Programme in Abdominal Radiology at the Hôpital Beaujon in Clichy, France. For three months, I had the privilege to take part in a structured training programme. This included dedicated training in US, CT, MRI and interventional procedures, participation in multidisciplinary meetings and teaching seminars, and active contributions to ongoing research projects. I sincerely thank Prof. Vilgrain, Prof. Ronot and all the other senior radiologists and residents of the department for sharing their knowledge and experience with me, which allowed me to widely expand my own expertise. I can strongly recommend this experience to every radiology resident!



Milda Dedelaite
Aalborg Universitetshospital, Aalborg/Denmark
Topic: Abdominal Radiology
Training Centre: King's College Hospital, London/United Kingdom

I am very grateful to ESOR for this amazing opportunity to participate in a three-month scholarship programme with focus on gastrointestinal imaging at King's College Hospital in London. As I am writing this, I have yet to complete 2 months of the programme. When I arrived, I was warmly welcomed by all the staff members of the radiology department and by the head of the department Prof. Paul Sidhu. I want to especially thank my amazing tutor, who is a great inspiration to me, Dr. Suzanne Ryan for the hospitality, willingness to teach and daily discussions of interesting cases. In addition to that, I am able to participate in multidisciplinary meetings, reporting sessions, teaching sessions and lectures. It has been an amazing experience so far and I am improving my knowledge of gastrointestinal imaging every day. It is also very interesting to talk with the local radiology trainees and learn about the different model of radiology training.





Elena Esteban García University Hospital Torrevieja, Torrevieja/Spain Topic: Abdominal Radiology

Training Centre: Heidelberg University Medical Center, Heidelberg/Germany

I am very grateful to the ESOR/ESR for giving me this great opportunity to spend three months in the Abdominal Radiology Department at Heidelberg University Medical Center, Germany. I had the opportunity to take part in daily work and I was fully involved in all activities of the department, including educational lectures and attendance to multidisciplinary meetings and tumor boards. I would like to express my gratitude to the Head of Department, Prof. Hans-Ulrich Kauczor and his radiology team for welcoming me and for sharing their knowledge. Finally I would like to thank my tutor Dr. Ekaterina Khristenko for her constant support and for encouraging me and helping me to do a scientific work together.



Ahmad Reshad Faizi
French Medical Institute for Mothers and Children, Kabul/Afghanistan
Topic: Chest Radiology
Training Centre: Hacettepe University Hospitals, Ankara/Turkey

I am really proud to have been part of the ESOR Visiting Scholarship Programme. During these months of training in the prestigious Hacettepe University Hospital I have improved my knowledge in chest radiology. I participated in a weekly multi-disciplinary meeting involving radiologists, pulmonologist, cardiothoracic surgeon and radiotherapists. I would like to thank Professor Macit Orhan Ariyurek, Professor Deniz Akata, Professor Meltem Gulsun Akpinar, Professor Figen B. Demirkazik and the entire radiology department team. I am very grateful to the ESOR team and sponsors for providing me this excellent opportunity to expand my experience and knowledge in chest radiology.



Knkush Hakobyan Heratsi Hospital Complex N.1, Yerevan/Armenia Topic: Abdominal Radiology Training Centre: Skåne University Hospital, Malmö/Sweden

I am very thankful to ESOR for giving me this unforgettable opportunity to extend my knowledge and experience in Abdominal Radiology at the Skåne university hospital in Malmö, Sweden. The medical staff was very supportive to me, all medical residents and all doctors helped me to understand new kinds of research, explained all interesting cases and encouraged me to write my own reports. My supervisor was Peter Leander and I think that I have been really lucky to meet him. He played an indescribable role in my training and solved all problems. He often organized private lectures for me in English and other doctors participated in that as well. I am really satisfied with this training and I am sure that it will help me during my career and will be the first big step on my way to become a professional specialist.





Rafael Heiß
University Hospital Erlangen, Erlangen/Germany
Topic: Musculoskeletal Radiology
Training Centre: Inselspital, University Hospital Bern, Bern/Switzerland

I am very grateful to ESOR for awarding me a three-month scholarship in musculoskeletal imaging at the University Hospital of Bern and especially to my head of department Prof. Dr. M. Uder for supporting my stay abroad. I would like to thank my mentor Dr. J. Cullmann and all members of the musculoskeletal imaging section for teaching me theoretical and practical skills and for sharing their experiences. During my stay, I had the opportunity to attend clinical conferences, observe examinations and interventions, and participate in teachings for residents, educational lectures and multidisciplinary boards. Apart from participating in the clinical routine, I had the chance to gain insights in the organization and management of the department. The scholarship was an outstanding experience that will sustainably impact my professional development in the future.



Rūta Kliokytė
Vilnius University Hospital Santariskiu Klinikos, Vilnius/Lithuania
Topic: Molecular Imaging
Training Centre: University College London Hospital - Institute of Nuclear Medicine,
London/United Kingdom

Firstly, I would like to thank ESOR for this amazing opportunity to not only broaden my medical knowledge but also grow as a person. I am also deeply grateful to the head of the department, Prof. Jamshed Bomanji, my tutor, Dr. Francesco Fraioli, all of the consultants of the department as well as the staff for helping me on daily basis and making me feel welcomed. During my stay, I attended multidisciplinary meetings, reported PET scans, took part in weekly teaching seminars and become involved in a research project. Most importantly, I have deepened my knowledge and gained valuable experience in the ever-expanding field of nuclear medicine. All in all three extraordinary months have passed leaving behind great memories, useful skills and new friends.



Maruša Kotnik
General Hospital Slovenj Gradec, Slovenj Gradec/Slovenia
Topic: Cardiac Imaging
Training Centre: Leiden University Medical Centre, Leiden/The Netherlands

I am very grateful to ESOR for giving me this great opportunity to expand my knowledge of cardiac imaging in one of the leading University Medical Centres in the Netherlands. I would like to express my gratitude to the whole Cardio-Thoracic team for making me feel welcome and for their support and all the expertise they shared with me. I am especially grateful to my exceptional tutor, Dr. Lucia Kroft for sharing with me her vast theoretical as well as practical knowledge and for her support in all the aspects of my time spent at the department. I am also very honoured and grateful to be able to work with Prof. Albert de Roos as one of my supervisors. During my three-month visit, I had the opportunity to be actively involved in everyday cardiac and thoracic imaging as well as reporting. I have also attended weekly cardiac multidisciplinary meetings, everyday department meetings and general teaching sessions for registrars with many interesting cases from all fields of radiology. I learned how to work with and interpret new cardiac MRI imaging sequences and novel cardiac CT techniques. Moreover, I was given the opportunity to be involved in research work with special support from Prof. Hildo Lamb. This scholarship gave me invaluable educational as well as cultural experience and I would highly recommend this program to all the residents who wish to expand their knowledge and broaden their horizons not just in professional but also in personal development.





Anna Lavrova
Almazov National Medical Research Centre, Saint Petersburg/Russia
Topic: Oncologic Imaging
Training Centre: Inselspital, University Hospital Bern, Bern/Switzerland

I am very grateful to ESR/ESOR for giving me this unique opportunity to participate in a three-month Visiting Scholarship programme on Oncologic Imaging at one of the most respected hospitals in Europe – Inselspital, University Hospital Bern in Bern/Switzerland. During my training period, I was able to observe all areas of oncologic imaging and join different teams according to my rotation plan: thorax, abdomen, musculoskeletal, neuroradiology and nuclear medicine. I attended daily clinical, research activities, multidisciplinary tumor boards and, occasionally, regional congresses. I would like to thank the Head of the Department, Prof. Dr. med. Johannes Heverhagen, and my tutor, Prof. Dr. Hendrik von Tengg-Kobligk, for their hospitality and support. I also express my gratitude to my mentors from different teams: PD Dr. Lukas Ebner, Prof. Dr. Florian Dammann, Dr. Frank Mosler and to all the faculty and residents for sharing their knowledge. I am convinced, that this inspiring experience will have a positive influence on my future professional and research career.



Benjamin Leenknegt
AZ Sint-Jan Hospital, Brugge/Belgium
Topic: CEUS
Training Centre: King's College Hospital, London/United Kingdom

I am very grateful to the ESOR community for awarding me the invaluable opportunity to participate in a three-month Visiting Scholarship in Contrast Enhanced Ultrasound at King's College Hospital in London, UK. It has been an utterly rewarding experience. I was offered the chance to learn from world reference radiologists on a fascinating new imaging technique. Upon arrival, the entire staff of the radiology department of King's College Hospital offered me a very warm welcome. Immediately, I felt submerged in a vibrant teaching-minded atmosphere. I would like to express my profound gratitude to all hospital staff and especially to Prof. Dr. Paul S. Sidhu and Dr. Anna-Maria Deganello for what has been an unforgettable experience.



Magdalena Lunkiewicz
Kantonsspital Baden, Baden/Switzerland
Topic: Musculoskeletal Radiology
Training Centre: Medical University of Vienna, Vienna/Austria

Thanks to the European School of Radiology and to my very much appreciated tutor Prof. Dr. Franz Kainberger (Neuro- und MSK-Radiology Department at AKH, Medical University of Vienna) I had the great opportunity to work with and to complete a three-month observership in the above named department under the supervision of Prof. Dr. Daniela Prayer. From the very beginning, I was involved in the daily routine of this outstanding radiological team and was welcomed to various multidisciplinary boards. Thanks to Prof. Kainberger's initiative, I attended numerous scientific sessions and educational lectures dealing with fascinating cases. As Prof. Kainberger is the leading member of the radiological training team at the Medical University of Vienna, I had a unique opportunity to gain an insight into the teaching process, including the lecturing. Thanks to Dr. Iris Nöbauer-Huhmann and Dr. Hannes Platzgummer I had the possibility to improve my MSK ultrasound skills e.g. the ultrasound-guided interventional techniques at peripheral nerves. I am looking forward to my remaining training period at AKH in Vienna and hope to apply the gained knowledge back home in Switzerland.





Tom Matton
University Hospitals Leuven, Leuven/Belgium
Topic: Musculoskeletal Radiology
Training Centre: Case Western Reserve University, Cleveland/USA

The ESOR Visiting Scholarship at University Hospitals Cleveland was an exceptional opportunity for me to expand my knowledge in musculoskeletal radiology. Since my first day I felt warmly welcomed by all members of staff including attendings, residents and fellows. During the three months I attended multidisciplinary meetings, daily educational lectures during lunch and learned markedly from a large number of studies reviewed on a daily basis in the musculoskeletal reading room. Furthermore, I took part in daily interventional diagnostic CT-based procedures. The teaching was of the highest standards, and it was great fun to work with everyone. I am particularly grateful for this unique opportunity to ESOR, my attending mentors in musculoskeletal radiology Dr. Peter C. Young and Dr. Christos Kosmas and MSc F. Philipp W. Graner of the radiology clinical research department.



Hanna Model
Republican Scientific and Practical Center of Cardiology, Minsk/Belarus
Topic: Cardiac Imaging
Training Centre: University Hospital Zurich, Zurich/Switzerland

I want to express my gratitude to ESOR/ESR for giving me the great opportunity to conduct the three-month training on Cardiac Imaging at the University Hospital Zurich, Zurich/Switzerland. It was an amazing experience for me. During my training period I have been able to participate in the daily work of the department, to learn from very skilled radiologists and to take part in research projects of my field of interest. I was involved in discussions of diagnostic cases and was able to ask all questions on cardiac imaging. I would like to thank my tutor, Prof. Hatem Alkadhi, for his warm welcome, support and willingness to share his knowledge. This program definitely helped me to improve my knowledge and skills in Cardiac Imaging.



Cristian Giuseppe Monaco
University of Milan, IRCCS Policlinico San Donato, San Donato Milanese/Italy
Topic: Breast Imaging
Training Centre: King's College Hospital, London/United Kingdom

I am very grateful to ESOR for giving me the opportunity to attend the three-month Visiting Scholarship at the Division for Breast Imaging of King's College Hospital in London. I want to thank the Director of Radiology Department, Prof. P. Sidhu, who friendly accepted me and other ESOR Scholars, and the Breast Imaging Director, Dr K. Satchithananda, who was dedicated to my learning and gave me the opportunity to contribute to ongoing research project. I really would like to thank also my tutor Dr. C. Peacock and all the Consultants: since the first day I was involved into daily clinical activity, learning from skilled professionals always ready to give me useful explanations and suggestions. As this is a big centre involved in the national screening program, I had the opportunity to see many interesting cases and also to know differences from my country screening program: a great opportunity to test another training environment and to learn different ways to work. I had also the possibility to attend the weekly multidisciplinary meetings, a very important and useful opportunity to see different approaches to breast disease also from the point of view of pathologists, surgeons and oncologists. It wasn't my first time in London, and living in this city also contributed to make these months unforgettable: I really recommend this scholarship, a chance to improve knowledge and skills, a chance to have a unique experience.





Nerses Nersesyan Hospital Clínico Universitario de Valencia, Valencia/Spain Topic: Neuroradiology Training Centre: Städt. Klinikum Karlsruhe, Karlsruhe/Germany

The three-month scholarship in the topic of Neuroradiology awarded by ESOR has been a professionally inspiring and culturally enriching experience that I will stubbornly cherish in the deep grey matter of my limbic system. I am wholeheartedly grateful for the warm welcoming of Dr. Jan Rabe and the understanding and insights provided by the Head of Department, Prof. Peter Reimer. To Dr. Sebastian Arnold, tutor and head of the section of neuroradiology, I can only express my deepest professional respect and personal esteem. This life-changing and career-defining opportunity overwhelmed my highest expectations.



Josip Ninčević
University Hospital Center Sisters of Mercy, Zagreb/Croatia
Topic: Oncologic Imaging
Training Centre: Memorial Sloan Kettering Cancer Center, New York/USA

I want to take this opportunity to thank ESOR, ESR and Memorial Sloan Kettering Cancer Center, NY, for making six months of my life, from April to September 2018, very special in every possible way. I was an observer and research fellow in one of the most respectful oncologic center in the world. I profited a lot in a clinical and scientific sense, attending many lectures, disease management teams, fellowship meetings and social events. I was helping on five big research projects and even working as the principal investigator on one of them. I was working with the Chair of the Department, Dr. Hedvig Hricak, Chief of Body Imaging Service, Dr. Alberto Vargas, Yulia Lakhman, MD and Andreas Wibmer, MD. They all mentored me, accepted me warmly and taught me how to be a great investigator and clinical radiologist. My main topics were genitourinary and gynecological radiology, but I also learned a lot by observing other attendings of MSKCC Body imaging service. I have met and become friend with other clinical and research fellows. I will never forget the summer of 2018.



Olanrewaju Adebusuyi Ogunleye University College Hospital, Ibadan/Nigeria Topic: Interventional Radiology Training Centre: Leeds Teaching Hospital NHS Trust, Leeds/United Kingdom

Firstly, I would like to thank ESOR and ESR for this rare opportunity to study Interventional Radiology in a big radiology training center. I was welcomed with open arms by my tutor – Dr. Sapna Puppala - and all the radiology staff at the Leeds University Teaching Hospitals. I have learnt a lot in the time that I have been here and I feel that interventional radiology is the way forward for me career-wise. In Leeds, I observed both vascular and non-vascular procedures and had most of these procedures explained to me in step-by-step fashion by the IR staff. I also took time to learn diagnostic radiology in a foreign environment with different disease prevalence when compare to my home community. I look forward to returning to my home hospital to begin hands-on procedures in Interventional Radiology.





Madhvi Patel
St George's Hospital, London/United Kingdom
Topic: Musculoskeletal Radiology
Training Centre: Azienda Ospedaliero Universitaria Careggi, Florence/Italy

I am so grateful to have been given the opportunity to spend 3 months training in musculoskeletal radiology at Careggi University Hospital in Florence. I was exposed to a huge variety of cases during my MRI sessions, particularly involving bone tumour diagnostics which I found especially interesting. I was able to give input, alongside fellow residents, in both image acquisition and interpretation, and was guided by my tutors along the way. I was also involved in interventional ultrasound cases and was able to build upon my own experiences. Overall I am very appreciative of all the time and effort all the tutors have given me over my 3 month period and I strongly recommend this hospital for future placements.



Pawan Patel
St George's Hospital, London/United Kingdom
Topic: Abdominal Radiology
Training Centre: Azienda Ospedaliero Universitaria Careggi, Florence/Italy

I am very grateful to ESOR for awarding me the three-month scholarship in Abdominal Radiology at one of the largest teaching hospitals in Italy - Azienda Ospedaliero Universitaria Careggi in Florence. I had exposure to a wide range of specialist imaging techniques which included flurosocopy, CT and MRI. I was involved in image acquisition and was able to interpret all the scans before going through them with the Consultant. The experience introduced me to a new approach to diagnostic radiology and I would like to thank all the radiologists and residents I worked with to make this an incredibly worthwhile experience. I encourage everyone to apply.



Ahmet Peker

Dokuz Eylül University Hospital, Izmir/Turkey

Topic: Interventional Radiology

Training Centre: Cambridge University Hospitals NHS Trust - Addenbrooke's Hospital,

Cambridge/United Kingdom

I am very grateful to ESOR for awarding me the three-month scholarship in Interventional Radiology at Addenbrooke's Hospital in Cambridge. Firstly, I would like to express my greatest gratitude to my tutor, Prof. Miltiadis Krokidis, for sharing his experiences with me and giving me the opportunity to contribute to research projects. During my scholarship, I have been involved in daily practice, a wide range of interventional procedures and multidisciplinary meetings. In Addenbrooke's I.R. there are so many experienced, academic and kind consultants. Each of them has their own individual perspective, they always have evidence-based explanations and I have learned so much during my time here. This has been an incredible opportunity for me to work with them. I would like to thank all the consultants and interventional radiology team for the warm welcome and the great experience. I would highly recommend this experience to everyone.





Filippo Pesapane
ASST Santi Paolo e Carlo, Milan/Italy
Topic: Urogenital Radiology
Training Centre: King's College Hospital, London/United Kingdom

Thanks to ESOR, I am currently spending a high-level scholarship with the radiology team at King's College Hospital in London (England, UK), an excellent place to continue developing my skills whilst combining clinical and research activities, particularly in urogenital radiology. During my scholarship, I am involved in both diagnostic and interventional radiological procedures, and I attend several multidisciplinary meetings and daily teaching as well. I am also currently working as a first researcher on a study to test the hypothesis that the focal testicular lesion should be quantitatively evaluated by Contrast Enhanced Ultrasound (CEUS). The opportunity to be involved in this training scheme surely improves my ability to integrate myself culturally, linguistically and organisationally in other centres outside Italy. I would like to express my gratitude especially to my tutor Dr. Dean Huang for his constant support and to Prof. Paul Sidhu, a great mentor. I strongly encourage all trainees to apply for this great opportunity offered by ESOR.



Christoph Polkowski
University Hospital Frankfurt, Frankfurt/Germany
Topic: Oncologic Imaging
Training Centre: Memorial Sloan Kettering Cancer Center, New York/USA

The ESOR Visiting Scholarship Programme offered me the exceptional opportunity to experience a different training environment abroad. After a warm welcome by Prof. Hricak and her team I joined the daily case readout sessions, supervised by specialized faculty radiologists, and attended a variety of disease management conferences and didactic lectures, including a continuous course program with weekly conferences for the radiology fellows as well as an oncologic imaging lecture series. Besides this I was able to participate in research projects using machine learning algorithms and classification systems. I want to thank ESOR and the whole Radiology Department at MSKCC for this great experience.



Lino Morris Sawicki
University Hospital Düsseldorf, Düsseldorf/Germany
Topic: Oncologic Imaging
Training Centre: Netherlands Cancer Institute - Antoni van Leeuwenhoek, Amsterdam/
The Netherlands

I want to express my deep gratitude towards ESOR for awarding me with this 3-months scholarship in Oncologic Imaging at one of Europe's most prestigious cancer centres, Antoni van Leeuwenhoek in Amsterdam. I would like to thank the Head of Department, Prof. Dr. Regina Beets-Tan and the whole radiology team for giving me a warm welcome. Throughout the entire program, I had the opportunity to not only take part in the daily routine of the oncological radiology department, but to also attend different academic lectures and multidisciplinary board meetings. I was able to increase knowledge on up-to-date diagnostic imaging tools, such as multi-parametric MRI for prostate cancer, both in early diagnosis, surveillance and radiological follow-up. I would also like to give a special thank you to Dr. Stijn Heijmink and Dr. Thierry Boellard for their commitment and effort in giving lectures, which was truly inspirational for me. Moreover, the beauty of Amsterdam and the insights I earned during these three months will remain fondly in my memory.





Anna Seehofnerová University Hospital Brno, Brno/Czech Republic Topic: Paediatric Radiology

Training Centre: Medical University of Graz - LKH, Graz/Austria

My three months Visiting Scholarship at Landeskrankenhaus - Medical University Hospital Graz has been a wonderful experience. My daily routine included basically all the modalities, visiting rounds at different paediatric departments and I could attend a wide spectrum of interdisciplinary meetings, teaching classes and seminars, too. I was also quite lucky to participate in an advanced course on paediatric radiology, which was ongoing during my stay in Graz. I believe my knowledge of paediatric radiology improved during the scholarship and I am looking forward to use this experience in my future work. I would like to thank all of the radiologist, specialist and residents, in LKH-Med. Uni Graz for making me feel welcome and helping me to get deeper insight of paediatric radiology. Last but not least I want to thank ESOR/ESR for allowing me to gain this unforgettable experience.



Chitrangada Singh D. Y. Patil Hospital, Navi Mumbai/India Topic: Breast Imaging Trainining Centre: Norfolk and Norwich University Hospitals NHS Foundation Trust, Norwich/ United Kingdom

ESOR gave me an opportunity to not just observe Breast Imaging Services at one of the pioneer centres in UK for breast screening programme - Norfolk and Norwich University Hospitals - but also a dream - to do something similar in my workplace. The exposure and the curriculum was really well planned in advance by my mentor, Dr. Arne Juette, and his team, especially Dr. Victoria Ames, Dr. David Newman, Dr. Kelvin Tan and Dr. Samyukta Boddu. A special mention goes to the Radiographers team headed by Rachel Hiscock for introducing me with the minute details that go into running such a successful department. The curriculum included screening work-consensus meets - multidisciplinary meets apart from an assortment of breast interventional procedures like Vacuum biopsies/excisions and ROLL. It was not just an observership but a future that I can see!



Bárbara Trapp Clinica Villas Boas, Brasilia/Brazil Topic: Neuroradiology Training Centre: Medical University of Vienna, Vienna/Austria

Undoubtedly, the three-month ESOR Visiting Scholarship Programme in Neuroradiology at the Vienna General Hospital was the most amazing and valuable experience I have ever had in radiology, and I am extremely grateful I had the chance of getting a position. Apart from participating in routine clinical reporting in Neuroradiology, I had the opportunity to attend daily lectures in General Radiology and weekly multidisciplinary meetings focused on Brain Tumours and advanced MR imaging techniques. I am especially thankful to my tutor Prof.Dr. Majda Thurnher, an impeccable mentor and Neuroradiologist, for her perfect teaching and example of constant search for excellence. I also want to express my deep gratitude to Dr. Maria Theresa Schmook for all the weekly rich discussions in Brain Tumors. Finally, I would like to thank Prof.Dr. Daniela Prayer (Head of the Neuroradiology Department), Dr. Sophie Bartsch and Dr. Lucas Reider for welcoming me so warmly. In my opinion, this is an indispensable experience for all radiology residents searching for constant improvement. I am sure that the experience acquired during this period will have an important impact on my daily practice and on my future professional career as a radiologist, positively influencing the development of the specialty in my country. I strongly recommend this unmissable opportunity to all residents around the world! Congratulations to the ESOR team for this amazing Program!





Filip Vitosevic
Clinical Center of Serbia, Belgrade/Serbia
Topic: Interventional Radiology
Training Centre: Hôpital Purpan - Centre Hospitalier Universitaire (CHU) de Toulouse,
Toulouse/France

I am very grateful to ESOR and ESR for the unique opportunity to expand my knowledge in Interventional Neuroradiology at the Purpan Hospital in Toulouse as a part of ESOR Visiting Scholarship Programme. During the 3-month period of my scholarship, I could participate in the daily department work as a part of the team with numerous interesting cases. I am especially thankful to my mentor, Prof. Cristophe Cognard, as well as Dr. Anne Christine Januel, Dr. Caterina Michelozzi and Dr. Jean Darcourt for their excellent teaching and sharing of vast knowledge and skills. I would also like to thank all specialists and residents for their warm welcome, support and common time spent at the department. It has been a real honor for me to be a part of their team. My ESOR Scholarship was indeed a huge step forward in my neuroradiological career.



Ye Cao Wang
First People's Hospital of Changzhou, Changzhou/China
Topic: Hepatobiliary Imaging
Training Centre: University Hospital Birmingham - Queen Elizabeth Medical Centre,
Birmingham/United Kingdom

First of all I would like to thank the European School of Radiology and the European Society of Radiology for providing me with such a valuable 3-months studying experience at the Queen Elizabeth Hospital Birmingham, which is the biggest hospital in the United Kingdom. Thank you to the ESOR Office for giving me kind arrangement and guidance for implementing this programme. With the direction of my tutor, Dr. Robert Briard, I have made several friends in the radiology Department (Dr. Hemi Mehrzad, Dr. Karkhanis Salil, Dr. Hancheng Zhou, Dr. Helium, Dr. Marco Salsano, Dr. Michal Palor) and enjoyed this wonderful time. I have seen many interventional procedures and discussed with physicians about the different ways of operations between China and United Kingdom.



Alexander Wressnegger
Medical University of Vienna, Vienna/Austria
Topic: Interventional Radiology
Training Centre: The National Hospital of Neurology and Neurosurgery UCLH Foundation
Trust, London/United Kingdom

With the ESOR Programme I got the chance to spend three months in one of the most important centres for neurology and neurosurgery in Europe, located in the heart of London. I was really impressed about the wide range of neurointerventions they perform there, ranging from the treatment of arteriovenous malformations, cerebral aneurysms, acute stroke, to Vein of Galen malformations in new-born children. Consultants took their valuable time to explain the different procedures to me in detail and I could feel the passion they find for their work. Apart from neurointerventions I visited specialists working on every branch of brain, spine and peripheral nerve pathology and plenty of weekly meetings were open to be joined all around the neuroscience campus of Queen Square, including dedicated teachings for registrars and fellows. I highly recommend to apply for an ESOR scholarship to widen your horizon in a new environment and gain new perspectives on how you work in your own country.





Rima Yeghiazaryan
Diagnostica Medical Corporation, Abovyan/Armenia
Topic: Oncologic Imaging
Training Centre: Krankenhaus Nordwest, Frankfurt/Germany

We all have goals, desires, dreams for which we run even when we do not feel our legs anymore, we work when eyes are closing from exhaustion, we do not give up when there is no chance to succeed. We try the 2<sup>nd</sup>, 10<sup>th</sup>, 100<sup>th</sup> time after fail. We rise above physical and emotional needs and we achieve the goal. For me, as with many other residents, it was a desire to experience this opportunity. I should accept that the reality was even more thriving. I got the chance to have three-month training in Oncologic Imaging at Krankenhaus Nordwest, Frankfurt am Main/Germany. I had access to huge amount of cases on X-ray, CT and MRI, including enlightening ones. Moreover, I wrote reports on my own which presented a huge step for my professional development, including my medical German. I want to thank my tutors Dr. Ursula Jaeger for her positive reinforcement, Dr. Björn Gemein for his mentorship, Dr. Simon Stahn who is one of the most prominent interventional radiologists I have ever worked with. I am also grateful to the chief of department Prof. Markus Düx, for his hospitality and support in everything. During the period I also attended weekly multidisciplinary meetings and case presentations every day. Fortunately, I was also able to participate in different conferences. It was a great honor and motivation to be part of this experience, which will serve me for my future development as a radiologist. I am grateful to ESOR for making me believe and work even harder. Thank you for these three amazing months of my life.



Serap Yucel
Ondokuz Mayis University Hospital, Samsun/Turkey
Topic: Breast Imaging
Training Centre: Odense University Hospital, Odense/Denmark

Thanks to the ESOR committee for this great opportunity to join a three-month scholarship programme in Breast Department of Odense University Hospital. After my arrival the whole breast department showed me a warm welcome. My tutor, Dr. Larsen, provided me with a wonderful experience in breast imaging. I got the chance to observe breast interventions and attend the multidisciplinary sessions. During my stay, thanks to Dr. Larsen, I had also opportunity to participate in a scientific research also, alongside the every day routine. I am also grateful to the director of the department, Prof. Dr. Karstoft, the other doctors in the breast department and to all the radiology team. This scholarship improved my skills in breast imaging and though will be beneficial to and my country as well. Also, my future career will be influenced by this unique experience. I would like to encourage residents around Europe to take advantage of this opportunity.





## EXCHANGE PROGRAMMES FOR FELLOWSHIPS



## EXCHANGE PROGRAMME FOR ABDOMINAL RADIOLOGY FELLOWSHIP



Santhosh Kumar Geetha Virupakshappa Radnest Imaging Solutions, Bangalore/India Topic: Abdominal Radiology Training Centre: Cambridge University Hospitals NHS Trust - Addenbrooke's Hospital, Cambridge/United Kingdom

I feel very fortunate being part of the ESOR family. My experience in these 3 months of the fellowship program was truly positive and rewarding. It was a good opportunity for me to learn abdominal imaging, clinical workflow and work pattern in a referral hospital in the UK. While gaining knowledge and skills in radiology, I also got inspired by the teaching enthusiasm, wisdom and politeness of my mentor, Ed Godfrey. I thank all the radiology consultants and fellows in the department for making me feel so comfortable and for magnanimously sharing their knowledge. Another great experience was living in Cambridge, a student friendly university city. I will surely miss the beautiful buildings, river Cam and cycling in Cambridge. Thank you ESR and ESOR for giving this great opportunity to me!



Shedrack Felangu Kenis
Ahmadu Bello University Teaching Hospital, Zaria/Nigeria
Topic: Abdominal Radiology
Training Centre: University College London Hospital - Centre for Medical Imaging, London/
United Kingdom

Certainly my training at the University College Hospital London in Abdominal radiology is the highest and most valuable professional platform I ever saw radiology being practice. I want to thank the ESR and ESOR/ESGAR for this opportunity. The training is of immense value to my chosen career and has certainly connected me to top GI Radiologists in the world. I learned various application of MRI including comprehensive evaluation of rectal cancer and assessment of Crohn's disease with its perianal component. My confidence to approach hepatobiliary imaging, particularly MRCP is far better than before the training. Protocoling and interpretation of CT colonography is a completely new competency I gained. I am very appreciative of my tutors and the remaining members of the GI radiology team.





Numan Kutaiba Austin Health, Heidelberg/Australia Topic: Abdominal Radiology Training Centre: Pitié-Salpêtrière University Hospital, Paris/France

I am currently undergoing a three-month fellowship in abdominal imaging at a leading centre in Paris, Pitié-Salpêtrière University Hospital. I would like to thank my supervisor, Prof. Olivier Lucidarme, and the entire radiology team for welcoming me and involving me in their work and academic environment. Special thanks to Dr. Mathilde Wagner who has been supporting me throughout this period as well. This is an excellent centre with dedicated subspecialist care and high-end imaging. I have been attending multidisciplinary meetings and weekly teaching sessions with an emphasis on hepatobiliary and digestive oncological imaging. Despite my modest French language skills, there is a supportive atmosphere from everyone. Furthermore, living in Paris during this mini-fellowship adds an additional charm to the experience which I highly recommend.



Kashif Nadeem Liaqat

Dr. Sulaiman Al-Habib Medical Group - Arryan Hospital, Riyadh/Saudi Arabia

Topic: Abdominal Radiology

Training Centre: Università degli Studi "G. d'Annunzio" Chieti - Pescara, Chieti/Italy

I want to express my sincere and deepest gratitude to ESOR/ESGAR for choosing me for this excellent once in a lifetime learning opportunity. 3-months dedicated learning experience in my beloved area of Abdominal Imaging and that too in the beautiful country of Italy is just like an offer I could only dream of. I got a warm reception from my supervisor Dr. Raffaella Basilico, a wonderful human being apart from being a great radiologist and a tutor. While having a tour of the radiology department, she introduced me to the teaching faculty, residents and the rest of the radiology staff. The department also obliged me by arranging a welcome dinner in my honor. During my stay, I got exposure to various method and techniques of Abdominal Imaging procedures being done. I paid special attention to overcome my weaknesses and limitations like in Oncological imaging. I tried to learn and perform different procedures like CEUS which is not done at my workplace. I also attended multimodality meetings, an effective forum which provided me insight into local practice guidelines and a chance to learn some Italian language too. Overall, my experience has been quite encouraging and reassuring, as I consolidated and polished my existing skills and feel more confident and comfortable in dealing with areas of prior weaknesses. This unique European experience will tremendously add to my future practice. I say many thanks to all the staff, residents, lovely Abdominal group, especially to Prof. Cotroneo, Raffaella, Roberta, Barbara and Andrea for making my stay memorable. Ciao e grazie!!!



Fabrizio Mazzamurro
Clinica Nuova Villa Claudia, Rome/Italy
Topic: Abdominal Radiology
Training Centre: Hospital Universitario Miguel Servet, Zaragoza/Spain

I would like to thank ESOR/ESR for giving me this great opportunity to expand my knowledge in abdominal imaging at the Miguel Servet Hospital of Zaragoza. During the period of my fellowship I was able to attend all the different aspects of daily practice including teaching lectures, multidisciplinary meetings and tumor boards. It was very inspiring to review the reports of all the most interesting cases and to evaluate the clinical outcomes. Additionally I would like to thank the amazing team I worked with, starting with the chief of department Dr. Ros and the members of the abdominal radiology team Dr. Sarria, Dr. Larrosa, Dr. Estrada, Dr. Martinez for their warm welcome and the availability to share their knowledge. I would encourage all residents and radiologists to take this opportunity.





Silvia Pizza
Federico II University Hospital, Naples/Italy
Topic: Abdominal Radiology
Training Centre: Hôpital du Kremlin Bicêtre, Le Kremlin Bicêtre/France

I am extremely grateful to ESOR and ESGAR for giving me the opportunity to participate in this three-months exchange programme for Abdominal Radiology at Kremlin Bicêtre Hospital, in Paris. It has definitely been a wonderful learning and life experience. At the beginning I have been warmly welcomed by Professors M.F. Bellin and C. Balasa who introduced me to the hospital's world and all the department staff. Everybody has been so nice involving me in the department activities and sharing their up-to-date knowledge with me. I had the opportunity to write reports and attend with them the weekly multidisciplinary meetings which were incredibly interesting. I want to thank everybody for dedicating me valuable time and effort, for providing me constant and priceless education in their field, and for letting me feel part of the hospital's life. Futhermore Paris is a wonderful vibrant city with a rich cultural heritage and amazing life experiences to explore. Overall I found my time during this programme immensely enjoyable, educational and rewarding and I am sure that such a remarkable experience will positively influence my future work and I sincerely recommend such an experience to all my colleagues.



Svitlana Pochepnia
Eurolab, Kiev/Ukraine
Topic: Abdominal Radiology
Training Centre: Medical University of Vienna, Vienna/Austria

I would like to take this opportunity to express my gratitude for having this chance to participate in my fellowship program. Also, I would like to thank everyone who made me feel welcome and helped me tremendously in this journey especially my mentor, Professor Ahmed Ba-Ssalamah, and his supportive and experienced team, who are among the most experienced and qualified Radiologists in Hepato-biliary and Pancreas disease. It was a privilege to have this opportunity to work with and learn from, some of the best technologies and fellow colleagues in my field, abdominal radiology, at the Allgemeines Krankenhaus der Stadt Wien, Austria. My fellowship was on Gastrointestinal and Abdominal Radiology (ESGAR) with focus on Hepato-biliary and Pancreas Imaging. In this three months, I worked at one of busiest multi-profile university hospitals and experienced modern medical workflow with successful teamwork. In addition, I took part in clinical-radiological conferences to deepen my understanding of interdisciplinary collaboration role. In addition, being in the heart of Europe, Vienna with its rich cultural background, offered me an amazing experience with a dynamic life, delicious cuisines, breath-taking museums, operas, art exhibitions and historical places. I would like to encourage anyone who can to take this life-time opportunity in Vienna to learn, enjoy and experience a wonderful journey.





Carmelo Sofia
Policlinico Universitario "G. Martino", Messina/Italy
Topic: Abdominal Radiology
Training Centre: Netherlands Cancer Institute - Antoni van Leeuwenhoek, Amsterdam/
The Netherlands

I am very grateful to ESOR and ESGAR for giving me the opportunity to take part in the three-month fellowship in Abdominal Radiology at the Netherlands Cancer Institute – Antoni van Leeuwenhoek. From the first days I received a very warm welcome from Prof. Regina Beets-Tan, Dr. Max Lahaye and the entire staff. I have been exposed to a large number of interesting cases and I was invited to attend multidisciplinary meetings, teaching sessions, scientific and educational lectures. I had also the great opportunity to take part to original ongoing research projects, closely working with PhD students. I would like to thank especially Prof. Regina Beets-Tan, my tutor Dr. Max Lahaye, Dr. Doenja Lambregts and PhD student Lisa Min for their kindness and their advices. I am honored to have this opportunity and I am looking forward to improve my knowledge in Oncologic Imaging immersed in an international inspiring research atmosphere in my remaining time at the NKI.



Eugenio Zalaquett Complejo Asistencial Dr. Sótero del Rio, Santiago/Chile Topic: Abdominal Radiology Training Centre: Ospedale Ca' Foncello, Treviso/Italy

I would like to thank ESOR and ESGAR for awarding me the Exchange Fellowship in Abdominal Imaging. I had the outstanding opportunity to learn in Ospedale Ca' Foncello in Treviso, a renowned center in Pancreatic and Hepatobiliary Imaging, under the expert mentorship of Dr. Giovanni Morana. I was able to participate in an enriched academic environment where teaching and research were a priority. The number and variety of cases was truly remarkable, encompassing the full spectrum of abdominal pathology, including novel techniques such as Intravoxel Incoherent Motion Imaging and Secretin-enhanced MRI. Also, I was encouraged to participate in ESR activities, resulting in two posters submitted to ECR 2019 and two cases submitted to EURORAD. This fellowship provided me not only with high quality subspecialty training, but with an integral educational and cultural experience which broadened my horizons.



## EXCHANGE PROGRAMME FOR BREAST RADIOLOGY FELLOWSHIP



Daniela Donat
Clinical Center of Vojvodina, Novi Sad/Serbia
Topic: Breast Radiology
Training Centre: Medical University of Vienna, Vienna/Austria

My experiences during the stay at AKH medical center were outstanding. I gained invaluable knowledge and hands-on training in breast imaging procedures including ultrasound, contrast-enhanced ultrasound, mammography, contrast-enhanced mammography, CORE biopsies, stereotactic VAB biopsies and breast MRI. Furthermore, I established collaboration with several experts in the field which will hopefully lead to our further teamwork, reaserch and parthership. After the fellowhip, I will be able to transfer my knowledge to my colleagues in Serbia with the ultimate goal of upgrading diagnostic procedures now available in the Clinical Center of Vojvodina. All in all, the greatest benefit of this fellowship will be towards my patients, colleagues and my professional career.



**Gyongyi Juharosi**Semmelweis University, Budapest/Hungary
Topic: Breast Radiology
Training Centre: Medical University of Graz - LKH, Graz/Austria

I am grateful I was awarded the ESOR/EUSOBI 2018 Exchange Programme Fellowship in breast imaging. The fellowship provided a unique opportunity to deepen my knowledge in many kinds of breast diagnostic imaging techniques and breast interventions. It was a great honour to be hosted and kindly mentored by Prof. Michael Fuchsjäger, who made possible for me to gain a professionally very valuable experience. I would like to thank also Dr. Sabine Schwarz-Oswald and Dr. Eva Wegmann for sharing their excellent knowledge and expertise with me. I was given the opportunity to participate in the daily routine examinations, sonographic guided core-biopsies as well as mammographic or MRI guided vacuum-core biopsies and preoperative localisations. I also participated in department meetings, multidisciplinary consultations and tumour boards as well. I observed the decision-making processes of complex cases, which will certainly help me in my daily practice. Furthermore I was allowed to join all teaching lectures, ESOR courses and breast imaging courses which were organised during my three-month fellowship programme. I greatly appreciate the warm welcome by Dr. Emina Talakic, who took care of me all the time, and the kindness of every adorable staff member of the Department as well, who made my stay so lovely. In addition I should mention that Graz is a dynamically growing city with a lot of inspiring young people and a "jewellery box like" city centre, especially in advent time. I can only strongly encourage every young radiologist to try this exceptional experience!





Yethiksha Parag Lake, Smit and Partners, Durban/South Africa Topic: Breast Radiology Training Centre: Cambridge University Hospitals NHS Trust - Addenbrooke's Hospital, Cambridge/United Kingdom

My three months at the Cambridge Breast Unit, Addenbrooke's Hospital, has proven to be an enriching experience from both a professional and personal level, where I was able to improve my knowledge on breast imaging and intervention, while interacting with experts in the field of Breast Radiology. I participated in daily reporting sessions, attended multidisciplinary meetings in the Breast Unit, as well as general academic meetings in the Department of Radiology. Furthermore, I was involved in clinical audits in the department, improving my skills in research and broadening my knowledge on available literature and imaging guidelines. I would like to thank Professor Gilbert, my tutor Dr. Sinnatamby, and the radiologists of the breast unit for their mentorship during this time. I would also like to extend my gratitude to the ESOR and EUSOBI for this worthwhile and unique opportunity.



## EXCHANGE PROGRAMME FOR BREAST IMAGING FELLOWSHIP (USA)



Daly Betzabeth Avendano
Hospital San José, Monterrey/Mexico
Topic: Breast Imaging
Training Centre: Memorial Sloan Kettering Cancer Center, New York/USA

The ESOR exchange programme for fellowships are a great opportunity for young radiologists to increase knowledge and experience in every radiology field. Personally, I am very proud and more than satisfied with my training mainly based in Breast MRI research at Memorial Sloan Kettering (MSKCC) with Dr. Elizabeth Morris, Chief of Breast and Imaging Center (BAIC) Evelyn H. Lauder for the Breast imaging exchange program, USA. To Dr. Katja Pinker and Maxine Jochelson who are great professors, mentors and human beings, I would like to say thank you. To all BAIC research team thanks for the valuable time you spent on me. I would like to encourage all radiology residents to pursue and be part of this professional experience, it is worth all the way. I appreciate every one who is involved and make these grants possible. Thank you very much.



Maria Adele Marino
Policlinico Universitario "G. Martino", Messina/Italy
Topic: Breast Imaging
Training Centre: Memorial Sloan Kettering Cancer Center, New York/USA

I am very grateful to ESOR for the unique opportunity of being selected for the six month Exchange Programme at Memorial Sloan Kettering Cancer Center in New York. It was an amazing experience that helped me grow both professionally and personally. I can definitely say this was a positive and successful experience and I was lucky to find inspiring people to work with. My daily routine was based on different research projects on breast imaging. I want to especially thank Dr. Morris, who welcomed me and involved me as part of the team. Dr. Jochelson and Dr. Pinker with whom we connected immediately and eagerly worked with enthusiastic attitude the full six-months. I could experience how an outstanding environment works with international connections who finally became friends. I would encourage anyone to take advantage of such a great experience in a fantastic city.



## EXCHANGE PROGRAMME FOR CARDIOVASCULAR RADIOLOGY FELLOWSHIP



Abhinav Aggarwal
Mata Chanan Devi Hospital, New Delhi/India
Topic: Cardiovascular Radiology
Training Centre: University of Leipzig - Heart Centre, Leipzig/Germany

I am extremely grateful to ESOR and ESCR for selecting me for three-month fellowship in Cardiovascular Radiology at Herzzentrum Leipzig, a highly reputed academic and clinical institute. It is an honour to learn cardiac MRI from one of the best, Dr. Matthias Gutberlet. From the first day itself all the consultants, residents and staff of the department were very warm towards me and made me feel at home. I have already been enrolled into various research projects of the department, something I was looking forward to. I am sure I will be able to be part of various peer-reviewed publications. I attend the daily case discussions and department seminars which helps me remain in touch with general radiology too. Along with the vast spectrum of cases, I am also learning T1 & T2 mapping techniques on a daily basis. I strongly recommend the ESOR three-month exchange programme for high quality sub-speciality training to all budding radiologists. I would also like to take this opportunity to thank the HOD of my parent hospital for being a pillar of strength and helping me get permission for this fellowship.



Maria Nicole Sicaja
Merkur Clinical Hospital, Zagreb/Croatia
Topic: Cardiovascular Radiology
Training Centre: Medical University of Vienna, Vienna/Austria

I am very grateful to ESR/ESOR and ESCR for giving me the opportunity to attend the three-month Fellowship in Cardiovascular Radiology at the Department of Cardiovascular and Interventional Radiology of AKH in Vienna, Austria. I would like to express my greatest gratitude to the Head of Department Prof. Christian Loewe and to my tutor OA Dr.med. Dietrich Beitzke for involving me in all of the daily activities, including the teaching lessons, and giving me the opportunity to attend the regional conferences. They were both generous with their time, knowledge and patience, despite of high burden of everyday activities in the Department. Also, I would like to thank all the senior radiologists and residents of the Department for showing me the extraordinary welcome and willingness to help and teach throughout the everyday activities. Sharing their time, experience and expertise, I had an opportunity to intensify my knowledge in cardiac imaging, and have a much deeper understanding of cardiovascular radiology, an exciting and rapidly evolving field. My gratitude for your contribution to my future success is immeasurable.



## EXCHANGE PROGRAMME FOR HEAD AND NECK RADIOLOGY FELLOWSHIP



Ricardo Correia
Centro Hospitalar de São João, Porto/Portugal
Topic: Head and Neck Radiology
Training Centre: University Hospital of Geneva, Geneva/Switzerland

Although I am still doing the ESOR fellowship in Head and Neck Radiology at Geneva University Hospital while writing this report, I can already understand the value of this unique experience for my career. The head and neck team (Dr. Lenoir, Dr. Stefanelli and Dr. Luscher) welcomed me as one of their own and I have been involved in all activities of the unit: multimodality diagnostic imaging with supervised reporting, observing interventional procedures and also attending the multidisciplinary meetings and educational lectures. There is a strong relationship with other hospital departments, namely ENT, which further enriches the fellowship. Finally, I would like to sincerely thank my tutor, head of section, Professor Minerva Becker, for all the professional and personal opportunities that have been provided to me during the fellowship.



Alja Longo
University Medical Center Ljubljana, Ljubljana/Slovenia
Topic: Head and Neck Radiology
Training Centre: Instituto Portugues de Oncologia de Lisboa Francisco Gentil, Lisbon/Portugal

It was an honor to participate in the three-month training fellowship in head and neck radiology at the Portuguese Institute of Oncology Francisco Gentil under Alexandra Borges's tutorship. The training was very well structured with a diverse schedule of CT and MRI reading sessions, neck ultrasound examinations, multidisciplinary tumor boards, weekly lectures and assignments. I have learnt a lot about head and neck cancer imaging, management and follow up, which will reflect in my everyday clinical and research work in the future. I would like to express my sincere gratitude to my tutor Alexandra Borges for her outstanding teaching style, for welcoming me, spending extra time with me and for being a true inspiration. I am grateful to the ESOR/ESR and the ESHNR for giving me this remarkable opportunity.





Melisha Rolita Pinto
Coorg Institute of Dental Sciences, Virajpet/India
Topic: Head and Neck Radiology
Training Centre: Kings Health Partner (encompassing Kings College Hospital and Guy's and Thomas' Hospital), London/United Kingdom

It was indeed an honor to participate in the three month exchange fellowship in Head and Neck radiology at Kings College Hospital and Guy's and St Thomas' Hospital, London under the supervision of Dr. Steve Connor. During these three months I had the unique opportunity to observe and participate in the clinical activities in salivary gland and neck lump clinics, reporting sessions of CBCT, CT, MRI, involve in scientific studies and participate in multidisciplinary meetings. I also got a chance to witness advanced salivary gland procedures such as sialendoscopy and lithotripsy. I want to offer my deep appreciation to Dr. Connor, Dr. Ngu, Dr. Batchu, Dr. Siddiqui, Dr. Sriskandan and Dr. Touska who offered me a warm welcome despite their hectic daily schedule and contributed greatly to my training during this invaluable period. My sincere gratitude to the European Society of Radiology and the European Society of Head and Neck Radiology for this life-changing opportunity.



Abhijeet Kishor Taori
NKPSIMS and Lata Mangeshkar Medical College, Nagpur/India
Topic: Head and Neck Radiology
Training Centre: Kings Health Partner (encompassing Kings College Hospital and Guy's and Thomas' Hospital), London/United Kingdom

I would like to express my profound sense of gratitude to the European Society of Radiology in awarding me a Fellowship in Head and Neck Radiology. It gave me an opportunity of a lifetime to be part of an amazing team at Kings Health Partners encompassing St. Guys Hospital, St. Thomas Hospital and Kings Hospital, London. The Fellowship schedule was completely tailored to meet my needs and achieve standards to operate independently as a Head and Neck Radiologist which involved Reporting sessions, Multidisciplinary team meetings and Rotations through all modalities with other Fellows and Residents of the department. The highlight of the overall teaching experience was complete access to an extensive library of the teaching cases collated through years and years of hard work. Through all this effort, even though the time was short, I was able to gain an insider's perspective and broad sense of the subject material. I am going to cherish and treasure these memories of fellowship and my time in London forever. The European Society of Radiology (ESR), European School of Radiology (ESOR), European Society of Head and Neck Radiology (ESHNR) have together helped me fulfil a dream. Thank You!



## EXCHANGE PROGRAMME FOR HYBRID IMAGING FELLOWSHIP



Mahmoud Mohamed Aly Rezk
National Cancer Institute, Cairo/Egypt
Topic: Hybrid Imaging

Training Centre: Umeå University Hospital, Umeå/Sweden

First of all, I would like to thank ESR, ESOR and ESHI for their support for me to be the first fellow in Hybrid imaging. I would like to add many thanks to this amazing team, from the Head Prof.Dr Katrin Riklund to all tutors who shared in the successful program. The time spent in Sweden, at Umeå University Hospital, as Hybrid imaging clinical fellow, was unforgettable. During the three months, I got to learn much, as my training was scheduled following an organized system with a very warm work environment that helped me overcome the coldness of the north of Sweden. I liked the place and the rotation system that allowed me to spend time in most of the subspecialties. What is more, I was fully involved in the department activities and I had an opportunity to participate in lectures for residents. I want to say a special thanks to my main tutors, Dr. Lennart and Carolina, for welcoming me, showing me around and tutoring me during my stay. Moreover, I really want to thank all doctors in the department that made me enjoy my full stay. All in all, I gained a lot of professional experience in this hospital and I am sure, that it will influence my future career.



## EXCHANGE PROGRAMME FOR MUSCULOSKELETAL RADIOLOGY FELLOWSHIP



Alejandra Duarte Vallejo
Pontificia Universidad Javeriana, Bogotá/Colombia
Topic: Musculoskeletal Radiology
Training Centre: IRCCS Istituto Ortopedico Galeazzi, Milan/Italy

I am very thankful to ESOR, ESSR and Istituto Ortopedico Galeazzi, my experience has been amazing! I have met wonderful people and excellent MSK radiologists. At the beginning I was amazed with the warming welcome and the volume of MSK studies taken every day, and later I was truly astounded with the knowledge and the teaching willing of every professor at Galeazzi. In addition, I had the chance to participate in research projects from which I also learned a lot. I take this opportunity to deeply thank ESOR for this fellowship, I have learned from the best in MSK RM, CT, X-ray, US and procedures. My most sincere gratitude goes to everyone at Galeazzi, Prof. Luca Sconfienza and ESOR for this priceless opportunity.



Paolo Lombardo Inselspital, University Hospital Bern, Bern/Switzerland Topic: Musculoskeletal Radiology Training Centre: Hôpital Roger Salengro - CHRU Lille, Lille/France

I am sincerely grateful to the ESOR/ESSR for awarding me the three-month fellowship in Musculoskeletal Radiology at the Hôpital Roger Salengro - CHRU Lille, Lille/France. It was a great privilege and an excellent educational opportunity to be a part of a world's leading Musculoskeletal Radiology team and to be able to gain profound knowledge from professionals such as the head of department, Prof. Anne Cotten. During the fellowship, I was able to observe all areas of musculoskeletal radiology and I had the opportunity to attend all radiological courses and multidisciplinary meetings that took place in the Department. Overall, I found my time during this placement immensely educational, enjoyable and gratifying. I am confident in saying I had highly improved my reading skills after these last three months and that this experience will be of immense help for my future work and career. I strongly encourage all my radiology colleagues to apply for this great opportunity offered by ESOR.



### EXCHANGE PROGRAMME FOR NEURORADIOLOGY FELLOWSHIP



Aline Amaral Dal Sasso
Hospital Copa D'Or, Rio de Janeiro/Brazil
Topic: Neuroradiology
Training Centre: John Radcliffe Hospital, Oxford/United Kingdom

I am deeply grateful to the ESOR/ESR and ESNR for giving me the opportunity to train in neuroradiology at the John Radcliffe Hospital. During the three-month fellowship, I have observed elective and emergency complex intervention procedures, learning the protocols and strategies related to each case. I have also been involved in numerous interesting cases in diagnostic imaging and I have increased my knowledge by attending daily multidisciplinary meetings, which, in my opinion, leads to better patient care. I was also able to participate in occasional lectures focusing on important and current points. I am grateful to my tutor, Dr. Wilhelm Kuker, an excellent professional, for supporting the development of my knowledge. I would also like to thank the senior neuroradiology fellow, Dr. Wen-Xern Chong, the nurses in the department, radiographers, registrars/residents, and other consultants. They really made me feel welcome. My time at John Radcliffe Hospital has given me a valuable educational and cultural experience. This has widened my horizons improving my career. I strongly recommend young radiologists to apply for this incredible opportunity.



Ikram Eda Duman
Marmara University School of Medicine, Istanbul/Turkey
Topic: Neuroradiology
Training Centre: Medical Center - University of Freiburg, Freiburg/Germany

I am very grateful to ESOR for the great opportunity to expand my knowledge of neuroradiology in one of the leading university in Germany. I had the opportunity to participate in all available activities of the Neuroradiology Department, including reporting sessions, teaching lectures and daily multi-disciplinary meetings. I would like to express my gratitude to Prof. Horst Urbach head of the Department of Neuroradiology - and his amazing team for their warm welcome, support and willingness to share their knowledge. During my fellowship, I improved my knowledge and my practice in all the imaging techniques that will help me in my future work and career. I strongly encourage all young radiologists to apply for this great opportunity offered by ESOR.





Hidayatullah Hamidi French Medical Institute for Mothers and Children, Kabul/Afghanistan Topic: Neuroradiology Training Centre: Istanbul University Cerrahpasa School of Medicine, Istanbul/Turkey

From a country where radiology as a medical specialty is very young, and there are no subspecialty training available in any aspect of radiology, I really needed such an opportunity to spend time in a state-of-the-art center in order to enrich my knowledge and experience in the field of neuroradiology. I am very thankful to ESOR and ESNR for providing this great opportunity to me. This training gave me the opportunity to improve my knowledge, practice and approach in neuroradiology, both in diagnostic and interventional. I am thankful to my tutor, Dr. Naci Kocer, for his endeavor to share his knowledge and experience with me. Besides training, the opportunity of exploring the city of Istanbul was also joyful. I also want to thank my home institute and family for supporting me in this regard.



Shivaprakash B. Hiremath
Pushpagiri Medical College Hospital, Thiruvalla/India
Topic: Neuroradiology
Training Centre: University Hospital of Geneva, Geneva/Switzerland

I thank the ESOR committee for giving me this great opportunity of the Exchange fellowship in Neuroradiology at HUG, Geneva, Switzerland, under the supervision of Prof. Dr. Karl-Olof Lovblad, who made me a part of the busy neuroradiology team. It was an honor to have learned from the leading neuroradiologists in Europe. I express my sincere gratitude to Prof. Dr. Maria Isabel Vargas and the team who along with teaching interesting and challenging neuroimaging cases, engaged me in the scientific work and involved me in writing articles. It was a blessing and an overwhelming experience of being trained and working with an excellent teacher. I also thank the employees at the department for making me feel welcome and sharing their knowledge with me. I was fortunate enough to be in the interdepartmental meetings which opened a new avenue for learning. I thank ESOR for this humungous and invaluable academic experience and encourage radiologists around Europe and the World to utilize this opportunity and venture into subspecialty imaging.



## EXCHANGE PROGRAMME FOR ONCOLOGIC IMAGING FELLOWSHIP



Nino Bogveradze
Research Institute of Clinical Medicine, Tbilisi/Georgia
Topic: Oncologic Imaging
Training Centre: Guy's and St Thomas' NHS Foundation Trust, London/United Kingdom

It is with great gratitude that I wish to thank ESOR/ESOI for the opportunity to undertake the Exchange Programme for Fellowships 2018 at the Department of Cancer Imaging King's College London and Guy's and St. Thomas' NHS Foundation Trust. The three-month training in oncologic imaging under the expert guidance of Prof. Vicky Goh was an unforgettable experience. From the outset I was welcomed into a world leading gold standard hospital, where I was supported and empowered to engage in and learn from leading senior radiologists. Prof. Vicky Goh, Dr. Davide Prezzi and Dr. Christian Kelly-Morland provided me with the opportunity to conduct scientific research and further my learning and knowledge in my chosen field. My daily activities included local departmental workshops and lectures, teaching sessions, multidisciplinary meetings, discussions of interesting cases and being actively involved in reporting with senior radiologists. I wish to thank ESOR/ESOI for the chance to meet Prof. Goh. Her support and personable manner created a comfortable and professional learning environment. This experience has had a great impact on my professional development and these skills will stay with me in my future endeavors.



### EXCHANGE PROGRAMME FOR PAEDIATRIC RADIOLOGY FELLOWSHIP



Ishan Goel
Max Super Speciality Hospital, New Delhi/India
Topic: Paediatric Radiology
Training Centre: University of Ioannina, Ioannina/Greece

I am extremely thankful to ESOR and ESPR for granting me this great learning opportunity for the Pediatric Radiology Fellowship at the University of Ioannina, Greece under the tutelage of Prof. Maria I. Argyropoulou (Head of the Department of Radiology). While another month of my training remains at the time of writing this report, I can certainly say that my experience has been nothing less than exceptional. Prof. Maria and her entire team, especially my mentor Dr. Vassilis Xydis have been extremely helpful and no words can explain my gratitude towards them. The hospital is one of the best referral centre for children and preterm infants. I have had the privilege to attend the multi-disciplinary meetings, educational lectures, complicated and rare case presentation sessions. I have not only participated in the daily clinical activities in different techniques [MRI, CT, Ultrasound (including the neonatal neurosonograms), fluoroscopic studies and interventional radiology procedures] but also in a few academic projects, under the supervision of Prof. Maria, to whom I am extremely grateful. The whole department including the residents, technicians and the nursing staff are very helpful and co-operative. I look forward to implement my newfound knowledge and this valuable experience into my clinical practice



Sara Ahmed Tawfik Hassan Khairy
Boulak El-Dakrour General Hospital, Giza/Egypt
Topic: Paediatric Radiology
Training Centre: Great Ormond Street Hospital for Children NHS Trust, London/United Kingdom

I am grateful to ESOR/ESPR for giving me such an opportunity to be trained at GOSH, where I realized that the child comes first and must be the motivation for improving every day. I was blessed to have my training under the supervision of Dr. Marina Easty and her eminent team who were very welcoming and treated me as if I were a new registrar of the department, and not just a temporary observer. I was even given a schedule of rotation through X-ray, Ultrasound, CT, MRI and Nuclear Medicine. Moreover, I attended various amazing multidisciplinary meetings and the extremely interesting weekly teaching and discrepancy sessions. US is my favorite and I was lucky enough to be mentored by Dr. Paul Humphries, who took me kindly by the hand and showed me its magical world. I had the opportunity to attend 2 days per week at the Neuroimaging department, where Dr. Felice D'Arco and Dr. Dora Zlatareva showed a great cordiality and their willingness to teach and sharing their extensive knowledge. During my stay there I encountered many interesting neuroradiology cases as well as attending their teaching sessions and MDTs. I would like to thank Dr. Lorenzo Biassoni at the Nuclear Medicine for his inspiring teaching attitude. It has been a very fruitful experience, both from a personal and a professional point of view, where I had the opportunity to learn from very skilled professionals and test another training environment. This program will definitely influence my future career; I hope to apply my acquired expertise in my country. I also had the chance to discover London, an awesome city with wonderful people who are celebrating a wide range of cultures.





Emmanouela Modatsou
University Hospital of Crete, Heraklion/Greece
Topic: Paediatric Radiology

Training Centre: Hôpital Timone - Enfants, Marseille/France

My fellowship in Paediatric Radiology has been a truly wonderful experience for me. I have had the chance to work under the supervision and guidance of the best specialists in the subspecialty I am interested in the most. Now I have made a new family which I would be happy to join again in the future. Furthermore, I have come into contact not only with local people, hence familiarizing myself with the French language, but with people from all over the world, making this a genuinely multicultural experience. After all this, I am returning to my home country feeling a richer and wiser person. Merci beaucoup!!



Olivera Pecanac University Medical Center Ljubljana, Ljubljana/Slovenia Topic: Paediatric Radiology Training Centre: Hospital Materno-Infantil Vall d'Hebrón, Barcelona/Spain

It is hard to express how honored and happy I was when I was informed that I was selected to get a three months fellowship at the Department of Paediatric radiology of Vall d'Hebron Hospital Barcelona. First of all, I would like to thank ESOR for the unique opportunity and would like to express my profound gratitude to all the department staff. During the three months fellowship I participated in reporting MRI, CT studies and performing US examinations and I had the opportunity to observe biopsies. I attended at daily morning lectures which were provided by department paediatric radiologist and I also participated in multidisciplinary meetings. All of this contributed to a marked improvement in my imaging interpretation skills which will consequently have a great impact on my professional career. This fellowship has had so many positive aspects on my professional and personal life so I would highly recommend it to any radiologist.



## EXCHANGE PROGRAMME FOR THORACIC RADIOLOGY FELLOWSHIP



Nara Giacometti Halm Rio de Janiero/Brazil Topic: Thoracic Radiology Training Centre: Hôpital Cochin, Paris/France

I would like to express my deepest thanks to ESOR and ESTI for the 3 months training in Thoracic Radiology at Hôpital Cochin in Paris. I am sure that this period was enriching for my professional career and for my personal growth. I had the opportunity to attend multidisciplinary meetings, to analyze extremely interesting radiological cases and to start a research project in the field of thoracic radiology. Thank you to all the radiologists in the department and to all residents who shared their daily activities with me. Special thanks to my mentor Prof. Marie-Pierre Revel for the warm welcome, for the generosity of transmitting me her precious knowledge and for making my stay in Paris as pleasant as possible. It was an excellent opportunity to learn and to be integrated in such a great team. I would strongly recommend this experience to all those interested in Thoracic Radiology.



Christine Jacqueline Tolman
Leiden University Medical Centre, Leiden/The Netherlands
Topic: Thoracic Radiology
Training Centre: University Hospitals Leuven, Leuven/Belgium

I am very grateful to ESOR for awarding me a three-month fellowship in thoracic imaging at the University of Leuven in Belgium. I would like to thank the members of the Thoracic Radiology Department, Prof.Dr. Verschakelen, Prof.Dr. Wever, Prof.Dr. Koolen and Dr. Dubbeldam for making me feel welcome. They taught me practical as well as theoretical aspects of particularly (HR) CT imaging of the chest. I actively participated in hands-on diagnostic imaging and multidisciplinary meetings and I studied difficult imaging cases on a dedicated learning station. This fellowship provided me with a valuable educational experience, which broadened my horizons. Furthermore, Leuven is a vibrant city with a rich historical and cultural heritage that offers wonderful places to explore. I would like to thank ESOR, ESTI, and my tutor Prof.Dr. Verschakelen and his colleagues for this experience and I would like to encourage other radiologists to apply for an ESOR fellowship opportunity.



# ONE-YEAR FELLOWSHIPS



#### ABDOMINAL RADIOLOGY



**Lilian Christine Bozi Fanchiotti**Paris/France
Topic: Abdominal Radiology

Training Centre: Hôpital Beaujon, Clichy/France

I would like to thank the European School of Radiology for this memorable and rewarding opportunity to improve my knowledge in France and I wish to express my sincere gratitude to Prof. Valérie Vilgrain for all her support. I started my abdominal radiology fellowship at Beaujon Hospital only few months ago and my daily activities include lots of educational sessions like participating in academic lectures, case reports, multidisciplinary meetings, and besides that I am also involved in all clinical radiology activities such as Ultrasound, MRI, CT and interventional procedures. I feel deeply honored to work and to acquire knowledge from all the team members at Beaujon. I would like to encourage other professionals to apply and join this amazing professional and cultural experience.



Giuseppe Corrias University of Cagliari, Cagliari/Italy Topic: Abdominal Radiology Training Centre: Hôpital Beaujon, Clichy/France

I would like to express my immense gratitude to the ESOR program for the fantastic opportunity to perform a year of fellowship in abdominal imaging. Despite being only the first weeks of my experience, I cannot but immediately notice the level of experience of all the radiologists who make up the staff of the department of Prof. Valérie Vilgrain. It is her who with immense kindness, farsightedness, experience and skill has set up an impeccable and infallible diagnostic machine, and more importantly, an excellent school of abdominal radiology, allowing many French residents to learn from this source of knowledge, and fortunately extending the invitation at an European level to the lucky few who like me have the honor of being part of his formidable team.



#### **BREAST RADIOLOGY**



Burkhan Musaiev
Clinical Hospital "Dobrobut", Kiev/Ukraine
Topic: Breast Radiology
Training Centre: Hadassah Hebrew University Medical Center, Jerusalem/Israel

It is an honour and a cornerstone step in my education to receive this One-year Fellowship in Breast Imaging and I would like to thank the ESOR team for this opportunity. My training runs at the renowned Hadassah Hebrew University Hospital under Professor Tamar Sella's supervision. I have started the fellowship just recently and am already enrolled in reading sessions, interventional procedures and multidisciplinary meetings at the Breast Centre. I was cordially met by all the staff of the department and received every help I needed to integrate. I want to acknowledge specially Dr. Adler-Levy Yael and Dr. Galina Geltzer for all the mentoring and concerns. Throughout the year I will be exposed to all sorts of imaging and interventional procedures at the Centre; will have an observership at the Breast Surgery Department and will carry out a research project. Thank you so much for this exquisite fellowship. I believe it is going to be a very special year for me.



#### **CARDIAC MRI**



Volha Nizhnikava Republican Scientific and Practical center of Cardiology, Minsk/Belarus Topic: Cardiac MRI

Training Centre: Medical University Graz - LKH, Graz/Austria

I would like to express my gratitude the ESOR Committee for the unique opportunity to become a fellow at the LKH Graz – Universitatklinikum in Graz, Austria. I was very warmly welcomed and, from the very first minute, engaged in scientific work and research projects. I participate in all available activities, including case presentations and lectures that cover different topics. I am sure this experience will significantly influence my future choices and my work. This fellowship is a chance not only to increase my professional skills but also for social experience and the chance to get integrated into a different culture, which is priceless. I would like to thank Prof. Michael Fuchsjäger and Dr. Ursula Reiter and the whole cardiac team for giving me the feeling that I am already part of the community. I am looking forward for the remaining time.



#### **CHEST RADIOLOGY**



Olena Hural
Regional Phthisio-pulmonological Medical - Diagnostic Center, Lviv/Ukraine
Topic: Chest Radiology
Training Centre: Heidelberg University Medical Center, Heidelberg/Germany

I would like to thank the ESOR Committee for giving me this unique opportunity to train as a chest radiology fellow in Heidelberg University Hospital "Thoraxklinik", Germany. Though I am at the beginning of my fellowship, I have been already involved in a set of scientific projects and also participate in weekly post-graduate education lectures, daily multi-disciplinary meetings on different chest pathologies with the focus on oncology imaging and idiopathic lung diseases imaging. It is a great honor for me to have Prof. Claus Peter Heussel and Prof. Hans-Ulrich Kauczor as tutors. I hope my remaining period will be as fruitful as my first months have been.



#### INTERVENTIONAL NEURORADIOLOGY



Matteo Cappucci Sant'Andrea Hospital, Rome/Italy Topic: Interventional Neuroradiology Training Centre: Hospital Clinic of Barcelona, Barcelona/Spain

I would like to thank ESOR for the great opportunity to expand my knowledge in neurointerventional radiology in one of the most renowned center in Spain and Europe. My mentors were J. Macho (head of the unit), J. Blasco, L. San Roman and A. López; great teachers and experienced professionals of their field. They welcomed me as one of the team, really hospitable and friendly. I had the opportunity to participate in different interventions, multidisciplinary meetings and radiology reporting. I greatly expanded my knowledge in all fields of neurointerventional radiology. I found not only a great team but also new friends. I am sure that all my acquired expertise will be useful for my practice.



#### INTERVENTIONAL RADIOLOGY



**Shelagh Dyer Hartnett** 

Hospital Universitari Vall d'Hebrón, Barcelona/Spain

Topic: Interventional Radiology

Training Centre: Radboud University Medical Center, Nijmegen/The Netherlands

Thanks to the ESOR programme I have been given the chance to carry out a year-long training as an interventional radiology fellow at the Radboud UMC in the Netherlands. This is a period I had always wanted to undertake in a country different to where I am from since I believe it gives one the chance to meet new people, learn different approaches to each case, view a diverse way to organize the department... and the ESOR has given me the chance to do so. All these are, to my thinking, positive aspects in one's training and in one's personal development. The couple of months I have been here have completely fulfilled my expectations in both personal and professional matters and I would highly recommend it to anyone who wants to train in a new and interesting place.



#### NEURORADIOLOGY/HEAD AND NECK RADIOLOGY



Chiara Ganazzoli
Maggiore Hospital, Parma/Italy
Topic: Neuroradiology/Head and Neck Radiology
Training Centre: Erasmus University Medical Centre, Rotterdam/The Netherlands

I would like to express my gratitude to ESOR for giving me the amazing opportunity of a one-year Fellowship in Neuroradiology & Head and Neck at Erasmus Medical Centre in Rotterdam, The Netherlands. As I am currently in training, I am reporting preliminary reports in English that are discussed afterwards with staff neuroradiologists. This reporting activity has given me a strong methodological approach and increased my self-confidence over these past weeks. I am also attending interesting and different multidisciplinary meetings everyday. Furthermore, I will have the privilege to be involved in a brain tumor research project. I would like to express my acknowledgment to my tutors Prof. Dr. Aad van der Lugt and Prof. Dr. Marion Smits, to Prof. Dr. Meike Vernooij as well as their colleagues for welcoming me as a member of their team.



#### PAEDIATRIC RADIOLOGY

for those with an interest in paediatric imaging.



**Greg Chambers** Leeds Teaching Hospital NHS Trust, Leeds/United Kingdom Topic: Paediatric Radiology Training Centre: Hôpital du Kremlin Bicêtre, Le Kremlin Bicêtre/France

After a warm welcome, I was made to feel a part of this dynamic team, made up of senior and junior consultants, residents and an array of support staff. The work is varied and encompasses the full spectrum of pre-natal, perinatal and childhood imaging. Of significant interest is the hepatobiliary work, for which the hospital is a national reference centre, dealing with the whole gamut of liver disease including paediatric liver transplant. There is an assortment of weekly teaching sessions, cased-based teaching, departmental meetings and clinical reporting, which allows trainees to improve both their theoretical and practical

knowledge. Furthermore, there is time for academic pursuits, with several internationally recognised authors of peer-reviewed papers and textbooks within the department. This fellowship comes highly recommended



### **BRACCO FELLOWSHIPS**



#### **BRACCO CLINICAL**



Dilara Atasoy Karadeniz Technical University Farabi Hospital, Trabzon/Turkey Topic: Neuroradiology Training Centre: King's College Hospital, London/United Kingdom

 $The \, ESOR/BRACCO \, programme \, gave \, methe \, great \, chance \, to \, have two-month \, fellowship \, in \, the \, Neuroradio logy \, and \, the \, Neuroradio log$ department at King's College Hospital/London. During this period I have attended both diagnostic and interventional activities, multidisciplinary meetings, educational case discussions. I also had the remarkable opportunity to be involved in a research project. Beside the information about neuroradiology, I have also observed different management style and functioning of the department. With the help of this programme I understand the importance of specializing in a particular topic, which will likely be neuroradiology for me. I have already a feeling that this program is a milestone in my professional career. Therefore I would like to express my gratitude to this ESOR/BRACCO programme, every member in the department but especially my tutor Dr. Booth. I definitely recommend every radiology registrar this fellowship programme not only for educational aims but also for the incredible life experience.



Veronica Attard Mater Dei Hospital, Msida/Malta Topic: Imaging in soft-tissue sarcomas Training Centre: Royal National Orthopaedic Hospital NHS Trust, London/United Kingdom

I am grateful to the ESOR committee for enabling me to have this two-month experience at the Royal National Orthopaedic Hospital in London. I feel truly privileged to have had this unique opportunity to understand and experience at first hand the multidisciplinary management, imaging and care of sarcoma patients within a specialist centre. I would like to thank Dr. Asif Saifuddin and his radiology team at the Royal National Orthopaedic Hospital, for allowing me to be part of their great team. The rotation surpassed my expectations. I was welcomed by my mentor, Dr. Michele Calleja and several other consultants working at the Royal National Orthopaedic Hospital. During the two-month training period at the Royal National Orthopaedic hospital, I was involved in a range of activities within the Radiology Department. I was involved in daily case reporting, participated in multidisciplinary meetings, attended lectures on relevant topics and even participated in a course on pelvis and hip MRI. I was fully integrated as a team member and worked with various consultants. The consultants dedicated time to teach me about the different techniques in their specialty and for this I am deeply indebted. I was also given the chance to work on and submit publications. This experience has broadened my knowledge of sarcoma imaging and enabled me to receive a wealth of knowledge and invaluable practice. It has positively influenced my career. These two months at the RNOH have been a professionally inspiring experience and I would highly recommend it to other radiology trainees.





Jasmina Boban

Oncology Institute of Vojvodina, Novi Sad/Serbia Topic: Initial and follow-up SWI findings in posterior reversible encephalopathy syndrome (PRES) for outcome prediction

Training Centre: Medical University of Vienna, Vienna/Austria

I would like to thank both ESOR and BRACCO for giving me this great opportunity to do the Clinical Fellowship in one of the leading university hospitals in Europe, at the Medical University of Vienna. Even greater was the opportunity to work and expand knowledge with my mentor, and now friend, Prof.Dr. Majda Thurnher, who is an exquisite teacher and a very experienced professional. Together, we performed the research on the utility of the susceptibility weighted MR sequence as a diagnostic and also prognostic marker in posterior reversible encephalopathy syndrome (PRES). Additionally, we finished the research on the utility of this sequence in HIV-associated progressive multifocal encephalopathy (PML). Hopefully, our research will result in two papers.



Nathania Bonanno

Mater Dei Hospital, Msida/Malta

Topic: MR imaging for local staging of gynaecological malignancies and disease

surveillance

Training Centre: Montpellier Cancer Research Institute, Montpellier/France

The two-month ESOR fellowship has been a wonderful opportunity to improve my knowledge of gynaecological imaging and to compare practices in my home hospital and the well-regarded Cancer Research Institute in Montpellier, France. During this time I was exposed to a large volume of CTs and MRIs in cervical and rectal cancer, as well as in advanced ovarian cancer with peritoneal disease. I was also granted the opportunity to contribute to clinical research projects on the topics of MR radiomics analysis of cervical and ovarian cancer. I would like to thank all the members of the radiology team at the Montpellier Institut régional du Cancer for their hospitality, and especially the Head of the department Dr. Raphael Tetreau and my tutor, and MRI Director, Dr. Stephanie Nougaret, who made all this possible. I am particularly thankful to Dr. Nougaret, a very experienced and knowledgeable radiologist, and an excellent teacher. I am also very grateful to the ESOR and Bracco for awarding me this fellowship and I highly encourage young radiologists to apply and gain the most of this rewarding experience.



Roberto Cannella

University Hospital Policlinico Paolo Giaccone, Palermo/Italy

Topic: Abdominal Imaging

Training Centre: University of Pittsburgh Medical Center, Pittsburgh/USA

I would like to thank the ESOR and Bracco for the wonderful opportunity to conduct a clinical fellowship at the Abdominal Imaging Division, Department of Radiology, University of Pittsburgh Medical Center (PA, USA). It was a great honor to be a part of an excellent radiology team and I am especially grateful to my tutor, Dr. Alessandro Furlan. Since my arrival at the department I felt really welcome and I was involved in several clinical and teaching activities. This experience has largely exceeded my expectations. The University of Pittsburgh is a great learning center and a center of excellence for the diagnosis and treatment of liver disease, including liver transplantation. During my training I had the opportunity to be involved in daily clinical activities, discussion of cases, morning case conference, lectures and multidisciplinary meeting. This clinical fellowship provided me with a fantastic educational, social and cultural experience, expanding my knowledge in abdominal imaging. I for sure will bring it with me for my future career in radiology.





Magdalena Chmiel-Nowak
Krakow University Hospital, Krakow/Poland
Topic: Ultrasound of the musculoskeletal system
Training Centre: Sint Maartenskliniek, Nijmegen/The Netherlands

It was my greatest privilege and pleasure to spend two months in one of the renowned musculoskeletal centers in Europe. I was warmly welcomed by the whole radiology team and since the very beginning involved in all the activities at the department, including examinations, interventions, reporting and case presentation. The wide variety of examinations enabled me to expand my knowledge and practice my ultrasound skills, and all the team members were always willing to share their knowledge and answer my questions. I found the fellowship to be a rewarding educational opportunity, which strengthened my interest in musculoskeletal radiology and surely will affect my future career choices. I am deeply grateful to Dr. Obradov and the whole team for their kindness, hospitality and being dedicated tutors. I would also like to thank ESOR and Bracco for making this unique experience possible.



#### **Giuseppe Cicero**

Policlinico Universitario "G. Martino", Messina/Italy

Topic: Validation of bi-dimensional (2D) and three-dimensional (3D) Fourier Decomposition (FD) as Magnetic Resonance Imaging (MRI) technique to assess lung ventilation and perfusion compared to computed tomography (CT), Hyperpolarised gases (HP-MRI) and Contrast-Enhanced MRI (CE-MRI)

Training Centre: Erasmus University Medical Centre, Rotterdam/The Netherlands

I really want to thank ESOR for this two-months fellowship sponsored by BRACCO at Sophia Children's Hospital in Rotterdam. This has represented for me a great chance for further improving my personal expertise both from a radiological and clinical point of view with a great exposure to chest-CT and -MRI and to several multidisciplinary meetings. Special thanks go to my two main supervisors, Prof. H. Tiddens and Dr. P. Ciet, who welcomed me into their working group since the beginning, as well as the other members of the Lung Analysis Lab for the spirit of cooperation they have demonstrated towards me. Certainly, this experience enriched my background and I am sure that it will be of great importance for my future personal career and professional life.



Felice D'Antuono

Federico II University Hospital, Naples/Italy Topic: Percutaneous interventions for Peripheral Arterial Disease (PAD) and vascular imaging Training Centre: Cambridge University Hospitals NHS Trust - Addenbrooke's Hospital, Cambridge/United Kingdom

I would like to thank ESOR and Bracco for the two-months Clinical Fellowship at the Department of Interventional Radiology of Addenbrooke's Hospital in Cambridge. I was involved in very interesting diagnostic and interventional activities, and I think this experience provided me with an incredibly valuable educational experience, which not only increased my knowledge in IR and specifically in Peripheral Arterial Disease management but also broadened my cultural and personal horizons. I am very grateful to my tutor, Dr. M. Krokidis for teaching me practical as well as theoretical aspects, especially for all the advice, incentives, ideas he gave me with his words and his passion for IR. I would like to thank all Interventional Radiology Consultants, who involved me in all the daily activities, all IR unit staff, for making me feel welcome, and Prof. Fiona Gilbert, head of the Department, who friendly accepted me. This fellowship was an entusiasthic experience, and I would like to strongly recommend the incredible opportunity by ESOR to experience a stimulating learning environment like the one I found in Addenbroooke's Hospital.





Cristina Fabris
Policlinico G.B. Rossi, University of Verona, Verona/Italy
Topic: Abdomen: oncologic and colorectal imaging
Training Centre: Netherlands Cancer Institute - Antoni van Leeuwenhoek, Amsterdam/
The Netherlands

I am very honored to have worked in this European center of excellence, in a radiological reality different from the one in which I have worked and lived in every day the past couple of years. This was the perfect opportunity for improving my experience in different oncological areas. I learned new theoretical concepts and notions on how to deal with the everyday radiologic problems. I am also very proud to have participated in several clinical research projects. I really want to express my gratitude towards Professor Regina Beets-Tan for the opportunities that she has given me. Also I want to thank my main tutor, Max Lahaye, and Doenja Lambregts for their help.



Luca Facchetti
University of Brescia, Brescia/Italy
Topic: Breast Imaging
Training Centre: South General Hospital - Södersjukhuset, Stockholm/Sweden

I am very grateful to ESOR for awarding me with the 2018 Clinical Bracco Fellowship in Breast Imaging at the Södersjukhuset Bröstcentrum in Stockholm. I was exposed every day to several clinical cases and I had the opportunity to improve my knowledge in all the aspect of breast imaging, like mammography/tomosynthesis, ultrasound/ABVS, MRI, ultrasound-, stereotactic- or MRI-guided biopsies. I was able to start a research project on screening findings as well. I am particularly thankful to my tutor Dr. Wilczek who is an incredible experienced teacher and she made my experience inestimable. I am sure that this fellowship will change and boost my career in breast imaging.



Ioan Nicolae Gemescu
Bucharest Emergency University Hospital, Bucharest/Romania
Topic: Posttraumatic Musculoskeletal MR Imaging
Training Centre: Universitätsmedizin Rostock, Rostock/Germany

I would like to thank ESOR/BRACCO for choosing me to take part in this fellowship. I had the opportunity to spend 2 months at the University Hospital of Rostock, Germany, where I was able to improve my musculoskeletal (MSK) imaging skills. During my training period, I took part in daily reporting with the staff, had the chance to observe a few interventions and was able to contribute to the writing of four articles. I am grateful to Professor Marc-André Weber and Dr. Kolja Thierfelder who provided a great teaching environment and were most patient with me. This fellowship was undoubtedly a great opportunity and will contribute to my career as a MSK specialist.





Monika Grilli Wagnerová
Královské Vinohrady University Hospital, Prague/Czech Republic
Topic: Using PET/CT during treatment of lymphoma
Training Centre: Hospital da Universidade de Coimbra, Coimbra/Portugal

I am honored to be one of the recipients of the ESOR/ESR and Bracco fellowship 2018, which gave me the opportunity to spend a two-month training period in the Department of Nuclear Medicine at the Coimbra University Hospital. During the period of my fellowship, I have been involved in the daily practice of the Department of Nuclear Medicine, and had the opportunity to attend a regional conference. I would like to express my sincere gratitude to Gracinda Costa, MD, the head of the Department of Nuclear medicine, and to my tutor, Rodolfo Manuel Pinta Silva, MD, for their kind reception and the great experience they provided me. I would also like to thank all the senior doctors and residents from the Department, for their support and for sharing their experience, allowing me to learn about PET/CT for the staging and treatment of hematologic malignancies, especially lymphoproliferative disorders. As a radiologist, I had no previous experience with PET/CT imaging and the fellowship provided me the great opportunity to learn a lot about this method and to put theoretical knowledge into my daily practice. Coimbra has one of the largest Nuclear Medicine Departments in Portugal and I saw a big spectrum of patients with various diagnoses, other than hematologic malignancies, and I would like once more to thank you for enabling this great experience. Last but not least, I would like to thank my manager and tutor Hana Malíková, MD, Associate Professor, who enabled me to enroll and supported me through the training.



Amela Hasa University Hospital Center Mother Teresa, Tirana/Albania Topic: Musculoskeletal Imaging, especially Ultrasound Training Centre: Pitié-Salpêtrière University Hospital, Paris/France

I am very grateful to ESOR, ESR and Bracco for awarding me with this two-month fellowship in Musculoskeletal Imaging, especially ultrasound, at one of the leading and largest European University Hospital Centers, "Pitié-Salpêtrière" in Paris. I would like to express my deep gratitude to the Head of Department, Prof. Olivier Lucidarme and his radiology team for welcoming and helping me. It was one of the most wonderful experiences I have ever had. This is related not only with the fact that this specialization is not offered in my country, but also because I had the chance to learn from a really competent equipe that works with sophisticated techniques. I would like to give special thanks to Dr. Jean Louis Brasseur, the most experienced doctor in Musculoskeletal Ultrasound, the passion with which he works and gives lectures, was truly inspirational for me. This experience will remain invaluable in my memory. My expectations are fulfilled in the highest degree.



Merli Ilves
Tartu University Hospital, Tartu/Estonia
Topic: MRI exams and protocols in paediatric patients
Training Centre: Jena University Hospital, Jena/Germany

I would like to thank ESOR and Bracco for the clinical fellowship at Jena University Hospital in Germany. I am very grateful for Prof. Hans-Joachim Mentzel, the Head of the Paediatric Section, and the whole paediatric radiology team (including Dr. Diane Renz, Dr. Paul-Christian Krüger, Dr. Matthias Waginger and Dr. Hanne Kirsch) for a warm welcome and invaluable experience. My topic for the two-month training period was "MRI exams and protocols in paediatric patients". I could observe the carrying out of different MRI exams from neonates to adolescents. I gained experience in paediatric neuroradiology, MSK and abdominal radiology, but also in interpreting fetal-MRIs and WB-MRI exams. As one of the three centres in Germany the department is equipped with a MR-compatible incubator for examining preterm and very small babies. Alongside daily routine work I was able to attend multidisciplinary meetings, educational lectures, conferences and to do even a little research project concering functional MR-urography. This experience abroad definitely improved my knowledge in paediatric MRI.





**Jagoda Jacków** Wroclaw Medical University Hospital, Wroclaw/Poland Topic: Neuroradiology

Training Centre: Sheffield Teaching Hospitals Foundation NHS Trust, Sheffield/United Kingdom

It is very hard and impossible to express properly how wonderful and full of experiences these two months of ESOR Bracco Fellowship were. Thanks to ESOR for giving me such a great opportunity to improve my neuroradiological knowledge. Especially I would love to say thank you to my magnificent tutor Dr. Charles Romanowski, who opened not only his enormous knowledge and experience but what is more his heart. He is the most benevolent person I have ever met. He taught me what it means to be a doctor as well as a neuroradiologist and how we are supposed to bahave in our daily practice. I will always remember our reporting session and discussion about anatomy. He helped me realize how important for radiologists it is to know well anatomy and how helpful it is. All people in the neuroradiology department in Sheffield were special, kind and willing to help with sharing their experience. Truly I was feeling like at home. I am very grateful to ESOR that created such an opportunity for young trainee radiologists to have an unforgettable time which helps develop not only as a radiologist but most importantly as a human. I will always recommend it to my colleagues at work to apply for an ESOR fellowship.



Kinga Kecskés
Semmelweis University, Budapest/Hungary
Topic: Aim to improve knowledge in oncology imaging and oncology intervention
Training Centre: North Bristol NHS Trust, Bristol/United Kingdom

I am very grateful to the ESOR and BRACCO for giving me the unique opportunity to spend two months as a fellow at North Bristol NHS Trust in Bristol. From the first moment I received a very warm welcome from Mark Thornton and the entire staff. It was a very exceptional personal and professional experience for me where I was able to expand my knowledge and skills in general and oncology imaging. Apart from observing routine clinical activities, I regularly attended mostly oncology based multidisciplinary team meetings and I was actively involved in educational lectures, training workshops and case-by-case discussions. As this hospital is regarded as a centre of chest and urogenital diseases I was given the chance to gain my knowledge and skills in these subspecialities in every modalities. I was given the possibility to observe different oncology related interventional procedures, not only biopsies, but image-guided treatments, such as embolisations and ablations. I would like to thank all of my lovely tutors to share their outstanding knowledge with me. This fellowship was a wonderful experience for me and I truly recommend this programme for anyone.



Ali Murat Koc

Izmir Bozyaka Training and Research Hospital, Izmir/Turkey Topic: Imaging biomarkers and advanced neuroimaging techniques in neurodegenerative diseases

Training Centre: The National Hospital of Neurology and Neurosurgery UCLH Foundation Trust, London/United Kingdom

I am very grateful to ESOR-BRACCO for awarding me with a two-month clinical fellowship in London. My attendance to this highly sophisticated centre with several branches of clinical and research teams in dementia, epilepsy, oncology and ophthalmology had been an important and enthusing step for my future career. Working with clinical scientists and physicists was one of the most important advantages of being a fellow in Lysholm Department of Neuroradiology. I had the chance to improve my knowledge primarily with the help of my tutor, Dr. Indran Davagnanam, who has an outstanding radiological and clinical knowledge and also is a good mentor too. I would definitely recommend this experience to all specialists who wants to improve their skills in a selected topic of interest.





**Luca Pasquini**Sant'Andrea Hospital, Rome/Italy
Topic: Neuro-oncologic Imaging from childhood to adulthood: extensive study on brain and spine tumors

My experience at Memorial Sloan Kettering Cancer Center, funded by the Bracco Clinical Fellowship, was greatly positive. During my attendance at the Neuroradiology Department, I strengthen my knowledge in Oncologic Neuroimaging and functional MRI, working with stunning neuroradiologists and cooperating with other scientists to pursue my own research projects. Memorial Sloan Kettering Cancer Center is a top-notch Center for Cancer care, with a friendly, highly professional work environment and a great dedication to teaching. Surrounded by an amazing international environment, I had the opportunity to share my ideas of research and learn from the best experts in Cancer Imaging.

Training Centre: Memorial Sloan Kettering Cancer Center, New York/USA



Michele Pietragalla
Azienda Ospedaliero Universitaria Careggi, Florence/Italy
Topic: Cranial nerves and skull base pathology
Training Centre: Instituto Portugues de Oncologia de Lisboa Francisco Gentil, Lisbon/Portugal

I want to thank ESOR and BRACCO so much for choosing me for the two-months Clinical Fellowship in Head and Neck radiology in Lisbon. It has been an amazing opportunity to learn new skills and to improve my knowledge, from which I will surely benefit in my daily practice in Italy. I am also very grateful to my tutor Dr. Alexandra Borges, a very good teacher as well as a special person, with whom I participated in lectures on Head and Neck anatomy and pathology and oncological reporting sessions. This fellowship provided me with a great educational and social experience, which it will be essential to improve my career.



Piotr Stajgis
University School of Medicine, Poznan/Poland
Topic: Magnetic Resonance Enterography in diagnostics of Inflammatory Bowel Diseases with special focus on Crohn's disease
Training Centre: Hospital Universitario y Politecnico La Fe, Valencia/Spain

I would like to express my gratitude to ESOR/ESR for the unique opportunity of taking part in two month clinical fellowship in the Department of Radiology at La Fe Polytechnic University Hospital in Valencia, Spain. During this unforgettable time I was able to expand my knowledge and interests in the field of abdominal imaging with special focus on inflammatory bowel diseases. Taking part in radiological sessions, multidisciplinary meetings and every-day clinical work was very memorable experience which deeply influenced and deepened my practical skills. I have had the chance to learn a lot from outstanding faculty and gain real-life work experience. I am extremely thankful to the Head of Radiology Department, Prof. Marti-Bonmati for his warm welcome, courtesy and open-mind. I would also like to address my thanks to the Chief of Abdominal Section, Dr. Torregrosa and the whole team including Dr. Batista, Dr. Rudenko and Dr. Perez for all their efforts and time spent on teaching. Every member of the whole team was very cooperative and friendly, their positive attitude made me feel satisfied and comfortable. This program will definitely influence my future career and will help me become a better radiologist.





Maria Chiara Terranova
University Hospital Policlinico Paolo Giaccone, Palermo/Italy
Topic: Paediatric gastro-intestinal radiology
Training Centre: Great Ormond Street Hospital for Children NHS Trust, London/United Kingdom

I would like to thank ESOR/ESR for awarding me this two-months clinical fellowship in paediatric gastro-intestinal imaging at Great Ormond Street Hospital for children. I had the great opportunity and honour of meeting a great, skilled, compassionate, thigh-knit team of registrars, fellows, and experienced and brilliant consultants, sonographers and radiographers. I was able to follow all the available imaging modalities, receiving appropriate training regarding not only the reporting phases but also regarding the acquisition protocols and the radiation protection rules, as well as to attend professional-enriching multi-disciplinary meetings and educational lectures on a daily basis. I would like to express my deepest gratitude to all the amazing GOSH radiology staff, for their warm welcome and their kindness in sharing their knowledge with me. This unforgettable experience has definitively fulfilled my expectations, providing me a wide training in paediatric gastro-intestinal imaging as well as in paediatric body imaging, indelibly contributing to my future clinical career.



Federica Vernuccio
University Hospital Policlinico Paolo Giaccone, Palermo/Italy
Topic: Dual Energy CT
Training Centre: Duke University Hospital, Durham/USA

First of all, I would like to thank ESOR and Bracco for giving the opportunity to radiology residents and young radiologist to improve their radiological skills and also to take part in medical research. I had the opportunity to do my Clinical Fellowship at Duke University in Durham, North Carolina, world-renowned as a reference center in dual-energy CT and abdominal imaging, under the guidance of my tutor, Prof. Daniele Marin. Since the very beginning I was warmly welcomed by Prof. Daniele Marin and his collaborators: they gave me the feeling that I was part of their team. I had the opportunity to learn how dual-energy works, its current indications for abdominal imaging, and to follow interesting abdominal cases in which dual-energy CT was used. I was also given the opportunity to see current research projects on dual energy CT and to actively participate to them. I want to especially acknowledge my tutor Prof. Daniele Marin for his constant support and always sharing his large experience and knowledge on dual energy CT.



Maksim Zagura
Tartu University Hospital, Tartu/Estonia
Topic: Cardiac imaging
Training Centre: University of Leipzig - Heart Centre, Leipzig/Germany

I had an opportunity to spend two months of training at Heart Center Leipzig. During the training period I participated in case reporting and discussions, teaching sessions and other educational activities. I have significantly improved my knowledge in the acquisition and interpretation of T1 and T2 myocardial mapping, which will help me to implement these techniques at Tartu University Hospital. I am deeply grateful to Bracco and ESOR for an exceptional opportunity to spend two months in one of the leading centers in cardiac imaging. I would like to thank all the staff of the department of Radiology and especially my tutor, Professor Matthias Gutberlet, for the support and willingness to share their knowledge with me.



#### **BRACCO MANAGEMENT**



Michal Buk Královské Vinohrady University Hospital, Prague/Czech Republic Topic: Assessing and finding solutions using modern technologies to high workload related

Training Centre: Heidelberg University Medical Center, Heidelberg/Germany

issues in a radiology department

I would like to thank ESOR and BRACCO for this amazing opportunity of a 2 month management fellowship, within which I spent time both in research and in clinic. As for my research, I analyzed the appropriateness of CTPA examinations in patients with suspected pulmonary embolism, focusing on the cooperation between clinicians and radiologists. I made a presentation of the results to the fellow staff members, we will publish it as a scientific paper later on and I will even present it on our national radiological conference this year. I also spent some time in the clinical radiology in the CT and MRI departments. Overall the experience was very enjoyable and interesting to me, I gained a lot of experience and knowledge. The staff was very friendly and helpful to me, I felt very welcome in the department. I would especially like to thank Dr. Oyunbileg von Stackelberg for constantly supporting me, organizing my project and helping me with day-to-day tasks, and of course all the other fellow researchers and radiologists for devoting time to me and making this experience so amazing. The whole experience has widened my horizons and made me more passionate about my future research and career in general.



#### **BRACCO RESEARCH**



Tommaso Di Noto
Centro Diagnostico Italiano, Milan/Italy
Topic: 3D texture, shape and color analysis in CT and MRI of the heart
Training Centre: University Hospital Zurich, Zurich/Switzerland

I have carried out a four-month research fellowship at the University Hospital of Zurich under the supervision of Prof.Dr. Hatem Alkadhi in the Institute for Diagnostic and Interventional Radiology. I would like to thank ESOR and Bracco for providing me this great opportunity during which I expanded my knowledge both of cardiac MRI and applied machine learning on medical images. I also want to personally thank Dr. Alkadhi and all those that have taken part in the project who have been very supportive, curious and inspiring. It was a pleasure working in such a stimulating environment. This fellowship was indeed a chance for me to enlarge my skills in a unique and unexpected way.



Filipp Kossov
Russian National Oncology Center, Moscow/Russia
Topic: PSMA and MRI-controlled bone biopsies using cone-beam CT guidance
for molecular research in patients with metastatic prostate cancer
Training Centre: Radboud University Medical Centre, Nijmegen/The Netherlands

I am very grateful to ESOR and Bracco for giving me an invaluable opportunity to participate in a four-month training in oncologic imaging at one of the best centers worldwide - Radboud Medical University. It was really an amazing scientific fellowship that I will never forget. It was a tremendous experience to learn from outstanding radiologists and to take part in research projects there. I am thankful a thousand times to the whole research team of the radiology department and especially to Professor J.J. Futterer who helped and supported me during this period. The time spent at Radboud UMC will definitely influence my professional career and future life. I am sure to keep all the wonderful memories about Radboud UMC!





Kateryna Musaieva Clinical Hospital "Dobrobut", Kiev/Ukraine Topic: Multiparametric analysis in brain and head and neck tumours Training Centre: University College London Hospital - Institute of Nuclear Medicine, London/United Kingdom

It was an honour and a cornerstone career opportunity for me to receive the ESOR Research Bracco fellowship in Multiparametric analysis in brain and head and neck tumours. My training was held at the renown Institute of Nuclear Medicine, UCL, London/UK under Professor Jameshed Bomanji's supervision. It was a pleasure to carry out a research at UCLH, the centre of maxillo-facial surgery and National Sarcoma Centre. I am very grateful to my tutors Dr. Fancesco Fraioli and Dr. Simon Wan for their dedicated approach and for their willingness to teach and share knowledge. A very special acknowledgment to Prof. Mark McGurk and Dr. Nikolas Kalavresos for the introduction into clinical research, academic and scientific activities. UCLH is the biggest academic hospital in the UK and also a state-of-the-art Nuclear imaging Centre with impressive multidisciplinary cooperation with surgeons, pathologists, oncologists. During my stay in London I was involved and contributed to four separate research projects in head and neck pathology from study sample selection to submitting a manuscript and a presentation. I was also enrolled in some clinical work (sentinel lymph node SPECT-CT and biopsy, reading sessions, multidisciplinary meetings, journal club, discrepancy meetings and educational lectures). The Head and Neck Tumour MDT, which takes place every Wednesday, was a wonderful opportunity to see different cases and the ways to manage them. It has been a very important experience in my professional and academic career and I am very grateful for this visit to UCLH. Thank you so much for this exquisite time spent on this fellowship; I am enormously grateful for all the help, support and patience I have received during my stay!



#### Nadezhda Plakhotina Dr. Berezin Medical Center, Saint Petersburg/Russia

Topic: CNS tumours: advanced imaging and genetic considerations Training Centre: Hospital Materno-Infantil Vall d'Hebrón, Barcelona/Spain

I feel very fortunate to have been awarded a four-months Research Bracco Fellowship program and I am very grateful to ESOR and Bracco for giving me this opportunity. It was an inspiring experience to take part in the research project with such an highly qualified team. The University hospital Vall d'Hebron and the subdivision of Materno-Infantil is a highly specialised pediatric hospital and is the regional reference center for complex cases. I was not quite experienced in pediatric radiology, but this fellowship has enhanced my skills and understanding. I would like to express my deep gratitude to all doctors, especially to my tutor, Dr. Elida Vázquez Mendez, for the kindness in sharing their knowledge. They not only helped me with research work, but also provided me with the understanding of cutting-edge pediatric radiology.



#### Pablo Rodriguez Carnero

Hospital Universitario La Princesa, Madrid/Spain Topic: Predicting tumour response to rectal cancer with MR imaging and Radiomics: Quantitative analysis of the tumours undergoing neoadjuvant radio-chemotherapy and surgery Training Centre: Policlinico Universitario "Agostino Gemelli", Rome/Italy

Thanks to this ESOR Research Fellowship and the sponsorship of Bracco I had the chance of working within the radiomic research group of A. Gemelli University Hospital: cutting-edge research under the guidance of Prof. Valentini and his collaborators, and learning with the energy and drive of my tutor Prof. Manfredi, in the unrivalled setting of the eternal city of Rome. Science is an international language and scientific exchange should be encouraged early in the careers of younger generations of radiologists. I think the ESR understands the importance of this fact: I am grateful for being part of it. I am sure this fellowship will boost my academic career.





Aycan Uysal
Hacettepe University Hospitals, Ankara/Turkey
Topic: Development of CT radiomic signatures for the early detection of liver metastasis of GI cancers
Training Centre: Champalimaud Foundation, Lisbon/Portugal

I am very grateful to ESR and ESOR for giving me this unique opportunity to participate in a four-month Research fellowship on Radiomics analysis in Oncologic Imaging in Clinical Computational Imaging Group at Champalimaud Foundation, Lisbon. It was a great honor to be a part of one of Europe's best clinical computational imaging team and to be able to gain profound knowledge from professionals such as the head of department Nickolas Papanikolaou, Ph.D. and his wonderful team. Also I would like to express my deep gratitude to the Head of Radiology Department, Prof. Celso Matos and his radiology team for welcoming me. I have segmented MR images of prostate, breast, colon cancer and multiple myeloma patients. I had the opportunity to learn the basic aspects of Radiomics analysis and Machine Learning techniques for Radiological Applications. This experience broadened my interest and knowledge in Radiomics analysis. As a radiologist, I saw the extraordinary effect created by our collaboration with engineers engaged in clinical imaging that enhances our ability to interpret images.



## NICHOLAS GOURTSOYIANNIS **TEACHING FELLOWSHIP**



#### NICHOLAS GOURTSOYIANNIS TEACHING FELLOWSHIP



Ivana Blažić Clinical Hospital Centre Zemun, Belgrade/Serbia Topic: Rectal cancer MRI Training Centres: Hacettepe University Hospitals, Ankara/Turkey; Imperial College London, London/United Kingdom

The Nicholas Gourtsoyiannis Teaching Fellowship programme gave me a chance to develop my teaching ability and training competency in two leading European medical institutions. After completion of the programme, I would like to confirm that offering the possibility of a teaching fellowship was a great idea which should be continued in the future. It was one of the best professional experiences I have ever had. I would like to thank Hacettepe University Hospital and Imperial College London as well as members of both radiology departments for being great hosts and to express my gratitude to professor Deniz Akata and professor Andrea Rockall for helping me with their generous advice and friendly comments to enhance my teaching and training skills. Finally, I want to make an acknowledgment to ESOR for an outstanding contribution in education of young persons involved in radiology.





## Faculty 2018



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Saarbrücken/Germany

Saule Mukhametzhanova

Astana/Kazakhstan

Talgat Nurgozhin

Astana/Kazakhstan

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Astana/Kazakhstan

Nikolaj L. Shimanovskii

Moscow/Russia

Dinara Zhumadilova Astana/Kazakhstan





## Tutors 2018



Catherine Adamsbaum Hôpital du Kremlin Bicêtre Le Kremlin Bicêtre/FR Paediatric Radiology



Deniz Akata Hacettepe University Hospitals Ankara/TR Rectal cancer MRI



Hatem Alkadhi University Hospital Zurich Zurich/CH Cardiac Imaging



Maria Argyropoulou University of Ioannina Ioannina/GR Paediatric Radiology



Sebastian Arnold Städt. Klinikum Karlsruhe Karlsruhe/DE Neuroradiology



Cristina Elena Balasa Hôpital du Kremlin Bicêtre Le Kremlin Bicêtre/FR Abdominal Radiology



Pascal Baltzer Medical University of Vienna Vienna/AT Breast Radiology



Ignasi Barber Hospital Sant Joan de Deu Barcelona/ES Paediatric Radiology



Raffaella Basilico Università degli Studi "G. d'Annunzio" Chieti -Pescara Chieti/IT Abdominal Radiology



Ahmed Ba-Ssalamah Medical University of Vienna Vienna/AT Abdominal Radiology



Minerva Becker University Hospital of Geneva Geneva/CH Head and Neck Radiology



Regina Beets-Tan Netherlands Cancer Institute - Antoni van Leeuwenhoek Amsterdam/NL Oncologic Imaging



Massimo Bellomi European Institute of Oncology Milan/IT Oncologic Imaging



Fabrice Bonneville
Hôpital Purpan - Centre
Hospitalier Universitaire
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Head and Neck Radiology



Thomas Booth King's College Hospital London/UK Neuroradiology



Alexandra Borges Instituto Portugues de Oncologia de Lisboa Francisco Gentil Lisbon/PT Head and Neck Radiology



Michele Calleja Royal National Orthopaedic Hospital NHS Trust London/UK Soft-tissue sarcomas



Joan C. Carreño Hospital Materno-Infantil Vall d'Hebrón Barcelona/ES Paediatric Radiology



Christophe Cognard Hôpital Purpan - Centre Hospitalier Universitaire (CHU) de Toulouse Toulouse/FR Interventional Radiology



Stefano Colagrande Azienda Ospedaliero Universitaria Careggi Florence/IT Abdominal Radiology





Steve Connor
Kings Health Partner
(encompassing Kings
College Hospital and Guy's
and Thomas' Hospital)
London/UK
Head and Neck Radiology



Anne Cotten Hôpital Roger Salengro -CHRU Lille Lille/FR Musculoskeletal Radiology



Peter Cowley
The National Hospital
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Interventional Radiology



Jennifer Cullmann Inselspital, University Hospital Bern Bern/CH Musculoskeletal Radiology



Teresa Margarida Cunha Instituto Portugues de Oncologia de Lisboa Francisco Gentil Lisbon/PT Urogenital Radiology



Didier Dormont Pitié-Salpêtrière University Hospital Paris/FR Neuroradiology



Carolina Flygare Umeå University Hospital Umeå/SE Hybrid Imaging



Francesco Fraioli University College London Hospital - Institute of Nuclear Medicine London/UK Molecular Imaging, Head and Neck Radiology



Michael Fuchsjäger Medical University of Graz - LKH Graz/AT Breast Radiology



Alessandro Furlan University of Pittsburgh Medical Center Pittsburgh/USA Abdominal Imaging



Jurgen Futterer Radboud University Medical Centre Nijmegen/NL Interventional Radiology



Edmund Godfrey Cambridge University Hospitals NHS Trust -Addenbrooke's Hospital Cambridge/UK Abdominal Radiology



Vicky Goh Guy's and St Thomas' NHS Foundation Trust London/UK Oncologic Imaging



Meltem Gülsün Akpnar Hacettepe University Hospitals Ankara/TR Chest Radiology



Matthias Gutberlet University of Leipzig -Heart Centre Leipzig/DE Cardiovascular Radiology



Claus Peter Heussel Heidelberg University Medical Center Heidelberg/DE Chest Radiology



Andrei Holodny Memorial Sloan Kettering Cancer Center New York/USA Neuro-oncologic Imaging



Dean Huang King's College Hospital London/UK Urogenital Radiology



Arne Juette Norfolk and Norwich University Hospitals NHS Foundation Trust Norwich/UK Breast Imaging



Franz Kainberger Medical University of Vienna Vienna/AT Musculoskeletal Radiology



### Tutors 2018



Naci Kocer Istanbul University Cerrahpasa School of Medicine Istanbul/TR Neuroradiology



Lucia Kroft Leiden University Medical Centre Leiden/NL Cardiac Imaging



Miltiadis Krokidis Cambridge University Hospitals NHS Trust -Addenbrooke's Hospital Cambridge/UK Interventional Radiology



Wilhelm Kuker John Radcliffe Hospital Oxford/UK Neuroradiology



Max Lahaye Netherlands Cancer Institute - Antoni van Leeuwenhoek Amsterdam/NL Abdominal Radiology



Lisbet B. Larsen Odense University Hospital Odense/DK Breast Imaging



Peter Leander Skåne University Hospital Malmö/SE Abdominal Radiology



Olivier Lucidarme Pitié-Salpêtrière University Hospital Paris/FR Abdominal Radiology



Juan Macho Hospital Clinic of Barcelona Barcelona/ES Interventional Radiology



Riccardo Manfredi Policlinico Universitario "Agostino Gemelli" Rome/IT Rectal cancer Radiomics



Tomasz Matys Cambridge University Hospitals NHS Trust -Addenbrooke's Hospital Cambridge/UK Neuroradiology



Hans-Joachim Mentzel Jena University Hospital Jena/DE MRI in paediatric patients



Giovanni Morana Ospedale Ca' Foncello Treviso/IT Abdominal Radiology



Elizabeth Morris Memorial Sloan Kettering Cancer Center New York/USA Breast Imaging



Stephanie Nougaret Montpellier Cancer Research Institute Montpellier/FR Gynaecological malignancies



Marina Obradov Sint Maartenskliniek Nijmegen/NL Ultrasound of the musculoskeletal system



David M. Panicek Memorial Sloan Kettering Cancer Center New York/USA Oncologic Imaging



Nickolas Papanikolaou Champalimaud Foundation Lisbon/PT Liver metastasis of GI cancers



Philippe Petit Hôpital Timone - Enfants Marseille/FR Paediatric Radiology



Andrew Plumb University College London Hospital - Centre for Medical Imaging London/UK Abdominal Radiology





Daniela Prayer Medical University of Vienna Vienna/AT Neuroradiology



Sapna Puppala Leeds Teaching Hospital NHS Trust Leeds/UK Interventional Radiology



Ursula Reiter Medical University of Graz - LKH Graz/AT Cardiac MRI



Marie-Pierre Revel Hôpital Cochin Paris/FR Thoracic Radiology



Andrea Rockall Imperial College London London/UK Rectal cancer MRI



Charles Romanowski Sheffield Teaching Hospitals Foundation NHS Trust Sheffield/UK Neuroradiology



Maxime Ronot Hôpital Beaujon Clichy/FR Abdominal Radiology



Keshthra Satchithananda King's College Hospital London/UK Breast Imaging



Paul Sidhu King's College Hospital London/UK CEUS



Ruchira Sinnatamby Cambridge University Hospitals NHS Trust -Addenbrooke's Hospital Cambridge/UK Breast Radiology



Erich Sorantin Medical University of Graz - LKH Graz/AT Paediatric Radiology



Jacob Sosna Hadassah Hebrew University Medical Center Jerusalem/IL Breast Imaging



Majda M. Thurnher Medical University of Vienna Vienna/AT SWI findings in PRES



Harm Tiddens Erasmus University Medical Centre Rotterdam/NL Paediatric Radiology



Asuncion Torregrosa Hospital Universitario y Politecnico La Fe Valencia/ES MR Enterography



Horst Urbach Medical Center -University of Freiburg Freiburg/DE Neuroradiology



Aad van der Lugt Erasmus University Medical Centre Rotterdam/NL Neuroradiology/Head and Neck Radiology



Élida Vázquez Hospital Materno-Infantil Vall d'Hebrón Barcelona/ES CNS tumours



Johny Verschakelen University Hospitals Leuven Leuven/BE Thoracic Radiology



Oyunbileg von Stackelberg Heidelberg University Medical Center Heidelberg/DE Modern technologies for high workload radiology department



## Tutors 2018



Hendrik von Tengg-Kobligk Inselspital, University Hospital Bern Bern/CH Oncologic Imaging



Maria Isabel Vargas University Hospital of Geneva Geneva/CH Neuroradiology



Marc-André Weber Universitätsmedizin Rostock Rostock/DE Posttraumatic MSK MR Imaging

King's College Hospital

Abdominal Radiology

Luis Sarria Octavio de

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Suzanne Ryan

London/UK

Miguel Servet

Zaragoza/ES

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Brigitte Wilczek South General Hospital -Södersjukhuset Stockholm/SE Breast Imaging



Tarek Yousry
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Neurodegenerative
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#### Marco Bartolini

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#### Dietrich Beitzke

Medical University of Vienna Vienna/AT Cardiovascular Radiology

#### Patrick Chevallier Hôpital Archet

Nice/FR Abdominal Radiology

#### Markus Düx

Krankenhaus Nordwest Frankfurt/DE Oncologic Imaging

#### Marina Easty

Great Ormond Street Hospital for Children NHS Trust London/UK Paediatric Radiology

#### Miriam Klauß

Heidelberg University Medical Center Heidelberg/DE Abdominal Radiology

#### Daniele Marin

Duke University Hospital Durham/USA Dual Energy CT

#### Lisa Meacock

King's College Hospital London/UK Emergency Radiology

#### Homoyoon Mehrzad

University Hospital Birmingham - Queen Elizabeth Medical Centre Birmingham/UK Hepatobiliary Imaging

#### Quentin Monzani

Pitié-Salpêtrière University Hospital Paris/FR Musculoskeletal Imaging

#### Rodolfo Manuel Pinto Silva

Hospital da Universidade de Coimbra Coimbra/PT PET/CT in treatment of lymphoma

#### Grazia Pozzi

IRCCS Istituto Ortopedico Galeazzi Milan/IT Musculoskeletal Radiology

#### Nikhil Ramaiya

Case Western Reserve University Cleveland/USA Musculoskeletal Radiology

#### Mark Thornton

North Bristol NHS Trust Westbury-on-Trym/UK Oncology imaging and oncology intervention

#### **Andrew Watt**

Royal Hospital for Children Glasgow/UK Paediatric Radiology





### **ESOR AT ECR 2018**



## ESOR SESSION TRENDS IN QUALITY EDUCATION IN RADIOLOGY

#### Moderators

B. Brkljačić, Zagreb/HR N. Gourtsoyiannis, Athens/GR

#### Introduction

B. Brkljačić, Zagreb/HR

#### ESOR in action 2018

N. Gourtsoyiannis, Athens/GR

#### The beauty of face-to-face teaching

Y. Menu, Paris/FR

#### Flipped classroom: paradigm shift with pathologists

V. Vilgrain, Clichy/FR

#### Integration of Big Data in radiological education

L. Marti-Bonmati, Valencia/ES

#### Awards

On the occasion of the session, scholars and fellows were awarded certificates for successfully completing the 2017 ESOR Scholarship and Fellowship Programmes.



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- 6 Alexandroupolis/Greece
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