esor.org

ANNUAL REPORT 2019



EDUCATION IN PARTNERSHIP



EDUCATION IN PARTNERSHIP





REVIEW 2019

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 2019, ESOR has expanded its range of activities by adding new course series to its portfolio, to accommodate the ever-evolving needs for radiological education. New to this year's programme was the first ever ESOR activity on Artificial Intelligence in Barcelona, Spain entitled "Intelligence. Innovation. Imaging. The Perfect Vision of AI. An ESR Premium Event brought to you by ESOR." Additionally, ESOR implemented new courses in Manila/Philippines and in Kolkata/ India. Altogether this was the most comprehensive ESOR programme offered, with 41 courses and 114 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.

2019 marked also the celebration of thirteen 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 2019 are presented. You are provided with a snapshot of the educational programmes attended by more than 5,900 residents, fellows and board-certified radiologists (2,976 on-site participants and 2,988 live streaming viewers) along with a brief description of the scholar's and fellow's experiences gained from their participation and interaction.

Professor Valérie Vilgrain ESOR Scientific/Educational Director

ESOR STEERING COMMITTEE

March 2019 - March 2020 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 Regina Beets-Tan, Amsterdam/NL

2nd 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*

Maja Marolt-Mušič, Ljubljana/SI Chairperson of the RTF Subcommittee

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

Koenraad Verstraete, Ghent/BE

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

Edwin Oei, Rotterdam/NL ESMRMB School of MRI

Prudencia Tyrrell, Oswestry/UK ESMRMB School of MRI



INTELLIGENCE. INNOVATION. IMAGING. THE PERFECT VISION OF AI

An ESR Premium Event brought to you by ESOR

Artificial Intelligence is the hottest issue in radiology right now, so the ESR and ESOR were excited to announce their first event on Artificial Intelligence, in Barcelona, Spain, on April 5-6, 2019 entitled "Intelligence. Innovation. Imaging. The Perfect Vision of AI. An ESR Premium Event brought to you by ESOR."

The main focuses of this artificial intelligence event were the basic technical principles of AI and how they are applied to diagnostic imaging and clinical applications. The basic concepts of machine and deep learning were explored, information about the type and consistency of imaging data processed by AI tools was displayed, and the main potential and emerging clinical applications were revealed. Two special sessions brought a European flavour to the course. The first of these sessions was a panel discussion, featuring AI superstar Toby Walsh, about the future of radiology and radiologists in the era of AI. The second session was open to SME companies to present themselves and showcase their product and the advantages of using their AI solution in different scenarios of their choice.

This event was also live streamed and was exclusively sponsored by Siemens Healthineers.

Number of on-site participants: 192

Country statistics: Australia 3, Austria 3, Belgium 9, Brazil 4, Canada 1, Denmark 2, Finland 4, France 14, Georgia 1, Germany 22, Greece 3, Hungary 5, India 4, Iran 1, Ireland 3, Israel 2, Italy 9, Korea 1, Latvia 1, Lithuania 1, Norway 6, Peru 1, Poland 2, Portugal 5, Romania 8, Russian Federation 3, Slovenia 2, South Africa 1, Spain 38, Sweden 3, Switzerland 7, The Netherlands 9, Turkey 2, Ukraine 1, United Kingdom 2, United States of America 9

Number of live streaming participants: 2865 participants from 117 countries





INTELLIGENCE. INNOVATION. IMAGING. THE PERFECT VISION OF AI

An ESR Premium Event brought to you by ESOR

April 5–6, 2019 Barcelona/Spain

Topics and Faculty:

Introduction to AI Chair: V. Vilgrain, Clichy/FR

Artificial intelligence. The view of the computer scientist J.M. Bishop, London/UK

Machine and deep learning in radiology M. De Bruijne, Rotterdam/NL

Imaging biomarkers and radiomics: source of big data for AI L. Marti-Bonmati, Valencia/ES

From raw data to beautiful images D. Rueckert, London/UK

Clinical applications Chair: M. Fuchsjäger, Graz/AT

Neuro P. Parizel, Antwerp/BE

Chest H.-U. Kauczor, Heidelberg/DE

Cardiovascular M. Francone, Rome/IT

Abdomen and GI tract D. Regge, Candiolo/IT

Breast A. Gubern-Mérida, Nijmegen/NL

Ethics and responsibilities in AI A. Brady, Cork/IE

ESR paper on Artificial Intelligence in radiology E. Neri, Pisa/IT

Impact of AI in radiology Chair: B. Hamm, Berlin/DE

Integration of AI in the imaging workflow E. Ranschaert, Tilburg/NL

Impact of AI in teaching radiology J. Sosna, Jerusalem/IL Impact of AI in continuous education in radiology E. Kotter, Freiburg/DE

Impact of AI in the management of the Radiology Department: a leadership challenge C.D. Becker, Geneva/CH

Keynote lecture: AI and Radiology T. Walsh, Sydney/AU

Round Table - Panel discussion: the future of radiology and radiologists Chairs: V. Vilgrain, Clichy/FR; K. Riklund, Umeå/SE; N. Lassau, Villejuif/FR Panelists: C.D. Becker, Geneva/CH; B. Brkljačić, Zagreb/HR; L. Derchi, Genoa/IT; M. Fuchsjäger, Graz/AT; E. Neri, Pisa/IT; P. Parizel, Antwerp/BE; T. Walsh, Sydney/AU

Professional issues Chair: P. Mildenberger, Mainz/DE

Who is responsible for the diagnosis? Man or machine? M. Zins, Paris/FR

Who controls patient data in the era of AI? Man or machine? P. van Ooijen, Groeningen/NL

Making the shift to value-based healthcare J.J. Visser, Rotterdam/NL

Al companies' space Chairs: N. Papanikolaou, Lisbon/PT; P. van Ooijen, Groeningen/NL; E. Neri, Pisa/IT

Session open to SME companies in the field of AI to present themselves and to showcase their product and the advantages of AI in different scenarios of their choice. The following companies participated in the session: contextflow, icoMetrix, Incepto, infervision, Median Technologies, QUIBIM, TeraRecon.





Greek:ΓαληνόςLatin:Claudius Galenus of PergamumArabic: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 2019, one foundation and three advanced courses were organised, covering topics across the modalities reaching a total number of 204 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 92 residents from 25 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 (women's imaging, cardio-thoracic cross-sectional imaging, oncologic imaging from head to toe) and were attended by 112 doctors from 28 countries.



GALEN FOUNDATION Course

LEVEL I+II

NEURORADIOLOGY

May 23-25, 2019 Lisbon/Portugal

Host Organiser: P. Vilela Lisbon/PT

Topics and Faculty:

Vascular anatomy and imaging techniques J.T. Baptista, Lisbon/PT

Ischemic stroke: diagnosis and therapy P. Vilela, Lisbon/PT

Non-traumatic brain haemorrhage T. Nunes, Lisbon/PT

Cross-sectional brain anatomy revisited T. Yousry, London/UK

Brain congenital abnormalities M. Argyropoulou, Ioannina/GR

Pattern recognition in neuroradiology L. Van den Hauwe, Antwerp/BE **Traumatic brain injury: a practical guide** P. Vilela, Lisbon/PT

Imaging in secondary epilepsy A. Krainik, Grenoble/FR

Spinal cord lesions: myelitis or tumour? J. Van Goethem, Antwerp/BE

CNS infections: from image to pathogen C. Calli, Izmir/TR

White matter diseases F. Bonneville, Toulouse/FR

Brain tumours: what is each technique telling us about the tumour M. Thurnher, Vienna/AT

Number of participants: 92

Country statistics: Austria 2, Belgium 7, Brazil 1, Denmark 1, Georgia 2, Germany 4, Greece 4, Ireland 2, Israel 1, Italy 3, Norway 3, Poland 6, Portugal 13, Romania 10, Russian Federation 3, Slovenia 1, South Africa 1, Spain 6, Sweden 2, Switzerland 2, The Netherlands 4, Turkey 1, United Arab Emirates 1, United Kingdom 11, Uzbekistan 1



GALEN ADVANCED Courses

LEVEL II+III

WOMEN'S IMAGING

June 13-14, 2019 Malmö/Sweden

Host Organiser: S. Zackrisson Malmö/SE

Topics and Faculty:

Will tomosynthesis replace mammography in breast screening? S. Zackrisson, Malmö/SE

US of the breast from B-mode to CEUS A. Athanasiou, Athens/GR

Update of MRI of the breast T. Helbich, Vienna/AT

Imaging and management of the axilla F. Kilburn-Toppin, Cambridge/UK

Imaging of gynaecological emergencies H. Sartor, Lund/SE O-RADS classification of adnexal masses: lexicon and score I. Thomassin-Naggara, Paris/FR

MRI in endometriosis A. Guerra, Lisbon/PT

Rare gynaecological tumours: germ cell, gestational and sarcoma A. Rockall, London/UK

Whole body imaging in metastatic gynaecology malignancy H. Addley, Cambridge/UK

Number of participants: 33

Country statistics: Austria 3, Belgium 2, Denmark 1, Germany 1, Iceland 2, Latvia 1, Portugal 3, Romania 1, Sweden 16, The Netherlands 2, United Kingdom 1

8



GALEN ADVANCED Courses

LEVEL II+III

CARDIO-THORACIC CROSS-SECTIONAL IMAGING

July 4-5, 2019 Tübingen/Germany

Host Organiser: K. Nikolaou Tübingen/DE

Topics and Faculty:

New insights into pulmonary embolism M. Prokop, Nijmegen/NL

Current role of cardiac CT in acute coronary syndromes F. Bamberg, Freiburg/DE

Old disease - modern diagnosis and treatment: acute aortic syndromes C. Loewe, Vienna/AT

To touch or not to touch? Management of pulmonary nodules M.-P. Revel, Paris/FR Staging, treatment decision and follow-up of lung cancer M.O. Wielpütz, Heidelberg/DE

The forgotten organ: the oncologic heart M. Francone, Rome/IT

Cardiac inflammation and tissue characterisation J. Bremerich, Basel/CH

Cardiac interventions: role of CT for planning and imaging complications C. Artzner, Tübingen/DE

Pulmonary infections T. Franquet, Barcelona/ES

Number of participants: 24

Country statistics: Austria 1, Belgium 3, China 1, Germany 14, Sweden 1, Switzerland 2, The Netherlands 1, Ukraine 1



GALEN ADVANCED Courses

LEVEL II+III

ONCOLOGIC IMAGING FROM HEAD TO TOE

September 5-6, 2019 Paris/France

Host Organiser: M. Zins Paris/FR

Topics and Faculty:

Multimodality imaging of pancreatic cancer M. Zins, Paris/FR

Multimodality imaging of liver tumours V. Vilgrain, Clichy/FR

Incidental splenic lesions in cancer patients S. Gourtsoyianni, Athens/GR

Assessing renal tumours: pearls and pitfalls R. Pozzi Mucelli, Trieste/IT

Update of prostate cancer imaging H. Thoeny, Fribourg/CH Multimodality imaging of lung cancer I. Tyurin, Moscow/RU

Multimodality imaging of head and neck cancer R. Maroldi, Brescia/IT

Bone tumours: making the most of imaging K. Verstraete, Ghent/BE

Immunotherapy: how best to assess response? C. Dromain, Lausanne/CH

Number of participants: 55

Country statistics: Algeria 1, Austria 2, Belgium 2, Denmark 3, Estonia 1, Finland 1, France 6, Germany 3, Greece 1, Ireland 2, Latvia 2, Lithuania 2, Mexico 1, New Zealand 1, Norway 1, Poland 2, Romania 9, Slovakia 2, Switzerland 1, The Netherlands 3, Turkey 4, Ukraine 1, United Kingdom 3, United States of America 1

esor.or





In 2019, ESOR continued to organise foundation courses to prepare/assist those entering examinations for the European Diploma in Radiology. These courses have also been attended by residents/board-certified radiologists, wishing to update their knowledge in a specific area. The format included nine courses, each one dealing with a specific organ/system-oriented theme: abdominal, breast, cardiac, chest, head and neck, hybrid, musculoskeletal, neuro and paediatric radiology. The learning objectives for each of the topics were strictly adhered to the European Training Curriculum. An exam simulation with multiple-choice questions for each lecture rounded-off the exercise.

All courses were available for on-site attendance as well as participation via live streaming. In total 59 participants from 28 countries attended the ESOR Courses for EDiR on site in Vienna/Austria and 119 participants from 43 countries watched conveniently from home.



LEVEL II

NEURORADIOLOGY

November 6, 2019 Vienna/Austria

Topics and Faculty:

Acute haemorrhagic lesions imaging P. Vilela, Lisbon/PT

Neuroimaging of immunosuppressed patients A. Krainik, Grenoble/FR

Vascular malformations overview P. Vilela, Lisbon/PT

Common intracranial infections A. Krainik, Grenoble/FR

Intracranial extra-axial lesions: differential diagnosis P. Vilela, Lisbon/PT

MR spectroscopy, perfusion and diffusion in tumoural diseases A. Krainik, Grenoble/FR

Number of live streaming participants: 49

Country statistics: Australia 1, Austria 1, Belgium 1, Colombia 2, Costa Rica 1, Croatia 3, Germany 2, Greece 2, Hungary 2, India 2, Italy 1, Latvia 1, Morocco 1, Nigeria 2, Norway 1, Oman 1, Philippines 1, Poland 9, Romania 6, Saudi Arabia 1, Spain 2, Switzerland 1, The Netherlands 1, United Arab Emirates 1, United Kingdom 3

INTRE EUROPEAN SOCIETY OF RADIOLOGY 13

Number of on-site participants: 13

Country statistics: Australia 1, Austria 6, Canada 1, Denmark 1, Germany 1, Iran 1, Norway 1, Portugal 1



LEVEL II

HYBRID IMAGING

November 7, 2019 Vienna/Austria

Topics and Faculty:

Introduction to hybrid imaging K. Riklund, Umeå/SE

Breast cancer B. Schaarschmidt, Düsseldorf/DE

Colorectal cancer K. Riklund, Umeå/SE

PET/MRI in inflammatory diseases B. Schaarschmidt, Düsseldorf/DE

Prostate cancer K. Riklund, Umeå/SE

PET/MRI in gynaecologic oncology B. Schaarschmidt, Düsseldorf/DE

Number of on-site participants: 8

Country statistics: Australia 1, Canada 1, Denmark 1, Norway 1, Romania 2, Sweden 1, Switzerland 1

Number of live streaming participants: 30

Country statistics: Croatia 1, Finland 1, Germany 1, Greece 1, Hungary 2, Iceland 1, India 2, Morocco 1, Nigeria 2, Norway 1, Oman 1, Philippines 1, Poland 8, Romania 2, Spain 1, Sweden 2, United Arab Emirates 1, United Kingdom 1

esor.org

14



LEVEL II

MUSCULOSKELETAL RADIOLOGY

November 8, 2019 Vienna/Austria

Topics and Faculty:

MR and CT arthrography: an update R. Sutter, Zurich/CH

MRI of the knee in children L. Jans, Ghent/BE

Mid- and forefoot injuries R. Sutter, Zurich/CH

Rheumatic disease of the spine L. Jans, Ghent/BE

Imaging of the elbow R. Sutter, Zurich/CH

Inflammation of the muscle: myositis and beyond L. Jans, Ghent/BE

Number of on-site participants: 18

Country statistics: Australia 1, Austria 3, Belgium 1, Denmark 1, Germany 2, Iran 2, Italy 2, Norway 1, Portugal 1, Romania 1, Slovenia 1, Sweden 1, Switzerland 1

Number of live streaming participants: 36

Country statistics: Austria 1, Colombia 1, Croatia 2, Germany 4, Hungary 2, India 1, Lithuania 1, Nigeria 1, Norway 2, Oman 1, Poland 8, Portugal 1, Romania 2, Russian Federation 1, Slovenia 1, South Africa 1, Spain 1, Switzerland 2, United Arab Emirates 2, United States of America 1



LEVEL II

HEAD AND NECK RADIOLOGY

November 9, 2019 Vienna/Austria

Topics and Faculty:

Key imaging information in salivary gland lesions R. Maroldi, Brescia/IT

How to differentiate parapharyngeal space masses T. Beale, London/UK

Imaging of the larynx: the essential R. Maroldi, Brescia/IT

Imaging of the nasopharynx: key information for treatment planning T. Beale, London/UK

Deep neck infections in paediatric and adult patients: the role of imaging R. Maroldi, Brescia/IT

Key imaging information in sinonasal neoplasms T. Beale, London/UK

Number of on-site participants: 14

16

Country statistics: Australia 1, Austria 1, Belgium 1, Canada 1, Croatia 1, Denmark 1, Germany 2, Ireland 1, Latvia 1, Norway 1, Poland 1, Sweden 1, Switzerland 1

Number of live streaming participants: 28

Country statistics: Austria 1, Croatia 2, Germany 4, Hungary 2, India 1, Italy 1, Oman 1, Poland 7, Portugal 1, Romania 1, Russian Federation 1, Spain 1, Switzerland 2, Thailand 1, United Arab Emirates 1, United Kingdom 1



LEVEL II

PAEDIATRIC RADIOLOGY

November 11, 2019 Vienna/Austria

Topics and Faculty:

Imaging of CNS in children from basic to advanced M. Argyropoulou, Ioannina/GR

Imaging in child abuse I. Barber, Barcelona/ES

Imaging the craniostenosis M. Argyropoulou, Ioannina/GR

Imaging skeletal inflammatory and infectious disorders I. Barber, Barcelona/ES

The digestive tract imaging of the most common abnormalities M. Argyropoulou, Ioannina/GR

Imaging the lungs in children I. Barber, Barcelona/ES

Number of on-site participants: 11

Country statistics: Australia 1, Austria 3, Denmark 1, India 1, Norway 1, Poland 1, Saudi Arabia 1, Sweden 1, Switzerland 1

Number of live streaming participants: 27

Country statistics: Austria 1, Croatia 2, France 1, Germany 2, Greece 2, Hungary 1, India 1, Indonesia 1, Norway 1, Oman 1, Poland 5, Romania 3, Russian Federation 1, Spain 2, Sweden 2, United Arab Emirates 1



LEVEL II

CARDIAC IMAGING

November 12, 2019 Vienna/Austria

Topics and Faculty:

Cardiovascular risk assessment with Ca-scoring C. Loewe, Vienna/AT

Cardiac MR for tissue characterisation: late enhancement, T1 and T2 mapping M. Francone, Rome/IT

Ischemic cardiomyopathies M. Francone, Rome/IT

Acute coronary syndrome C. Loewe, Vienna/AT

Pulmonary hypertension and right heart involvement M. Francone, Rome/IT

Imaging in CAD after treatment C. Loewe, Vienna/AT

Number of on-site participants: 10

Country statistics: Australia 1, Austria 1, Bulgaria 1, Croatia 1, Denmark 1, Nigeria 1, Norway 1, Poland 1, Switzerland 1, United States of America 1

Number of live streaming participants: 22

Country statistics: Croatia 2, Germany 1, Greece 1, Hungary 2, India 2, Norway 2, Oman 1, Poland 6, Slovenia 1, Spain 2, United Arab Emirates 1, United Kingdom 1

18



LEVEL II

CHEST IMAGING

November 13, 2019 Vienna/Austria

Topics and Faculty:

Chest X-ray on the ICU: the basics, tubes and lines N. Howarth, Chêne-Bougeries/CH

Lung cancer: TNM staging A.R. Larici, Rome/IT

Patterns in chest radiology: ground glass opacity N. Howarth, Chêne-Bougeries/CH

Neoplastic and inflammatory diseases of the mediastinum and hila A.R. Larici, Rome/IT

Patterns in chest radiology: cystic and cyst-like structures, emphysema N. Howarth, Chêne-Bougeries/CH

Infectious and non-infectious inflammatory disease in immunocompetent, immunocompromised, and post-transplant patients including tuberculosis A.R. Larici, Rome/IT

Number of on-site participants: 11

Country statistics: Austria 4, Belgium 1, Bulgaria 1, Denmark 1, Hong Kong 1, Norway 1, Poland 1, Switzerland 1

Number of live streaming participants: 30

Country statistics: Belgium 1, Croatia 2, Czech Republic 1, Germany 4, Hungary 3, India 1, Ireland 1, Italy 1, Oman 1, Peru 1, Poland 5, Portugal 1, Romania 2, Russian Federation 1, Slovenia 1, Spain 1, Sweden 1, Ukraine 1, United Kingdom 1



LEVEL II

BREAST IMAGING

November 14, 2019 Vienna/Austria

Topics and Faculty:

Breast cancer screening: when, how, and why? P. Baltzer, Vienna/AT

How to report breast imaging findings with MG and US (BIRADS) I. Thomassin-Naggara, Paris/FR

From 2D mammography to 3D and more (BIRADS) I. Thomassin-Naggara, Paris/FR

Role of imaging during neoadjuvant therapy (NAC) P. Baltzer, Vienna/AT

Ultrasound of the breast: from morphology to function (BIRADS) I. Thomassin-Naggara, Paris/FR

Update on MRI of the breast: technique and reporting P. Baltzer, Vienna/AT

Number of on-site participants: 13

Country statistics: Austria 5, Denmark 1, Hong Kong 1, Latvia 2, Poland 1, Russian Federation 1, Spain 1, Switzerland 1

Number of live streaming participants: 20

Country statistics: Colombia 1, Croatia 2, Denmark 1, Finland 1, Germany 1, Hungary 2, India 1, Oman 1, Poland 3, Portugal 1, Romania 1, Spain 2, Switzerland 2, United Kingdom 1



LEVEL II

ABDOMINAL IMAGING

November 15, 2019 Vienna/Austria

Topics and Faculty:

Diffuse liver diseases A. Ba-Ssalamah, Vienna/AT

Prostate cancer: diagnosis and staging G. Villeirs, Ghent/BE

Gastro-oesophageal cancers: diagnosis and staging A. Ba-Ssalamah, Vienna/AT

Cervical cancer: diagnosis and staging G. Villeirs, Ghent/BE

Staging of colorectal and anal cancer A. Ba-Ssalamah, Vienna/AT

Imaging of the penis and scrotum: how I do it G. Villeirs, Ghent/BE

Number of on-site participants: 14

Country statistics: Austria 5, Belgium 1, Croatia 1, Denmark 1, Italy 1, Norway 2, Poland 1, Serbia 1, United Kingdom 1

Number of live streaming participants: 20

Country statistics: Brazil 1, Croatia 2, Hungary 2, India 1, Oman 1, Poland 3, Romania 1, Slovenia 1, South Africa 1, Spain 4, Sweden 1, Thailand 1, United Kingdom 1



ESOR/EIBALL Course

LEVEL II

RESEARCH IN DIAGNOSTIC RADIOLOGY -HOW TO BUILD THE PERFECT STUDY

November 16, 2019 Vienna/Austria

The objective of this course was to learn how to develop a research project to discover and validate an imaging parameter (e.g. radiological sign, perfusion, ADC, diagnostic algorithm, radiomics signature). The morning was dedicated to basics on imaging biomarkers and principles of measurements (coefficient of variation, reproducibility), statistics (metrics and tests), and clinical trials in diagnostic imaging. In the afternoon, participants presented a research project and worked in small groups to develop the workplan for a study. Then, the research projects were commented and improved by the group as a whole, with discussion on how to avoid common pitfalls. At the end of this course, participants had acquired the basics to put together a research study in diagnostic imaging.

Topics and Faculty:

What is a biomarker? N. deSouza, Sutton/UK

Basics of measurement F. Garcia-Castro, Valencia/ES

Basics of statistics I. Millet, Montpellier/FR

Steps to validate a biomarker L. Fournier, Paris/FR

Workshop 1: Setting up research workplans N. deSouza; F. Garcia-Castro; I. Millet; L. Fournier

Workshop 2: Comments and review of projects N. deSouza; F. Garcia-Castro; I. Millet; L. Fournier

Number of participants: 7 Country statistics: Croatia 1, France 1, Hungary 1, Norway 1, Poland 1, Portugal 1, Sweden 1







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

The partnership with GE Healthcare led to a course on "Advances in MR Imaging" held in Bucharest/Romania with 73 participants, a second course on "Emergency Radiology (Trauma)" held in Warsaw/Poland attended by 94 participants and a third course on "Most common GI Disorders" organised in Novi Sad/Serbia with 48 participants.

Additionally, ESOR continued the partnership with Lancet in Russia, which resulted in an ESOR course on "Body Oncologic Imaging". The course took place in Saint Petersburg and was attended by 65 radiologists.

In 2019, ESOR's portfolio included a course on "Cardiac Imaging" embedded within the successful ESOR Graz Tutorial; a symposium on imaging hallmarks of pancreatic cancer in Lisbon/Portugal, which was realised in collaboration with the Champalimaud Foundation and attended by 290 interested participants; a course on "Musculoskeletal Radiology" held in Madrid/Spain with 71 participants as well as a course on "Mechanical Thrombectomy" in Lille/France.

Furthermore, after seven successful courses from 2012 to 2018, 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 Amsterdam/The Netherlands and was attended by 64 participants from 24 countries.



LEVEL II+III

ADVANCES IN MR IMAGING

May 9–10, 2019 Bucharest/Romania

Host Organiser: I. Lupescu Bucharest/RO

Topics and Faculty:

Glioblastoma management: MR diffusion and perfusion strategies F. Aparici, Valencia/ES

Stroke management: MR diffusion and perfusion strategies Y. Berthezène, Lyon/FR

Neurodegenerative diseases: MR evaluation of tissue damage S. Haller, Geneva/CH

Myocardial hypertrophies: MR evaluation of tissue properties A. Kallifatidis, Thessaloniki/GR

Myocardial ischemia and fibrosis MR imaging of prognostic markers C. Loewe, Vienna/AT **Pericardial and valvular abnormalities: MR in clinical pathways** A. Azarine, Paris/FR

MR of the synovial: from thickness to aggressiveness evaluation A. Cotten, Lille/FR

MR of cartilage: from appearance to properties S. Ghiea, Bucharest/RO

MR of bone: from cortical to trabecular changes K. Verstraete, Ghent/BE

Number of participants: 73 Country statistics: Denmark 2, Romania 67, Slovakia 2, The Netherlands 2



LEVEL II+III

BODY ONCOLOGIC IMAGING

May 16–17, 2019 Saint Petersburg/Russia

Host Organiser: I. Tyurin Moscow/RU

Topics and Faculty:

Imaging of abdominal neuroendocrine tumours V. Vilgrain, Clichy/FR

Lung cancer: multimodality imaging I. Tyurin, Moscow/RU

Imaging of metastatic lymph nodes: focus on DWI H. Thoeny, Fribourg/CH

Breast cancer: early detection and staging T. Helbich, Vienna/AT

Endometrial and cervical cancer: staging and assessing therapy R. Forstner, Salzburg/AT MRI in staging and monitoring of rectal cancer V. Sinitsyn, Moscow/RU

Focal liver lesions: diagnostic approach based on imaging characteristics C. Stoupis, Maennedorf/CH

Pancreatic cancer: detection, staging and treatment evaluation R. Manfredi, Rome/IT

Prostate cancer: PIRADS v2 and beyond J. Futterer, Nijmegen/NL

Number of participants: 65 Country statistics: Armenia 1, Kyrgyzstan 1, Russian Federation 63



LEVEL III

MECHANICAL THROMBECTOMY

June 26–28, 2019 Lille/France

Host Organiser:

J.-P. Pruvo Lille/FR

Topics and Faculty:

Epidemiology of stroke and societal impact D. Leys, Lille/FR

The first stroke treatment: the stroke Unit. Is thrombolysis dead? E. Touzé, Caen/FR

Comprehensive stroke center network, where to perform thrombectomy? C. Taschner, Freiburg/DE

Pre-hospital management: mothership, drip & ship P. Goldstein, Lille/FR

MRI first, the way to go! X. Leclerc, Lille/FR

Stroke mimics & chameleons D. Leys, Lille/FR

CT and MRI perfusion, do we need it? - Diffusion, FLAIR, T2*, TOF, is that all? (advanced imaging) G. Boulouis, Paris/FR

European strategy of stroke imaging M. Argyropoulou, Ioannina/GR

Thrombectomy: what the RCTs tell us? O. Berkhemer, Amsterdam/NL

Haemorrhagic transformation, who's to blame? C. Cordonnier, Lille/FR

Number of participants: 35

Country statistics: Austria 1, Belgium 2, Bulgaria 1, Croatia 1, France 12, Germany 1, Greece 7, Jordan 1, Mexico 1, Morocco 1, Poland 1, Romania 4, Spain 1, United Kingdom 1

Session: From grade A to off-label thrombectomy

Too old? H. Henon, Lille/FR

Too large? In Extremis C. Dargazanli, Montpellier/FR

Not severe enough – Low NIHSS? B. Lapergue, Paris/FR

Tandem occlusion? B. Gory, Nancy/FR

ARTS, SAVE, EPIC, BGC, SOS! P. Vilela, Lisbon/PT

Graduation for thrombectomy: who to graduate to assume workflow? Example in the south-west of France J. Berge, Bordeaux/FR

Stroke unit and tele-stroke network, the German model? H. Audebert, Berlin/DE

Practical workshop - Hands-on workshop Virtual and flow-model simulation L. Estrade, Lille/FR; T. Personnic, Lille/FR; N. Bricout, Lille/FR

Theoretical workshop 1 - CT & MRI pitfalls (virtual cases) G. Kuchcinski, Lille/FR; J. Le Faivre, Lille/FR; X. Leclerc, Lille/FR

Theoretical workshop 2 - Interactive clinical cases A. Kazémi, Lille/FR; C. Barbier, Caen/FR; N. Nouri, Lille/FR

Stroke physiopathology, what do we know? D. Deplanque, Lille/FR

Giving new life to old music: about the future of translational stroke research D. Vivien, Caen/FR

What next for thrombectomy? Multi-centric and collaborative databases: a call for unity B. Gory, Nancy/FR; J.-P. Pruvo, Lille/FR



LEVEL II+III

MUSCULOSKELETAL RADIOLOGY

September 13–14, 2019 Madrid/Spain

Host Organiser: A. Alcalá-Galiano Madrid/ES

Topics and Faculty:

MRI of the postoperative knee A. Karantanas, Heraklion/GR

Ankle joint M.-A. Weber, Rostock/DE

Shoulder instability J. Fernandez Jara, Madrid/ES

Imaging of the wrist M. Shahabpour, Brussels/BE

Shoulder - rotator cuff U. Aydingoz, Ankara/TR Imaging of the upper limb nerves C. Martinoli, Genoa/IT

Musculoskeletal variants and pitfalls F. Vanhoenacker, Antwerp/BE

Bone tumours and bone marrow K. Verstraete, Ghent/BE

Soft tissue tumours A. Navas, Leiden/NL

Number of participants: 71

Country statistics: Argentina 1, Australia 2, Belgium 4, Denmark 2, Finland 2, France 1, Germany 4, Greece 3, Hungary 2, Ireland 1, Italy 5, Poland 1, Portugal 5, Romania 7, Russian Federation 1, South Africa 1, Spain 16, Sweden 2, Switzerland 1, The Netherlands 5, Turkey 1, Ukraine 1, United Kingdom 3



ASKLEPIOS Courses

LEVEL II+III

EMERGENCY RADIOLOGY (TRAUMA)

September 19–20, 2019 Warsaw/Poland

Host Organiser: A. Majos Lodz/PL

Topics and Faculty:

How to optimise a body CT for trauma patients A. Palkó, Szeged/HU

Trauma brain injury A. Majos, Lodz/PL

Spine G. Bierry, Strasbourg/FR

Chest trauma H. Prosch, Vienna/AT

Abdominal: solid organs M. Piskunowicz, Gdansk/PL Intestinal and mesenteric trauma I. Millet, Montpellier/FR

Pelvic trauma M.C. De Jonge, Woerden/NL

Lower extremities J. Kramer, Linz/AT

Trauma in children: why different? M. Raissaki, Heraklion/GR

Number of participants: 94

Country statistics: Austria 1, Belarus 1, Belgium 3, Bulgaria 1, Denmark 2, Germany 4, Italy 1, Latvia 1, Lithuania 4, Poland 59, Romania 9, Singapore 1, Switzerland 1, Turkey 1, Ukraine 4, United Arab Emirates 1



LEVEL II+III

MOST COMMON GI DISORDERS

September 26-27, 2019 Novi Sad/Serbia

Host Organiser: S. Stojanovic Novi Sad/RS

Topics and Faculty:

Sigmoiditis: what is the role of radiologists? S. Schmidt Kobbe, Lausanne/CH

Small bowel obstruction: when to go for surgery? P. Taourel, Montpellier/FR

Appendicitis and mimics S. Stojanovic, Novi Sad/RS

Peritoneal diseases: clues to differentiate carcinomatosis from other diseases C. Dromain, Lausanne/CH

Abdominal hernias: role of imaging M. Zins, Paris/FR Acute cholecystitis: ultrasound and beyond S. Sotirović Seničar, Novi Sad/RS

Bile duct stricture: is it benign or malignant? C. Valls, Stockholm/SE

Cirrhosis and mimickers V. Vilgrain, Clichy/FR

Pancreatic pseudotumours: how to recognise? C. Triantopoulou, Athens/GR

Number of participants: 48

Country statistics: Argentina 1, Austria 1, Bosnia and Herzegovina 1, Croatia 4, Estonia 1, Italy 2, Kosovo 1, North Macedonia 1, Romania 15, Serbia 15, Slovenia 4, United Kingdom 2



LEVEL II+III

CARDIAC IMAGING

October 9–11, 2019 Graz/Austria

Host Organiser: M. Fuchsjäger Graz/AT

Topics and Faculty:

Cardiac CT techniques K. Nikolaou, Tübingen/DE

Cardiac CT in the challenging patient C. Loewe, Vienna/AT

Coronary anatomy and anomalies C. Loewe, Vienna/AT

Cardiac CT in stable angina (+FFR and perfusion) K. Nikolaou, Tübingen/DE

Cardiac CT after treatment (bypasses and stents) V. Sinitsyn, Moscow/RU

Cardiac CT in the acute setting K. Nikolaou, 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; V. Nizhnikava, Minsk/BY

Cardiac MR in the diagnosis of non-ischemic cardiomyopathy V. Sinitsyn, Moscow/RU

Number of participants: 43

Country statistics: Armenia 2, Austria 5, Azerbaijan 1, Belarus 1, Bulgaria 1, Croatia 1, Egypt 1, Finland 1, France 1, Germany 2, Greece 1, Kazakhstan 2, Malta 1, Oman 1, Romania 4, Russian Federation 5, Slovakia 6, Slovenia 4, Turkey 1, Ukraine 2 Cardiac MR techniques and protocols U. Reiter, Graz/AT

Cardiac MR in ischemic heart disease M. Francone, Rome/IT

Cardiac MR in the diagnosis of myocarditis M. Francone, Rome/IT

Cardiac MR assessment of cardiac and myocardial functions J. Schmid, Graz/AT

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 MR 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 E. Sorantin, Graz/AT

Cardiac MRI live session U. Reiter, Graz/AT; G. Reiter, Graz/AT

Cardiac MR in the challenging patient G. Reiter, Graz/AT

Case presentations cardiac MR

- G. Adelsmayr, Graz/AT; J. Schmid, Graz/AT;
- E. Talakic, Graz/AT; C. Reiter, Graz/AT;
- M. Fuchsjäger, Graz/AT; V. Nizhnikava, Minsk/BY



LEVEL III

MULTIDISCIPLINARY APPROACH TO CANCER IMAGING

November 4-5, 2019 Amsterdam/The Netherlands

Host Organiser:

R. Beets-Tan Amsterdam/NL

Topics and Faculty:

Imaging technology in radiotherapy for radiologists: Basic principle in radiation technology F. Cellini, Rome/IT

Imaging technology in radiotherapy for radiologists: Clinical application F. Cellini, 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: Clinical application of MRI in radiology for radiotherapists R. Manfredi, Rome/IT

Number of participants: 64

Country statistics: Australia 1, Belarus 3, Belgium 1, Bosnia and Herzegovina 1, Brazil 1, Canada 1, Georgia 1, Germany 2, Greece 1, Israel 1, Italy 2, Latvia 1, New Zealand 1, North Macedonia 2, Norway 5, Poland 1, Portugal 1, Romania 9, Russian Federation 2, Spain 1, Switzerland 1, The Netherlands 21, Turkey 1, United States of America 3 Advanced imaging technology in radiotherapy for radiotherapists: Radiation technology for radiotherapists F. Cellini, 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

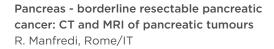
Liver - borderline resectable colorectal liver metastases: CT and MRI of liver tumours M. Ronot, Clichy/FR

Liver - borderline resectable colorectal liver metastases: How to manage treatment - invasive and non-invasive K. Kuhlmann, Amsterdam/NL

Liver - borderline resectable colorectal liver metastases: How to manage treatment - radiation and systemic

F. Cellini, Rome/IT

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



Pancreas - borderline resectable pancreatic cancer: How to manage treatment - radiation and systemic F. Cellini, Rome/IT

Multidisciplinary tumour board 1: The management of CRC liver metastases M. Ronot, Clichy/FR K. Kuhlmann, Amsterdam/NL F. Cellini, Rome/IT

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

- S. Alfieri, Rome/IT R. Manfredi, Rome/IT
- F. Cellini, Rome/IT

Prostate cancer: Staging with imaging R. Manfredi, Rome/IT

Prostate cancer: How to manage treatment - surgery H. Van Poppel, Leuven/BE Prostate cancer: Radiotherapy P. Hoskin, London/UK

EUROPEAN SCHOOL OF RADIOLOGY

Multidisciplinary tumour board: The management of prostate cancer

- R. Manfredi, Rome/IT H. Van Poppel, Leuven/BE P. Hoskin, London/UK
- . HOSKIII, LOHOOH/ OK

Rectal cancer: How to manage treatment - surgery C. van de Velde, Leiden/NL

Rectal cancer: How to manage treatment radiation treatment C.A.M. Marijnen, Amsterdam/NL

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

Multidisciplinary tumour board: The management of rectal cancer

C. van de Velde, Leiden/NL C.A.M. Marijnen, Amsterdam/NL R. Beets-Tan, Amsterdam/NL



LEVEL III

SYMPOSIUM ON IMAGING HALLMARKS OF CANCER PANCREATIC CANCER - FROM CELL BIOLOGY TO TREATMENT

November 15, 2019 Lisbon/Portugal

Host Organiser: C. Matos

Lisbon/PT

Topics and Faculty:

Keynote lecture Chair: C. Matos, Lisbon/PT

Bridging basic biological science and clinical research A. Coutinho, Lisbon/PT

Session I Chairs: C. Carvalho, Lisbon/PT; B. Costa-Silva, Lisbon/PT

Cell competition in cancer development E. Moreno, Lisbon/PT

Imaging pancreatic cancer morphogenesis A. Behrens, London/UK

Tumour microenvironment in pancreatic cancer metastasis M. Schmid, Liverpool/UK

Session II Chairs: C. Matos, Lisbon/PT; O. Pares, Lisbon/PT

Al in cancer imaging: barriers and breakthroughs G. d'Assignies, Paris/FR

Added value of CT Radiomics in pancreatic ductal adenocarcinoma M. Haider, Toronto/CA

CT Radiomics and SBRT in pancreatic adenocarcinoma C. Franzese, Milan/IT

Number of participants: 290

Country statistics: Belarus 1, Brazil 1, Poland 4, Portugal 222, Romania 1, Spain 5, United Kingdom 1, United States of America 1, Unknown 54 Session III Chairs: M. Castillo, Lisbon/PT; D. Costa, Lisbon/PT

Pathways of progression from IPMN to PDAC L. Wood, Baltimore/US

Detection of intraepithelial pancreatic lesions by Immuno-PET H. Ploegh, Boston/US

Molecular stratification of pancreatic cancer sub-types and clinical implications T. Arsenijevic, Brussels/BE

Session IV Chairs: E. Barroso, Lisbon/PT; R. Rio Tinto, Lisbon/PT

Immuno-Surgery for pancreatic cancer: barriers and breakthroughs M. Mauerer, Lisbon/PT

Current options and new developments in pancreatic cancer surgery A. Sa Cunha, Villejuif/FR

Current options and new developments in endoscopic perioperative interventions J. Devière, Brussels/BE

What we have learned today? P. Fidalgo, Lisbon/PT; T. Carvalho, Lisbon/PT





LEVEL II+III

VISITING PROFESSORSHIP Programme Georgia 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 2019, Georgia was selected by the ESR Board of Directors as the fifth 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 Georgian 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, renal and testicular cancer. Renowned European experts ensured a high-quality teaching programme, combining lectures and workshops, allowing for interactive case discussions.

ONCOLOGIC IMAGING OF THE ABDOMEN AND PELVIS

Date and Venue: May 3, Tbilisi/GE

Host Organisers:

G. Tsivtsivadze, Tbilisi/GE M. Okujava, Tbilisi/GE S. Kakhadze, Tbilisi/GE

Topics and Faculty:

How to diagnose hepatocellular carcinoma V. Vilgrain, Clichy/FR

Imaging of pancreatic cancer: diagnosis and staging C. Triantopoulou, Athens/GR

Imaging testicular tumours L. Derchi, Genoa/IT

Imaging of neuroendocrine tumours of the abdomen V. Vilgrain, Clichy/FR

Imaging assessment of treatment response during chemo radiation therapy for pancreatic cancer C. Triantopoulou, Athens/GR

Imaging of renal cancer L. Derchi, Genoa/IT

Number of participants: 366

Country statistics: Georgia 366



VISITING PROFESSORSHIP Programme Bulgaria

This Visiting Professorship Programme was aimed at senior residents and boardcertified radiologists interested in paediatric radiology. It was designed as an intense one-day programme, directly linked to the Bulgarian Congress of Radiology.

The purpose of the course was to familiarise the attendees with foetal imaging, key imaging findings, differential diagnosis of common paediatric disorders and radiation protection applied in paediatric imaging. Another important topic presented was "imaging of child abuse" with its typical findings and differential diagnosis.

Teachers with a large experience in practicing paediatric radiology gave didactic lectures associated with interactive case-based discussions.

PAEDIATRIC RADIOLOGY

Date and Venue: September 26, Varna/BG

Host Organiser: N. Traykova, Plovdiv/BG

Topics and Faculty:

Imaging the lungs in children: what we need to know A. Kanavaki, Athens/GR

Imaging urinary system in childhood C. Granata, Genoa/IT

Imaging inflammatory and infectious skeletal disorders in childhood I. Barber, Barcelona/ES

Radiation protection in paediatric imaging C. Granata, Genoa/IT

Foetal MR imaging A. Kanavaki, Athens/GR

Imaging of child abuse I. Barber, Barcelona/ES

Number of participants: 59 Country statistics: Bulgaria 58, Norway 1



VISITING PROFESSORSHIP Programme Balkan Congress

This Visiting Professorship Programme was aimed at senior residents, board-certified radiologists and fellows interested in high-quality state-of-the-art breast imaging. The course was designed as an intense one-day programme, directly linked to the Balkan Congress of Radiology. It was articulated on imaging strategies in screening, preoperative setting with staging and tumour localisation as well as neoadjuvant chemotherapy monitoring. Lectures on latest advances of routine breast imaging with a focus on tomosynthesis, contrast-enhanced spectral mammography, advanced ultrasound and ultrafast breast MRI were presented. Highly renowned European lecturers ensured a high-quality teaching programme, combining lectures and workshops, allowing for interactive case discussions.

BREAST IMAGING

Date and Venue: October 17, Heraklion/GR

Host Organiser: D. Tsetis, Heraklion/GR

Topics and Faculty:

Tomosynthesis and contrast-enhanced spectral mammography E. Fallenberg, Munich/DE

Ultrasound, elastography and more F. Kilburn-Toppin, Cambridge/UK

Ultrafast and non-contrast breast MRI R. Mann, Nijmegen/NL

Screening: who, when and how? F. Kilburn-Toppin, Cambridge/UK

Preoperative staging and tumour localisation E. Fallenberg, Munich/DE

Neoadjuvant chemotherapy monitoring R. Mann, Nijmegen/NL

Number of participants: 107

Country statistics: Azerbaijan 3, Belgium 1, Bulgaria 12, Canada 2, Cyprus 1, France 1, Germany 1, Greece 47, Japan 2, Jordan 1, Korea 1, Latvia 1, North Macedonia 14, Norway 1, Romania 2, Russian Federation 1, Serbia 2, The Netherlands 1, Turkey 9, United Kingdom 2, Unknown 2





ASKLEPIOS Course International Philippines

This ESOR International course was implemented with great support and partnership of Guerbet and PSNHNR (Philippine Society of Neuroradiology and Head and Neck Radiology). It aimed to discuss the most important topics in neuroradiology and head and neck imaging. Experienced neuroradiologists and lecturers shared their knowledge and current practice on radiology using CT and MR of cranial nerves, orbit, temporal bone, pituitary, dural and carotid-cavernous fistulas and dementia. Imaging clinical case-based workshops completed and illustrated the selected lectures.

HEAD AND NECK RADIOLOGY

Date and Venue: July 12, Manila/PH

Host Organiser: I.D. David-Kintanar, Manila/PH

Topics and Faculty: Imaging of cranial nerves A. Krainik, Grenoble/FR

Imaging of sellar and suprasellar anomalies F. Bonneville, Toulouse/FR

How to read a temporal bone CT: anatomy and inflammation? B. Verbist, Leiden/NL

Pre-treatment assessment of dural and carotid-cavernous fistulas F. Bonneville, Toulouse/FR

Imaging of dementia A. Krainik, Grenoble/FR

Soft tissue mass of the orbits B. Verbist, Leiden/NL



Number of participants: 143 Country statistics: Malaysia 1, Philippines 141, Singapore 1

esor.c



ASKLEPIOS Course International Thailand

This ESOR International course was implemented with great support and partnership of Guerbet and RCRT (Royal College of Radiologists of Thailand). It aimed to discuss the most important topics in neuroradiology and head and neck imaging. Experienced neuroradiologists and lecturers shared their knowledge and current practice on radiology using CT and MR of cranial nerves, orbit, temporal bone, pituitary, carotid-cavernous fistulas and dementia. Imaging clinical case-based workshops completed and illustrated the selected lectures.

HEAD AND NECK RADIOLOGY

Date and Venue: July 15, Bangkok/TH

Host Organiser: A. Churojana, Bangkok/TH

Topics and Faculty: Imaging of cranial nerves A. Krainik, Grenoble/FR

Imaging of sellar and suprasellar anomalies F. Bonneville, Toulouse/FR

Pre-treatment assessment of carotid-cavernous fistulas A. Churojana, Bangkok/TH

Imaging of dementia A. Krainik, Grenoble/FR

How to read a temporal bone CT: anatomy and inflammation? W. Phuttharak, Khon Kaen/TH

Soft tissue mass of the orbits B. Verbist, Leiden/NL



Number of participants: 120 Country statistics: Indonesia 3, Nepal 1, Singapore 1, Thailand 115



ASKLEPIOS Courses International Brazil

These ESOR International courses were implemented with great support and partnership of CBR (Brazilian College of Radiology). The main aim of these courses was to review the basic and advanced principles of some important topics in neuroradiology imaging. An experienced Brazilian and European guest faculty shared their experience and knowledge using brain CT and MR in different clinical settings. The courses were composed of lectures on headache, stroke, infectious, demyelinating and tumoural imaging. These lectures were complemented by interactive sessions, clinical case-based workshops, that promoted the group case discussions and enabled the developing of new imaging diagnostic strategies, which will be useful for the participants clinical practice.

NEURORADIOLOGY

Dates and Venues:

August 29, Porto Alegre/BR August 31, Rio de Janeiro/BR

Host Organisers:

C. Fernandes Jerzewski Sotero da Cunha, Porto Alegre/BR

B. Tessarollo, Rio de Janeiro/BR

Topics and Faculty:

CT in stroke: CTA and pCT A. Dörfler, Erlangen/DE

MRI in stroke: ARM, perfusion and diffusion L. Morais, São Paulo/BR

Headache imaging in emergency P. Vilela, Lisbon/PT

Advanced MRI in neuro-oncology S. Bisdas, London/UK

Multiple sclerosis and differentials N. Menjot de Champfleur, Montpellier/FR

Infectious diseases of the CNS

L. Tavares Lucato, São Paulo/BR

Number of participants Porto Alegre: 66 Country statistics: Brazil 66 **Number of participants Rio de Janeiro: 77** Country statistics: Brazil 77

esor.c



ASKLEPIOS Courses International China

These ESOR International courses were implemented with great support and partnership of Guerbet and CSR (Chinese Society of Radiology). They were intended for senior residents, subspecialists and recently board-certified radiologists and designed to provide an in-depth view into modern application of cardiac imaging in the clinical practice. Recent advances and already established applications in Cardiac Radiology were presented by a joint faculty consisting of internationally renowned Chinese and European experts. Starting with more general lectures about implementation and optimisation of both coronary CT angiography and cardiac MRI, the use of these modern techniques in different, most relevant clinical conditions was discussed. The spectrum of clinical scenarios presented during these courses included topics spacing from acute chest pain over typical conditions and findings after treatment up to the differential diagnosis of myocardial diseases. Even latest innovations like the functional assessment of coronary stenosis by means of coronary CT angiography were addressed. The combination of didactic lectures and interactive case-based discussions guaranteed the high educational value of this teaching programme.

CARDIAC IMAGING - CT AND MR

Date and Venue: September 10, Beijing/CN

Host Organisers: Zhengyu Jin, Beijing/CN Bin Lv, Beijing/CN

Topics and Faculty:

How I do a coronary CT angiography? Yining Wang, Beijing/CN

Coronary CT angiography after cardiac surgery and stenting Marco Francone, Rome/IT

Current and possible future role of cardiac CT in acute chest pain Christian Loewe, Vienna/AT

How I do a cardiac MRI? Alban Redheuil, Paris/FR

The role of CMR in heart failure Lei Xu, Beijing/CN

MR in non-ischemic cardiomyopathies Alexandros Kallifatidis, Thessaloniki/GR Date and Venue: September 12, Shanghai/CN

Host Organisers: Shiyuan Liu, Shanghai/CN Fuhua Yan, Shanghai/CN

Topics and Faculty:

How I do a coronary CT angiography? Wenjie Yang, Shanghai/CN

Coronary CT angiography after cardiac surgery and stenting Marco Francone, Rome/IT

Current and possible future role of cardiac CT in acute chest pain Christian Loewe, Vienna/AT

How I do a cardiac MRI? Alban Redheuil, Paris/FR

CT-based functional assessment of coronary stenosis: latest development and clinical application Jiayin Zhang, Shanghai/CN

MR in non-ischemic cardiomyopathies Alexandros Kallifatidis, Thessaloniki/GR

Number of participants Beijing: 65 Country statistics: China 65 Number of participants Shanghai: 86 Country statistics: China 86



ASKLEPIOS Course International India

This ESOR International course was implemented with great support and partnership of IRIA-WB (Indian Radiological and Imaging Association - West Bengal branch). It was aimed at senior residents, board-certified radiologists and fellows interested in high-quality abdominal oncologic imaging. This intense two-day programme was articulated on imaging strategies for the most common cancers in abdomen (liver, pancreas, bile ducts and rectum) and pelvis (kidney, prostate and female pelvis). The course highlighted 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 Indian lecturers ensured a high-quality teaching programme, combining lectures and workshops, allowing for interactive case discussions.

ABDOMINAL ONCOLOGIC IMAGING

Dates and Venue: November 15-16, Kolkata/IN

Host Organisers: S. Sen, Kolkata/IN G. Niyogi, Kolkata/IN

Topics and Faculty: Hepatocellular carcinoma V. Vilgrain, Clichy/FR

Gallbladder cancer S. Sen, Kolkata/IN

Diagnosis and staging of pancreatic cancer C. Cassinotto, Montpellier/FR

Cholangiocarcinoma V. Vilgrain, Clichy/FR

Pancreatic cancer: imaging for assessing tumour response C. Cassinotto, Montpellier/FR

Stomach and oesophagus R. Sharma, New Delhi/IN **Rectal cancer** S. Gourtsoyianni, Athens/GR

Multiparametric MRI of the prostate: an update O. Rouvière, Lyon/FR

Ovarian cancer A. Baheti, Mumbai/IN

Peritoneal carcinomatosis and its mimickers S. Gourtsoyianni, Athens/GR

Diagnostic work-up of cystic renal masses O. Rouvière, Lyon/FR

Uterus cancer K. Ganesan, Mumbai/IN

Number of participants: 130 Country statistics: Bangladesh 25, India 104, The Netherlands 1





ADVANCED IMAGING MULTIMODALITY SEMINARS AIMS Mexico

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 purpose of these advanced one-day courses was to familiarise senior residents, boardcertified radiologists and fellows from Mexico with imaging of children. The courses were designed to offer knowledge on paediatric imaging protocols, on age-related normal changes and on specific findings and the differential diagnosis of the most common paediatric disorders. Renowned European and Mexican teachers, experts in the topic, gave lectures and workshops on imaging of the foetus, the thorax, the abdomen, the musculoskeletal system and on neuroimaging.

HOW GENERAL RADIOLOGISTS SHOULD DEAL WITH PAEDIATRIC IMAGING

Dates and Venues:

April 10, Mexico City/MX April 12, León/MX

Host Organisers:

M.A. Palacios Montesinos, Mexico City/MX M. Hernández Cruz, Puebla/MX P. Montaño Ascencio, León/MX

Topics and Faculty:

Foetal imaging R. Llorens, Valencia/ES

Diffusion tensor imaging in ADHD in children P. Dies Suárez, Mexico City/MX

Paediatric neuroimaging M. Argyropoulou, Ioannina/GR

Paediatric chest imaging M.P. García-Peña, Barcelona/ES

Paediatric musculoskeletal imaging A. Perez Lara, Mexico City/MX

Paediatric abdominal imaging S.G.F. Robben, Maastricht/NL

Number of participants Mexico City: 92 Country statistics: Mexico 92 Number of participants León: 99 Country statistics: Mexico 99



ADVANCED IMAGING MULTIMODALITY SEMINAR AIMS Korea

This year's Advanced Imaging Multimodality Seminar (AIMS) Korea was organised jointly with the Korean Society of Radiology (KSR) and was supported by Bracco. The seminar was aimed at senior residents, board-certified radiologists and fellows from Korea and was designed to advance the knowledge of an array of indications for musculoskeletal imaging. Didactic lectures combined with interactive case-based discussions highlighted common pathologies and imaging pitfalls in the diagnosis of sports trauma, postoperative changes, nerve imaging, arthritis, osteoporosis and oncologic imaging. International renowned European and Korean experts ensured a high-quality teaching programme.

PRESENT AND FUTURE IN MSK RADIOLOGY

Date and Venue: July 13, Seoul/KR

Host Organiser: Ik Yang, Seoul/KR

Topics and Faculty:

Sports imaging Apostolos Karantanas, Heraklion/GR

Postoperative imaging Kyung Ah Chun, Incheon/KR

MR neurography Dong-Ho Ha, Busan/KR

MR imaging of arthritis Philip O'Connor, Leeds/UK

Osteoporosis imaging Jee Won Chai, Seoul/KR

Quantitative oncologic imaging (perfusion and diffusion) Koenraad Verstraete, Ghent/BE



AIMS Korea

Number of participants: 69 Country statistics: China 2, Korea 65, Mongolia 2



VISITING PROFESSORSHIP Programme Colombia

This Visiting Professorship Programme was aimed at general board-certified radiologists and fellows interested in abdominal oncologic imaging, focussed on liver, pancreas and prostate malignancies. It was designed as an intense one-day programme connected to the Colombian Congress of Radiology. A particular focus was on the applications of the latest imaging techniques, diagnostic criteria, staging principles and clinical role of imaging in liver, pancreatic, and prostate cancer. Renowned European experts ensured a high-quality teaching programme, combining lectures and workshops, allowing for interactive case discussions.

ONCOLOGIC IMAGING

Date and Venue: August 7, Cartagena/CO

Host Organiser: F. Lubinus, Bucaramanga/CO

Topics and Faculty: Diagnosis and staging of cholangiocarcinoma C. Matos, Lisbon/PT

Diagnosis and staging of hepatocellular carcinoma L. Marti-Bonmati, Valencia/ES

Multiparametric MRI in the diagnosis of prostate cancer B. Hamm, Berlin/DE

Detection, staging, and follow-up of colorectal liver metastases L. Marti-Bonmati, Valencia/ES

Cystic pancreatic tumours C. Matos, Lisbon/PT

MR imaging of the prostate: challenges and chances for radiology B. Hamm, Berlin/DE

Number of participants: 71 Country statistics: Argentina 4, Colombia 56, Ecuador 4, Mexico 4, Panama 2, Peru 1



VISITING PROFESSORSHIP Programme Argentina

This Visiting Professorship Programme was implemented with great support and partnership of FAARDIT (Federación Argentina de Asociaciones de Radiología, Diagnóstico por Imágenes y Terapia Radiante) and SAR (Sociedad Argentina de Radiologia). It was aimed at senior residents, board-certified radiologists and fellows interested in high-quality breast imaging. This intense one-day programme consisting of lectures and workshops was articulated on imaging strategies for the breast pathologies, with emphasis on diagnosis, preoperative staging and post-treatment follow-up of patients with breast cancer. Lectures about state-of-the-art mammography, breast ultrasound and breast MRI, as well as image-guided interventions of the breast were presented. Renowned European lecturers ensured a high-quality teaching programme, combining lectures and workshops, allowing for interactive case discussions.

BREAST IMAGING

Date and Venue: November 2, Mar del Plata/AR

Host Organiser: D. Mysler, Buenos Aires/AR

Topics and Faculty:

Update on advanced breast ultrasound including elastography B. Brkljačić, Zagreb/HR

MRI of the breast: state of the art T. Helbich, Vienna/AT

Preoperative staging of breast carcinoma I. Thomassin-Naggara, Paris/FR

Tomosynthesis: where do we stand? I. Thomassin-Naggara, Paris/FR

Image-guided interventions of breast: when and how T. Helbich, Vienna/AT

Imaging of the postoperative breast B. Brkljačić, Zagreb/HR

Number of participants: 102 Country statistics: Argentina 102



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

In 2019, two ESOR Tutorials were organised in Nur-Sultan/Kazakhstan and Graz/Austria.

The ESOR Astana Tutorial was organised by the National Research Cardiac Surgery Centre in Nur-Sultan under the chairmanship of Dr. T. Dautov, and was sponsored by Siemens Healthineers. For one week, 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 Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Turkmenistan and Uzbekistan.

The ESOR Graz Tutorial was organised by the Medical University Graz under the chairmanship of Prof. M. Fuchsjäger, and was 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 Armenia, Azerbaijan, Belarus, Kazakhstan, Romania, Russia and Ukraine, were offered one week of practical and theoretical knowledge and the opportunity to be integrated in the activities of an academic department of radiology.







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 2019, 39 online courses were available on the ESR Education on Demand Premium platform and 6 on the free e-learning platform. All of these courses 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 2nd module of the 15th cycle "Tumours" held in spring in Antwerp, Belgium with 400 participants from 52 countries. The 3rd module of the 15th cycle has been held in autumn in Rovinj, Croatia, on "Vascular and traumatic diseases" with 350 participants from 53 countries.



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

VISITING SCHOLARSHIP PROGRAMMES

In 2019 40 places were available in Europe with the support of Bracco, the ESR, the Spanish Foundation of Radiology and the Hellenic Radiological Society. One of these scholarships was offered to Georgian residents within the ESR Support Initiative.

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

In total more than 260 residents have applied for the various programmes.

EXCHANGE PROGRAMMES FOR FELLOWSHIPS

In partnership with the European subspecialty societies, 30 junior radiologists had the possibility to pass modular training in their chosen subspecialty. The programmes included abdominal radiology (ESGAR – five trainees), breast radiology (EUSOBI – three trainees), cardiovascular radiology (ESCR – two trainees), head and neck radiology (ESHNR – three trainees), hybrid imaging (ESHI^{MT} – one trainee) musculoskeletal radiology (ESSR – four trainees), neuroradiology (ESNR – five trainees), oncologic imaging (ESOI – one trainee), paediatric radiology (ESPR – three trainees) and thoracic radiology (ESTI – three trainees). In total 156 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 2019, ESOR continued to organise the full one-year fellowships. This programme allowed six recently board-certified radiologists to undertake a twelve-month training at some of the most renowned European training centres.

BRACCO FELLOWSHIPS

In 2019, 30 radiology residents and young radiologists have benefitted of the Bracco Fellowships programme, created on the occasion of the 90th anniversary of Bracco (Clinical – 23 trainees; Management – one trainee; Research – 6 trainees). In total 63 residents and radiologists have applied.

NICHOLAS GOURTSOYIANNIS FELLOWSHIP

The Nicholas Gourtsoyiannis Teaching Fellowship, which has been established in 2018 by the European Radiology Private Foundation, allowed one fellow to enhance his 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 3900 trainees to apply for these programmes over the last thirteen years.



VISITING SCHOLARSHIP PROGRAMMES

My experience



Aziza Shavkatovna Almanova Tashkent Medical Academy, Tashkent/Uzbekistan

Topic: Head and Neck Radiology Training Centre: Pitié-Salpêtrière University Hospital, Paris/France

I would like to thank ESOR for giving me the opportunity to take part in a training period at the Pitié-Salpêtrière University Hospital in Paris. During the training, I gained invaluable knowledge and experience in the field of radiology, especially in visualization of the head and neck. I also want to note the great hospitality of French people, the high professionalism and pedagogical skills of the department staff. At this point I would like to express special appreciation to my tutor Dr. Nadya Pyatigorskaya for this amazing opportunity and for her 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. This time at Pitié-Salpêtrière University Hospital for the scholarship is an excellent chance to improve my skills and intensify my interest in the field of radiology. It is a very important experience in my professional and personal life. This was an outstanding experience for me, and it is wonderful that ESOR can provide such great possibilities for young residents.



Elena Amosova A.V. Vishnevsky Institute of Surgery, Moscow/Russia

Topic: Abdominal Radiology Training Centre: Hôpital Saint-Joseph, Paris/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 Saint-Joseph, Paris/France. During these three months I could participate in all activities of the department, including dedicated training in US, CT, MRI and interventional procedures, participation in multidisciplinary meetings and teaching seminars. Furthermore, I was involved in a very interesting ongoing research project on the diagnostics of pancreatic tumors. I sincerely thank the chief of the department Dr. Marc Zins and all the other senior and junior radiologists of the department for sharing their knowledge and experience with me. This was a very important experience in my professional life, and I can strongly recommend it to every radiology resident!





Ivan Sinisa Andjelkovic Clinical Center of Serbia, Belgrade/Serbia Topic: Cardiac Imaging Training Centre: Hôpital Saint-Joseph, Paris/France

I am very grateful to ESOR and ESR for the unique opportunity to expand my knowledge in Cardiac Imaging at the Saint Joseph Hôpital in Paris, France 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, Dr. Arshid Azarine, as well as Dr. Quentin Alias and Dr. Marc Zins 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 career as a radiologist.



Amanda Antonelli Policlinico Umberto I, Rome/Italy Topic: Paediatric Radiology Training Centre: Hospital Sant Joan de Deu, Barcelona/Spain

I would like to thank ESOR for allowing me to work alongside experts in the field of Pediatric Radiology in Barcelona at Sant Joan de Deu Hospital, in particular with Drs. Ignasi Barber and Mónica Rebollo. I am very grateful for their willingness to share their knowledge and expertise in pediatric radiology with me, in particular in the field of pediatric neuroradiology. The hospital was excellent, and the environment was not only stimulating but was inspiring as well. Every day we had multidisciplinary clinical sessions and I was included in all resident training sessions. The ESOR scholarship has been a rewarding experience and a fantastic opportunity from a professional, academic and personal point of view. I am very grateful that ESOR has given me the chance to participate in this training and I would recommend this experience to every resident.



Francesco Ballati IRCCS Policlinico San Matteo, Pavia/Italy Topic: Breast Imaging Training Centre: King's College Hospital, London/United Kingdom

I want to express my deep gratitude to ESOR for giving me the opportunity to join the three-month Visiting Scholarship at the Breast Imaging Division of King's College Hospital in London. My special thanks go to the Director of Radiology Department, Prof. Paul Sidhu, to the Breast Imaging Director, Dr. Keshthra Satchithananda, and to all the staff of the Department, from the consultants to the radiographers and nurses. They made me feel at home from the very beginning and they involved me in all their clinical and scientific activities. I managed to be part of all the multidisciplinary meetings, where radiologists, oncologists, pathologists and surgeons discuss every case, from the diagnosis to the treatment. I was even involved in the teaching sessions and I could lead a scientific project on my own. King's College Hospital is historically one of the leading centers in the entire United Kingdom for breast screening program and one of the first hospitals to adopt tomosynthesis as a new tool for diagnosing breast cancer. I would really recommend this center and this city for a life-changing experience, where skilled professionals will help you improve your knowledge and expertise in breast imaging.



Antonio Bulum Clinical Hospital Dubrava, Zagreb/Croatia Topic: Cardiac Imaging Training Centre: Leiden University Medical Centre, Leiden/The Netherlands

First and foremost, I am very grateful to ESOR for giving me this opportunity for a visiting scholarship in cardiac imaging at the Leiden University Medical Centre. I would like to thank the entire radiology department, especially the Cardiothoracic team, for their warm welcome and support during my entire stay. Thanks to their support, I had the opportunity, during my stay, to be actively involved in everyday cardiac and thoracic radiology workflow. This included supervised reporting in both areas as well as attending weekly cardiac and thoracic multidisciplinary meetings. I gained invaluable knowledge in novel cardiac and thoracic CT and MRI techniques. This scholarship also allowed me to develop my language and communications skills and provided me with a unique cultural experience during my stay abroad. Therefore, I would highly recommend the ESOR Visiting Scholarship Programme to all residents who wish to further improve and enrich their professional and personal experience.



Vlad Bura

Emergency County Hospital of Cluj Napoca, Cluj Napoca/Romania Topic: Oncologic Imaging Training Centre: Cambridge University Hospitals NHS Trust - Addenbrooke's Hospital, Cambridge/United Kingdom

The Visiting Scholarship Programme offered by ESOR is an amazing opportunity for radiology residents, and I am extremely grateful for being part of this program in 2019. Being at the Addenbrookes' Hospital in Cambridge, UK, an international renowned teaching hospital, was a tremendous experience, and each and every one of the doctors and staff I interacted with welcomed me warmly from the very beginning. During the time spent there, I attended multidisciplinary meetings, weekly educational lectures and learned from a substantially number of studies reviewed on a daily basis with the Urogenital and Gynecological Imaging teams. This program definitely helped me to improve my knowledge and skills in Oncologic Imaging, focused on female and male pelvis.



Davide Giuseppe Castiglione University Hospital Policlinico Paolo Giaccone, Palermo/Italy Topic: Interventional Radiology Training Centre: Cambridge University Hospitals NHS Trust - Addenbrooke's Hospital, Cambridge/United Kingdom

I want to express my deep gratitude towards ESOR for awarding me with this 3-month scholarship in Interventional Radiology at Addenbrooke's Hospital - NHS Foundation Trust in Cambridge (UK). I had the privilege to develop my clinical and research skills in one of the most prestigious universities in the world. During the scholarship, I have been involved in endovascular and percutaneous interventional procedures, taking part in the discussions of clinical indications, interventional strategies and the selection of the best devices for each patient. I was able to increase my knowledge on up-to-date interventional diagnostic tools such as vessel navigation system and stereotactic navigation system for ablation. I had also the opportunity to attend the Hybrid Theatre for EVAR. I would like to give special thanks to Dr. Nadeem Shaida for his commitment and effort in giving support and training in a dynamic and enthusiastic way, and to Prof. Krokidis, a great mentor. This scholarship surely improved the ability to integrate myself culturally, linguistically and organisationally in an international context. I strongly encourage all trainees to apply for this great opportunity.





Snehansh Roy Chaudhary

Royal Liverpool and Broadgreen University Hospitals NHS Trust, Liverpool/United Kingdom Topic: Musculoskeletal Radiology Training Centre: Medical University of Vienna, Vienna/Austria

Knowledge is the wing wherewith we fly to heaven", Shakespeare had said. Knowledge, like pearls scattered over the ocean floor, is spread all over the world. Therefore, this programme offered by ESOR gives trainee radiologists like me the unique opportunity to travel and collect some of these pearls of wisdom at the leading institutes in Europe. The Neuro-Musculoskeletal division at Vienna General Hospital have been extremely welcoming. I am learning about all aspects of musculoskeletal imaging especially from Dr. Iris Melanie Nöbauer-Huhmann who is an excellent teacher and a lovely person. She leads the sarcoma imaging service and also wrote the ESSR guidelines on this. I also wanted to learn ultrasound imaging of the nerves and MR neurography, which Dr. Hannes Platzgummer has been teaching me. His knowledge and skills are absolutely incredible. I have also been able to participate in all activities of the department, including multidisciplinary board meetings, case discussions and morning tutorials. I will forever be grateful to ESOR for this scholarship. I am sure this experience has made me a better person and a better radiologist, and thus better at serving those who matter the most, the patients.



Julie Desimpel

Michał Fraczek

Antwerp University Hospital, Edegem/Belgium Topic: Paediatric Radiology Training Centre: Jena University Hospital, Jena/Germany

I would like to thank ESOR and Bracco for the opportunity of this three-month training period at the pediatric radiology center in Jena. I would also like to thank Prof. Mentzel and his team for welcoming and teaching me. As specialized center they have interesting MRI cases to offer including prenatal MRI, pediatric neuroradiology and abdominal radiology. One big asset is that they are one of the three centres in Germany equipped with an MRI-compatible incubator allowing imaging of preterm babies and neonates. Numerous ultrasounds including modern techniques like elastography and contrast-enhanced ultrasound are performed on a daily base with close supervision allowing a great learning experience. There is also time for education and multidisciplinary meetings. These three months allowed me to increase my knowledge and competence in pediatric radiology and it was possible for me to do a little research project about using MRI of the knee for evaluation of skeletal age. I would recommend this scholarship for everyone who wants to improve their skills in pediatric radiology.



Central Clinical Hospital of the Ministry of the Interior and Administration, Warsaw/Poland Topic: Abdominal Radiology Training Centre: Guy's and St Thomas' NHS Foundation Trust, London/United Kingdom

First of all, I would like to express my gratitude to ESOR for providing me with a unique opportunity to spend three months being part of a team of excellent professionals in Abdominal Imaging at Guy's and St Thomas Hospital in London. During my training period, I participated in a variety of different activities: multidisciplinary meetings, radiology reporting of all modalities and educational lectures. Apart from taking part in routine daily activities, I was involved in a very interesting ongoing PET/MR research project. At this point, I want to express my special appreciation to my tutor Dr. Nyree Griffin for her support during my stay and willingness to share her knowledge with me. I would also like to thank all consultants and registrars for making me feel welcome and helping me to get a deeper insight of abdominal radiology. This experience introduced me to a new approach to diagnostic clinical radiology and had particularly broadened my knowledge of lower and upper GI radiology. I strongly encourage all trainees to apply in the next year!



Itxaso Galán Gonzalez

Hospital Universitario La Princesa, Madrid/Spain Topic: Interventional Radiology Training Centre: King's College Hospital, London/United Kingdom

I am very grateful to ESOR/ESR for giving me the opportunity to spend three months training at the Interventional Radiology Department at King's College Hospital in London. I am having the opportunity to participate in different interventional procedures, mainly in the angio-lab, learning about clinical indications, interventional strategies and selection of the best devices for each case. Moreover, I am being able to observe CT-guided ablations, vascular ultrasound, attend multidisciplinary meetings, teaching lessons and also taking part in a research project about renal cryoablation. I would like to thank all the members of the team for sharing their knowledge with me. This educational experience will surely contribute to my career and I look forward to using this experience in my future work. I strongly encourage all residents to apply for this unique experience!



Nicolò Gennaro

Humanitas Research Hospital, Rozzano/Italy Topic: Oncologic Imaging Training Centre: Netherlands Cancer Institute - Antoni van Leeuwenhoek, Amsterdam/The Netherlands

I am very grateful to the ESOR committee for awarding me with the outstanding opportunity to work in a renowned cancer center like the NKI in the Netherlands. During my stay in the Radiology department, I have enjoyed a thrilling environment and met brilliant minds devoted to cancer research. I was involved in research projects about radiological response of soft tissue sarcomas after neoadjuvant chemoradiotherapy and the predictive role of radiogenomics in cancer patients. Beside research projects, I attended weekly multidisciplinary meetings and academic lectures. I would like to give a special thanks to Dr. A. Bruining, Prof. W. Van Der Graaf, W. Van Der Houdt and Prof. R. Beets-Tan for their commitment and inspiration. Amsterdam is a stunning city and its beauty represented an added value to this experience.



Nariman Fayek Ghaleb

Children's Cancer Hospital, Cairo/Egypt Topic: Oncologic Imaging Training Centre: King's College Hospital, London/United Kingdom

The visiting scholarship in Oncologic Imaging at the King's College Hospital in London was an immense opportunity to advance my training in the field. I have been involved in all the educational activities, including multidisciplinary meetings, lectures and case-by-case discussions. I have seen an extremely wide range of interesting and engaging cases as well as took part in groundbreaking research. I am particularly grateful to my tutor, Dr. Nicola Mulholland, and all the nuclear medicine and radiology staff for instantly making me feel like part of the team. I would like to thank ESOR for giving me the chance to have this significant experience. It will definitely have a great impact on my future work and career.





Salvatore Gitto IRCCS Istituto Ortopedico Galeazzi, Milan/Italy Topic: Musculoskeletal Radiology Training Centre: Leiden University Medical Centre, Leiden/The Netherlands

Thanks to ESOR, I had the great chance to be trained in musculoskeletal radiology at Leiden University Medical Center (LUMC), one of the biggest academic hospitals and a state-of-the-art bone tumor center in The Netherlands. During my scholarship I was enrolled in daily clinical work, including reading sessions, educational lectures and several multidisciplinary meetings. I would like to express my gratitude to Prof. Hans Bloem, my tutor Dr. Monique Reijnierse, Dr. Ana Navas Canete and Dr. Herman Kroon for their willingness to teach and share their knowledge. I believe my training at LUMC was a crucial experience in my education and I strongly encourage all trainees to apply for such a stimulating opportunity offered by ESOR.



Marta Gonzalo Carballés

Hospital Universitari Vall d'Hebrón, Barcelona/Spain Topic: Interventional Radiology Training Centre: Hôpital Européen Georges Pompidou, Paris/France

I am very grateful to ESOR and ESR for the unique opportunity to expand my knowledge in Interventional Radiology at Hôpital Européen Georges-Pompidou (Paris, France) as a part of the ESOR Visiting Scholarship Programme. During the 3-month period of my scholarship, I had the opportunity to attend clinical conferences, observe examinations and interventions, and participate in teachings for residents, educational lectures and multidisciplinary boards. I am especially thankful to my tutors, Prof. Marc Sapoval, as well as Dr. Costantino Del Giudice 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 honour for me to be a part of their team. My ESOR Scholarship was an outstanding experience that will sustainably impact my professional development in the future.



Elizaveta Gvinjilia Geo-Swiss Diagnostic Clinic, Tbilisi/Georgia Topic: Musculoskeletal Radiology

Training Centre: Azienda Ospedaliero Universitaria Careggi, Florence/Italy

I am very grateful to ESOR for giving me the chance to spend three months at the Radiology department of the Azienda Ospedaliero Universitaria Careggi in Florence, Italy. I had this unique opportunity to gain profound knowledge from professionals such as the head of department Prof. Stefano Colagrande and his efficient team. Also, I would like to express my deep gratitude to Dr. Marco Bartolini and his radiology team for welcoming me. I had the opportunity to be involved in a variety of different activities. I was able to improve my musculoskeletal imaging skills. I took part in daily reporting and case discussions, and I could observe few interventions. This scholarship was a great opportunity and will contribute to my career.



Arla Harka

University Hospital Center Mother Teresa, Tirana/Albania Topic: Paediatric Radiology Training Centre: University of Ioannina, Ioannina/Greece

It was a great opportunity for me to participate in the 3-month period Scholarship in pediatric radiology in University Hospital of Ioannina. As a young radiologist this was a great experience which enriched not only my knowledge in pediatric radiology but in general radiology too. My daily activities included mostly ultrasound and MRI in the pediatric population such as brain ultrasound and head MRI in premature babies, hip and spine ultrasound, which were my main interests when I applied for this scholarship. Throughout this period of time, thanks to all the staff of the radiology department, I was offered the opportunity to gain new knowledge not only in pediatric radiology, but also in neuroradiology, MSK radiology, Doppler ultrasound etc. In addition, there were meetings where different radiological cases were discussed with the head of the department Professor Maria Argyropoulou who I want to thank for the warm welcome and the availability she offered me.



Julia Hine St George's Hospital, London/United Kingdom Topic: Chest Radiology

Training Centre: Heidelberg University Medical Center, Heidelberg/Germany

I am very grateful to the ESOR and to the Thoraxklinik in Germany for the opportunity to complete this three-month Scholarship in Chest Radiology. During my placement I gained valuable experience of the whole spectrum of thoracic imaging. I benefitted from seeing a huge number and variety of interesting cases and learning from Professor Heußel and all of his colleagues. I also attended clinical meetings, and had the opportunity to complete a project. Everyone was very friendly and welcoming, including me in all of the department social events. I would like to thank everyone I worked with at the Thoraxklinik and would certainly recommend this experience to anyone with an interest in Chest Radiology.



Suren Armeni Jengojan Medical University of Vienna, Vienna/Austria Topic: Musculoskeletal Radiology Training Centre: Guy's and St Thomas' NHS Foundation Trust, London/United Kingdom

With the ESOR Visiting Scholarship I got the chance to do a three-month training/observership in one of the best MSK-Radiology centres in the UK, located in central London. I was impressed with the wide range of MSK pathologies and minimally invasive interventions which were performed there. The consultant radiologists, and especially my tutor Dr. Amanda Isaac, always took their time to explain every procedure in detail, giving me the chance to understand and learn my admired specialty. Apart from radiologists, I met in several weekly meetings other specialists from other disciplines working on the human musculoskeletal system such as surgeons, clinicians, physiotherapists and other specialties, as well as attended highly specialised conferences and scientific talks. The MSK imaging team at the end also gave me the opportunity to prepare and present a talk myself, which further advanced my presenting skills. With these experiences described above I highly recommend every radiology resident to apply for an ESOR visiting scholarship to widen their horizon and learn in a new environment and culture, gaining new perspectives on work, life and their own personality.





Maria Karachaliou General University Hospital of Patras, Patras/Greece

Topic: Oncologic Imaging Training Centre: Hôpital Archet, Nice/France

I would like to express my gratitude to the ESOR Committee and the Hellenic Radiological Society for providing me with the amazing opportunity of a three-month scholarship in Oncologic Imaging at L'Archet University Hospital, in Nice. During my training period, I was involved in reporting sessions, weekly department meetings and multidisciplinary boards. I also had the opportunity to observe CT-guided biopsies as well as therapeutic interventional oncology procedures, especially in liver malignancies. I am particularly grateful to my tutor, Prof. Patrick Chevallier, a highly expert radiologist and a great and friendly teacher, for his kindness and willingness to share his knowledge and experience with me. I would also like to thank the radiology team, especially Dr. Madleen Chassang and Dr. Fabrice Lame, for making me feel welcome and for enriching my knowledge. It was a unique experience which further strengthened my interest in oncologic imaging and broadened my horizons.



Ivana Kavelj University Hospital Center Sisters of Mercy, Zagreb/Croatia Topic: Urogenital Radiology Training Centre: Hôpital du Kremlin Bicêtre, Le Kremlin Bicêtre/France

It was an honour to be selected for a scholarship in urogenital radiology at Hôpital du Kremlin Bicêtre, France. During these three months, I had the privilege to learn about urogenital imaging in the referral center for scrotal imaging in France. Thanks to the kindness and the willingness of the specialists for sharing their expertise, I improved my knowledge and skills in the field of both urogenital and abdominal imaging and had a chance to attend weekly multidisciplinary meetings and daily educational lectures. My mentor, Dr. Cristina Elena Balasa, encouraged me to write my own reports in French. I also really enjoyed spending time in one of the most beautiful cities of the world, Paris. This experience will definitely be of immense help for my future professional growth and I'm very grateful to ESOR for this unique opportunity. I strongly recommend this scholarship to every radiology resident.



Julian Kirchner University Düsseldorf, Düsseldorf/Germany Topic: Oncologic Imaging Training Centre: Memorial Sloan Kettering Cancer Center New York/USA

I want to express my deep gratitude towards ESOR for awarding me with this six-month scholarship in Oncologic Imaging at one of the world most prestigious cancer centres, Memorial Sloan Kettering Cancer Center in New York, USA. I would like to thank the Head of Department, Prof. Hedvig Hricak and the whole radiology team for giving me a warm welcome and making me feel comfortable. Throughout the entire time, 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. Besides this, I was able to participate in research projects on hybrid imaging in oncologic patients. I would also like to give a special thank you to Dr. Gary Ulaner for his commitment and effort in giving lectures, which was truly inspirational for me. Moreover, New York and the time with the other fellows from all over the world will remain fondly in my memory.



Beyza Nur Kuzan

Marmara University School of Medicine, Istanbul/Turkey Topic: Emergency Radiology Training Centre: Azienda Ospedaliero Universitaria Careggi, Florence/Italy

I am very grateful to ESOR for giving me the opportunity to attend the three-month scholarship in Emergency Radiology at one of the largest training hospitals in Italy - Azienda Ospedaliero Universitaria Careggi in Florence. I have been exposed to a huge variety of cases during my observation period, particularly in the Stroke Unit of the Emergency Neuroradiology Department which is one of my interests. In my daily practice, I was able to interpret images by participating in the image acquisition process and in this way I gained a different perspective on radiological imaging of emergency cases. Congratulations to the ESOR team for this amazing Program!



Maria Lelegianni

Papageorgiou General Hospital of Thessaloniki, Thessaloniki/Greece Topic: Breast Imaging Training Centre: University College London Hospital - Centre for Medical Imaging, London/United Kingdom

I would like to thank the European School of Radiology for this amazing opportunity of a three-month scholarship on breast imaging at University College London Hospital - Centre for Medical Imaging. I regard this period as the most amazing, constructive and challenging of my medical career so far. I would like to express my sincere gratitude to my amazing supervisor Dr. Oshaani Abeyakoon, for all the support, help and knowledge that she generously provided to me. Not only she is teaching me all the aspects of breast radiology that are beneficial for my future career, but she also integrated me in her research projects here at UCLH thus rendering my experience by her side unique and unprecedented. She has been very inspirational and, most importantly a strong incentive for my further development in the field. She and the rest of the breast imaging department activities, such as radiology reporting where I am dealing with a great variety of interesting cases, participation in all multidisciplinary meetings, and of course, to be introduced in a health system different from that of my country. I had the opportunity to learn about new innovative techniques and developments in breast radiology, while enriching my knowledge in ways that I was not familiar with before. As an ongoing experience, it means the most to me and it is a great start for my future career as a consultant.



Yiping Lu Huashan Hospital, Fudan University, Shanghai/China Topic: Neuroradiology Training Centre: University Hospital Birmingham - Queen Elizabeth Medical Centre, Birmingham/United Kingdom

I have attended the training program supported by the Jo Li Scholarship this year. My supervisor is Dr. Vijay Sawlani who is an experienced neuroradiological consultant in the imaging department of Queen Elizabeth Hospital. Every week I need to write brief reports of most of the allocated patients and attend the MDT meetings on Tuesday, Thursday and Friday. I have also participated in a research project concerning radiomics of GBM cases and will continue to collaborate with Dr. Sawlani's team in the near future. Thanks to ESOR for giving me such a great experience to be a short-term neuroradiologist in QE. Over 100% expections of the training is achieved.





Intesar-Victoria Malla Houech

Aleksandrovska University Hospital, Sofia/Bulgaria Topic: Urogenital Radiology Training Centre: Innsbruck Medical University, Innsbruck/Austria

My scholarship in the department of Uroradiology in the Innsbruck University Hospital is an experience I will cherish forever. Throughout this period of time I took active part in ultrasound examinations, CT scans and MRIs of the urogenital system. I attended biopsy examinations, tumor board meetings, morning educational sessions and a wide range of lectures related to special practical skills. I would like to express my gratitude to Professor Friedrich Aigner and the uroradiology team for the dedication, enthusiasm and positive approach during the training program. With the aid of Prof. Aigner I was also able to visit many radiology departments and to obtain knowledge about different clinical situations. I would like to sincerely thank everyone in the radiology team in the Innsbruck University Hospital for being so kind, friendly and without a doubt willing to share their tremendous experience in the radiology practice. The knowledge, I received in these 3 months, will have a significant impact on my future career. I am deeply convinced that I have not only made the right choice but the perfect one. Many thanks to the ESOR office for creating and developing this type of programs giving a practical opportunity to radiology residents to obtain additional lifetime experience and to be able to enrich their knowledge in highly esteemed educational centers with worldwide recognized specialists.



Nikolett Marton

Jahn Ferenc Dél-pesti Hospital, Budapest/Hungary Topic: Musculoskeletal Radiology Training Centre: Hospital Universitari Vall d'Hebrón, Barcelona/Spain

Expertise in a chosen subspeciality, get the possibility to write a scientific article and get to know an interesting new culture: sounds great, doesn't it? That's what the ESOR Visiting Scholarship provided me. I am very thankful for this wonderful possibility to ESOR and also grateful to Dr. Rosa Dominguez Oronoz and to her team for their warm welcome and teaching! I was able to learn musculoskeletal (MSK) radiology in the Vall d'Hebron University Hospital, where I had MRI, CT and US practice, 1 month of each, while I reported a lot of cases and performed sonography investigations with the supervision of specialists and also saw some US- and CT-guided interventions. I also took part in case presentations, multidisciplinary consultations (vertebral metastasis, soft tissue tumor and rheumatology) and an MSK sonography course. Furthermore I got access to a lot of educational material and wrote a case report about a rare transarticular tumor, which I hope will be accepted soon. Besides that I was introduced to catalan culture and explored Barcelona and its sorroundings. To conclude, this scholarship is really an opportunity not to be missed!



Maria Mayoral Peñalva Parc Taulí University Hospital, Barcelona/Spain Topic: Oncologic Imaging Training Centre: Memorial Sloan Kettering Cancer Center, New York/USA

I want to express my deep gratitude to ESR/ESOR for awarding me with this 3-month scholarship in Oncologic Imaging at one of the world's most prestigious cancer institutions, Memorial Sloan Kettering Cancer Center in New York. All the Radiology department welcomed me warmly and treated me like another member of the team. I joined daily case readout sessions as an observer and attended different disease management conferences and didactic lectures. Furthermore, I actively participated in different research projects in radiomics and machine learning in Chest Radiology, mentored by world-class researchers like Dr. Michelle Ginsberg. I can say without doubts that this scholarship has been a career-defining opportunity as well as a life-changing experience both personally and professionally.





Wouter Mebis Antwerp University Hospital, Edegem/Belgium Topic: Abdominal Radiology Training Centre: Maastricht University Medical Center, Maastricht/The Netherlands

My training in Maastricht was tailored to my learning objective of getting familiar with abdominal MRI. My tutor provided me with interesting cases from a teaching file which we discussed into detail. As a native Dutch speaker, I had the added opportunity to make my own reports under supervision of an experienced team of abdominal radiologists. I have also attended and actively participated in multiple multidisciplinary oncology conferences allowing me to see the bigger picture of what clinicians need to know and how radiological findings affect treatment decisions. Overall it was a great experience and something I would definitely recommend.



Tin Nadarević

University Hospital Centre Rijeka, Rijeka/Croatia Topic: Cardiac Imaging Training Centre: University Hospital Zurich, Zurich/Switzerland

I'm extremely honored and grateful to ESR/ESOR for awarding me with this unique opportunity to participate in a three-month scholarship in Cardiac Imaging at the University Hospital Zurich, Department of Diagnostic and Interventional Radiology under the supervision of Prof. Hatem Alkadhi. It was a great experience that improved my knowledge and practice in cardiovascular imaging, especially in cardiac MRI. During the training period, I was involved in the regular work of the department and collaborated with fellow residents and attendings. Apart from regular work, teachings, and conferences, I'm grateful to be involved in the work of the cardiovascular research team, with whom I improved my knowledge and expertise in CT-FFR and myocardial strain imaging. I'm thankful for the warm, supportive, stimulating and inspiring working environment, and it was a pleasure meeting and working with many respectable experts. This experience significantly improved my knowledge and practice in cardiac imaging, for which I will always be grateful.







Viktoriia Pozdniakova

Stavanger University Hospital, Stavanger/Norway Topic: Neuroradiology Training Centre: Hospital Universitario y Politecnico La Fe, Valencia/Spain

I would like to express my gratitude to the ESOR committee for providing me with a 3-month scholarship in neuroradiology at La Fe University and Polytechnic University Hospital. I have been extremely lucky to do my training in a great professional environment where all of my needs and expectations were met. During my stay, I participated in all activities of the department: reporting sessions, multidisciplinary meetings, teaching lectures, case reports presentations and on-call services. I could observe many interventional neurological procedures, spend several days at neuropediatric section and department of nuclear medicine learning about PET-CT imaging and newly installed PET-MRI. Furthermore, I could see several neurosurgeries; both opened for brain tumors and closed ones like electrode implantation for deep brain stimulation. Finally, I participated in two research projects about volumetric imaging of Parkinson's disease and functional brain imaging of pain. All of it could not be possible without fantastic people who took me in with open arms at La Fe Hospital. I would like to thank the chair of radiology department, Professor Luis Martí-Bonmatí and my supervisor Dr. Fernando Aparici for providing with all the learning and research opportunities I had. Thank you to Dr. Francisco Menor and Dr. Raquel Sánchez Vañó for offering their time and knowledge at the pediatric and nuclear section. Special gratitude goes to Dr. Joãn Carreras Polo and Dr. Fernando Mas, with whom I spent days at neuroradiology section during my training. Thank you for your kindness, your willingness to give away your knowledge, your patience, your support and sense of humor. Last, but not least, I would like to thank all radiology residents for the time spent together learning radiology, working evening shifts, preparing lectures and making me feel a part of their team. I believe that it has been an excellent educational experience which will contribute to my future radiology career. I felt privileged working in such a highly professional, stimulating environment and would definitely recommend fellow residents to apply for ESOR scholarship at La Fe University Hospital.



Gustas Rimeika Vilnius University Hospital Santaros Klinikos, Vilnius/Lithuania Topic: Neuroradiology Training Centre: AO Cardarelli, Naples/Italy

I am grateful to ESOR for providing me with an opportunity to participate in the ESOR Visiting Scholarship at the Cardarelli hospital which was an exceptional learning experience for me. During my three-month stay I attended/assisted in various neurointerventional and spinal procedures, learned from various neuroradiological cases. In addition, I got actively involved in research writing a scientific paper. I must express my deep gratitude for the head of the department and my tutor, Professor Mario Muto as well as my fellow colleague Dr. Ganesh Arthimulam for providing day to day teaching in Neuroradiology and Interventional Radiology. A big thank you to the staff of the Neuroradiology department who warmly welcomed me and assisted me in every way to make me feel at home. Needless to say, I strongly recommend participating in this program.



Julio Cesar Rivera Mata Hospital General Universitario, Valencia/Spain Topic: Abdominal Radiology Training Centre: Krankenhaus Nordwest, Frankfurt/Germany

I am currently attending the ESOR Visiting Scholarship Programme at "Krankenhaus Nordwest" in Frankfurt, Germany, with the aim of reinforcing my knowledge in abdominal radiology in this high specialization center with radiologists of top-level, led by Prof.Dr. Markus Düx. They have made me feel part of the team collaborating in the diagnosis and in some cases with interventional management of patients with a high degree of complexity. It is serving me to know different ways of working and to get closer to the integral management of the oncological patient, which is the primary profile of the institution's patients. I feel extremely lucky and grateful to ESOR for selecting me for this opportunity.



Anna Salwa Kamińska

Ludwik Rydygier Memorial Specialized Hospital, Krakow/Poland Topic: Head and Neck Radiology Training Centre: European Institute of Oncology, Milan/Italy

I would like to express my gratitude to ESOR for providing me with an amazing opportunity for a 3-month scholarship in Head and Neck Radiology at the European Institute of Oncology in Milan. This experience has truly enriched my last year of residency. While attending the Department of Radiology, I was able to participate in all activities of the department, including reporting sessions, teaching lectures, and weekly department meetings. I had an opportunity to broaden my knowledge in MRI, not only the head and neck area but also of prostate and whole-body MRI, that I believe I will be able to use in my own institute. It was also a great honor for me to be able to attend clinical case meetings led by Prof. Lorenzo Preda. All the department staff, especially Dr. Sarah Alessi, with their kindness and willingness to share their knowledge and experience provided me with high-level training. I am particularly grateful to my tutor, Dr. Francesca Ruju. This was a great experience and surely I encourage all the residents to apply in the next year!



Raimonds Skumbiņš

Pauls Stradiņš Clinical University Hospital, Riga/Latvia Topic: Emergency Radiology Training Centre: Universitätsmedizin Rostock, Rostock/Germany

I am very thankful to ESOR/Bracco for giving me this unforgettable opportunity of a 3-month scholarship to extend my knowledge and experience in Emergency Radiology at University Medical Center in Rostock and experience a different high-end training environment abroad including all imaging modalities. I would like to express my gratitude to the Head of Department, Prof. Dr. med. Marc-André Weber, Dr. med. Kristina Bath, PD Dr.med. Felix Meinel, PD Dr.med. Kolja Thierfelder and to other outstanding radiologists, to the entire radiology department team for their kindness and willingness to share their knowledge and experience which has provided me with a high level training that expanded my knowledge in a field where you have to always be faster than you are. I paid special attention to combine my interest, passion in diagnostic and interventional radiology in case of emergency (from diagnosis to treatment), for example, after acute ischemic stroke imaging and I was able to attend the interventional unit and assist with mechanical thrombectomy etc. I had an opportunity to participate in an extensive variety of multidisciplinary meetings, educational lectures, conferences and to assist many urgent CT-guided percutaneous drainages of abscesses and additionally biopsy procedures, that I will be able to use in my Hospital. I learned more about MR techniques, protocols which as an imaging modality was performed more often than CT and it extends my differential diagnosis. Prof. M. Weber contributed to my research in emergency topic and this is one more reason to broaden my horizons and meet, learn from my colleagues at annual meeting of the ESER next year.





Eliza Stavride

Papageorgiou General Hospital of Thessaloniki, Thessaloniki/Greece Topic: Musculoskeletal Radiology Training Centre: King's College Hospital, London/United Kingdom

I am very grateful to ESOR for giving me this amazing opportunity to participate in a three-month scholarship programme with focus on Musculoskeletal Radiology at King's College Hospital in London. When I arrived, I was warmly welcomed by all the staff members of the radiology department. Although I am currently in my first month of the programme I have already participated in multiple multidisciplinary meetings, reporting sessions, daily teaching and lectures. I have also been invited, by my tutor Dr. David Elias, to attend and assist in the implementation of a musculoskeletal ultrasound course, organised by him. It has been an amazing experience so far and I am enriching my skills and knowledge every day. It is also very interesting to exchange views and experiences with the local radiology trainees and fellows from all over the world and learn about the different models of radiology training. I would like to express my profound gratitude to the consultants and the rest of the staff of the department and in particular to my tutor Dr. David Elias and the head of the department Prof. Paul Sidhu for helping me on a daily basis and making me feel welcomed. I am convinced, that by the end of the 3 months, I will be filled with great memories and useful skills and I will have acquired lots of new friends and colleagues.



Ines Suñen Amador

Hospital Universitario Miguel Servet, Zaragoza/Spain Topic: Breast Imaging Training Centre: Maastricht University Medical Center, Maastricht/The Netherlands

I am very grateful to ESOR for awarding me the three-month Scholarship in Breast Imaging at Maastricht University Medical Center in The Netherlands. I could participate in the daily department work, focused on the development of contrast-enhanced mammography (CESM), and not only I have advanced my diagnostic and interventional skills, but I also have had the opportunity to research. My tutor, Dr. Ulrich Lalji, and all the team members made me feel valued since the first day and it has been a real honor for me to be a part of it. It has been an unforgettable experience, that has widened my horizons in a new environment and I would recommend it to anyone.



Marcello Andrea Tipaldi

Sant'Andrea Hospital, Rome/Italy Topic: Interventional Radiology Training Centre: Medical University of Vienna, Vienna/Austria

I would like to thank ESOR for the opportunity to spend a three-month period in one of the most renowned centers in Europe. My mentors were C. Loewe (head of the department), F. Wolf, R. Nolz and the entire equipe of Interventional Radiologists who were always keen on explaining and sharing their knowledge with me. Thanks to Professor Loewe, I was able to start up a clinical fellowship and I could actively participate in interventional procedures as well as in clinical meetings and diagnostic cardiovascular radiology reporting. Without any doubts I expanded my knowledge in all these fields. I am sure that all my acquired expertise will be useful for my practice.





Daria Venidiktova Problem scientific-research laboratory "Diagnostic researches and miniinvasive technologies", Smolensk/Russia Topic: Abdominal Radiology Training Centre: Medical University of Vienna, Vienna/Austria

It is a great honor to participate in the ESOR Visiting Scholarship. Personally, I am really proud of working together with great mentors such as Prof. Ahmed Ba-Ssalamah, Dr. Nina Bastati-Huber, Dr. Sarah Poetter-Lang and Dr. Marcus Raudner. Moreover, I am grateful to all doctors in the department that made me concentrate on and enjoy proper work. During these three months, I had the unique opportunity to observe and participate in reporting sessions of US, X-ray, CT, MRI, in multidisciplinary meetings, oncological forums and in scientific work, which was connected with an in-depth study of MR imaging in diffuse liver diseases. Daily lectures from remarkable specialists were also at a high level of quality. I have significantly improved my reading skills, gained a lot of professional experience which will be of immense help for my future work and career.



Vinciane Vercruysse Ghent University Hospital - UZG, Ghent/Belgium Topic: Neuroradiology Training Centre: Hospital Universitari Vall d'Hebrón, Barcelona/Spain

I am very grateful to ESOR for awarding me the unique opportunity to attend a Visiting Scholarship Programme in Neuroradiology at Vall d'Hebron University Hospital in Barcelona, Spain. I felt warmly welcomed by the entire staff of the department and immediately felt a vibrant teaching-minded atmosphere. I had the privilege to participate in the daily clinical work and to attend many multidisciplinary meetings and teaching seminars, where I have seen an extremely wide range of interesting and engaging cases. I sincerely would like to thank Prof.Dr. Alex Rovira, Dr. Juan Andres Mora and the entire staff of the department for sharing their knowledge and experience with me, which allowed me to widely expand my own expertise. This scholarship was an outstanding experience and an exceptional opportunity for me to expand my knowledge in neuroradiology.



Marie-Sofie Walgraeve University Hospitals Leuven, Leuven/Belgium Topic: CEUS Training Centre: King's College Hospital, London/United Kingdom

Thanks to the ESOR Visiting Scholarship Programme, I got the opportunity to be part of the Ultrasound Team for Contrast Enhanced Ultrasound in the renowned King's College Hospital in London. I found myself surrounded by motivated radiology consultants who were all passionate about ultrasound in general and CEUS in particular, and who were keen on teaching while dealing with challenging cases during their everyday work. Working abroad, functioning in a different healthcare system, speaking a foreign language, being able to attend lots of multidisciplinary meetings and lunchtime teaching moments made this experience even more interesting. I especially would like to thank Professor Paul Sidhu, Dr. Annamaria Deganello and Dr. Maria Sellars for looking after me and making this an unforgettable, invaluable three-month-period.





Yu-Dong Xiao

Second Xiangya Hospital of Central South University, Changsha/China Topic: Interventional Radiology Training Centre: Heidelberg University Medical Center, Heidelberg/Germany

I am very grateful to ESOR for providing me this learning opportunity in Interventional Radiology at the Heidelberg University Hospital. I also would like to express my gratitude to the Chairman of Department, Prof. Hans-Ulrich Kauczor and my tutor, Division head of Interventional Radiology, Dr. De-Hua Chang, and to other radiologists for their warm welcome and hospitality. During my stay, I have an opportunity to observe all interventional procedures, including transjugular intrahepatic portosystemic shunt creation, percutaneous transhepatic biliary drainage, transpedal lymphangiography, computed tomography-guided biopsy for liver disease, and so on. Some procedures, such as transpedal lymphangiography I believe I will be able to perform in my own institute. Furthermore, I am involved in a very interesting research project in the field of diagnosis of hepatocellular carcinoma in patients with transjugular intrahepatic portosystemic shunt. At this point I would like to express special appreciation again to my tutor Dr. De-Hua Chang for his humor, support and time shown to me during the scholarship. Last, I really recommend residents to apply for this scholarship.



EXCHANGE PROGRAMMES FOR FELLOWSHIPS

My experience

EXCHANGE PROGRAMME FOR ABDOMINAL RADIOLOGY FELLOWSHIP



Mohamed Adel Abdelatty Elsayed

Cairo University Hospitals, Cairo/Egypt Topic: Abdominal Radiology Training Centre: University College London Hospital - Centre for Medical Imaging, London/United Kingdom

As a firm believer in the necessity of exchange of knowledge and expertise for the sake of continuous improvement, I was thrilled to be chosen to participate in the ESOR/ESGAR exchange program fellowship for the year 2019. I cannot begin to describe how fruitful those three months of practice at University College London Hospital were in terms of pursuing my goal to specialize in abdominal imaging. Through the remarkable support of my dear tutors Prof. Steve Halligan and Dr. Andrew Plumb, I was exposed to various cases of different imaging modalities that altered my understanding of colorectal cancer staging, inflammatory bowel diseases, perianal diseases as well as pelvic floor dysfunctions. In addition to the comprehensive analysis of CT Colonography with Dr. Plumb and the numerous MDT meetings I have attended which truly advanced my clinical and radiological proficiency. It was a tremendous experience and I am forever grateful to ESOR, ESR and ESGAR as well as the abdominal radiology consultants at UCLH for this once in a lifetime opportunity.



Martina Caruso

Federico II University Hospital, Naples/Italy Topic: Abdominal Radiology Training Centre: Champalimaud Foundation, Lisbon/Portugal

I am very grateful to ESOR and ESGAR for giving me the opportunity to spend three months at the Champalimaud Foundation in Lisbon for the Abdominal Radiology research program. It has been an unforgettable life and learning experience, that I absolutely suggest to all my colleagues. A special thanks to my tutor, Prof. Celso Matos, and his fantastic team who warmly welcomed me since the beginning, involved me in the department life and shared their up-to-date knowledge. During this period, I had the opportunity to attend the weekly multidisciplinary meetings and reporting activity, in this way I deepened my knowledge about hepato-biliary-pancreatic diseases and colorectal cancer in a very stimulating environment.





Imre Csemez National Institute of Oncology, Budapest/Hungary Topic: Abdominal Radiology Training Centre: Pitié-Salpêtrière University Hospital, Paris/France

First of all, I am terribly grateful to ESOR and ESGAR for awarding me with this great opportunity. I am currently undergoing a three-month exchange programme fellowship on the topic of abdominal radiology at the Pitié-Salpêtrière University Hospital, which is a renowned center in the heart of Paris. I would like to express my gratitude to the entire staff of the department, especially Prof. Olivier Lucidarme and Dr. Mathilde Wagner for giving me a warm welcome and involving me in their daily activities. I have attended multidisciplinary boards and teaching sessions with an emphasis on oncologic radiology. Besides learning new skills in hepatobiliary imaging, I have also managed to extend my knowledge in the field of rectum and prostate imaging. Moreover, Paris is one of the most beautiful and exciting cities in the world, which also contributes to the unforgettable experience.



Aleksandra Jankovic Clinic for Digestive Surgery, Belgrade/Serbia Topic: Abdominal Radiology Training Centre: Netherlands Cancer Institute - Antoni van Leeuwenhoek, Amsterdam/The Netherlands

I am very honored to get this unique opportunity to learn and work in this respectable hospital for three months. I'm thankful to ESOR for the chance to improve my experience in different oncological areas, in the field of research as well as in clinics. It was certainly one of the most precious experiences in my professional life. I would like to express my gratitude to Professor Regina Beets-Tan and her team made of experienced and brilliant radiologists, with profound thanks to my mentors Dr. Doenja Lambregts and Dr. Annemarie Bruining for their time and knowledge they have unselfishly shared with me. I would also like to mention the great PhD team, with the individuals always ready to help, with special thanks to Lisa Anna Min for the huge support in different everyday situations. At the end, I have to say that Amsterdam is an extraordinary place and one of the most beautiful cities with great energy, and from now on, it will have a special place in my heart.



Taha Yusuf Kuzan Sancaktepe Education and Research Hospital, Istanbul/Turkey Topic: Abdominal Radiology Training Centre: European Institute of Oncology, Milan/Italy

I am very grateful to ESR/ESOR and ESGAR for giving me the chance to participate in a three-month fellowship on abdominal radiology in one of the leading oncology institutes in Italy. During this period, I was able to participate in all activities of the department: multidisciplinary meetings, radiology reporting of all modalities and educational lectures. As this institute is regarded as an oncology center, I had a chance to gain my knowledge and skills in subspecialties such as neuroendocrine tumor imaging, whole-body MRI and multiparametric prostate MRI. I am very appreciative of my tutor Dr. Luigi Funicelli, and the remaining members of the radiology team for their support during the fellowship.



EXCHANGE PROGRAMME FOR BREAST RADIOLOGY FELLOWSHIP



Pranav Gupta

Govind Ballabh Pant Institute of Postgraduate Medical Education and Research, New Delhi/India Topic: Breast Radiology Training Centre: University of Milan, IRCCS Policlinico San Donato, San Donato Milanese/Italy

I am extremely grateful to ESOR and EUSOBI for awarding me a three-month Exchange Programme Fellowship in Breast Imaging at IRCCS Policlinico San Donato, Milan. It is a great honour to work under the guidance of department head, Prof. Francesco Sardanelli and my tutor Dr. Luca Carbonaro both of whom are radiologists par excellence. I am writing this report two months into the fellowship and have already gotten exposure to ultrasound, plain and contrast-enhanced mammography, USG guided core biopsies, stereotactic VAB biopsies and breast MRI. Observing and understanding the complexities of organised and opportunistic screening, interpretation of scans and decision making is something I will take home with me and put to good use. Also all my colleagues and rest of the staff are extremely helpful. I really recommend this fellowship as it is an excellent opportunity for all young radiologists and provides a unique learning experience.



Andrej Papay Nemocnica Malacky, Malacky/Slovakia Topic: Breast Radiology 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 Breast Unit team at Addenbrooke's Hospital, Cambridge. Upon my arrival, I was warmly welcomed by my tutor, Dr. Ruchi Sinnatamby. I got the chance to observe breast interventions and attend the multidisciplinary sessions, which I consider very useful. I would like to thank all the members of the Breast Unit team for the kind welcome, support and for sharing all their knowledge with me. I really appreciate the fact that they were open to listen to my opinion and we had many discussions about all possibilities before we came to final results. This fellowship improved my skills in breast imaging and has contributed not only to my professional, but also personal growth as well. I strongly recommend this unique experience to all fellows, who should not hesitate to apply for this great opportunity offered by ESOR.



Anett Szomják Borsod County Teaching Hospital, Miskolc/Hungary Topic: Breast Radiology Training Centre: Medical University of Vienna, Vienna/Austria

I am happy to have been participating in the ESOR/EUSOBI 2019 Exchange Programme Fellowship in breast imaging. My mentor is Prof. Thomas Helbich, who made it possible for me to gain professionally very valuable experiences. Dr. Paola Clauser, Dr. Maria Bernathova, Dr. Pascal Baltzer and Dr. Panagiotis Kapetas are continuously sharing their knowledge with me. I am actually participating in the daily routine examinations such as tomosynthesis, contrast-enhanced mammography, ultrasound-guided core-biopsy, vacuum-assisted stereotaxic biopsy, preoperative localisations, as well as observing MRI-guided vacuum-assisted biopsies. I am regularly attending multidisciplinary meetings and tumour boards as well. It was a great pleasure for me to get the possibility to attend – for free – the high level 1-day MRI course and workshops, organized by the host department. I am pleased to spend some months in Vienna, and in this great teaching Department.

72



EXCHANGE PROGRAMME FOR BREAST IMAGING FELLOWSHIP (USA)



Almir Bitencourt AC Camargo Cancer Center, São Paulo/Brazil Topic: Breast Imaging Training Centre: Memorial Sloan Kettering Cancer Center, New York/USA

I am very grateful to ESOR for the opportunity to spend 6 months in the Breast Imaging Service at the Memorial Sloan Kettering Cancer Center in New York. I was warmly welcomed by Dr. Morris, who is an inspiring and remarkable example of leadership. The opportunity to work in different research projects, observe clinical practice and attend multidisciplinary sessions in one of the best oncologic centers in the world have undoubtedly influenced my future career and life. I would like to thank the MSKCC family, especially Drs. Morris, Pinker, Jochelson, Sutton and Thakur, for their trust and friendship.



Roberto Lo Gullo

European Institute of Oncology, Milan/Italy Topic: Breast Imaging Training Centre: Memorial Sloan Kettering Cancer Center, New York/USA

I will be forever grateful to ESOR for supporting my 6-month research exchange fellowship at Memorial Sloan Kettering Cancer Center, NY and giving me the opportunity to work with Dr. Elisabeth Morris whom I admire and consider a role model. In New York I found an international research team lead by Dr. Katja Pinker and Maxine Jochelson that is productive and very well organized, and has shown a great deal of support, excitement and willingness to collaborate with my research projects. I came with some ideas and those ideas were turned into organized research projects and into manuscripts. I also wrote several review articles. There are numerous lectures and weekly multidisciplinary meetings that are very interesting and helpful. This experience has dramatically changed my life: the department of breast radiology of MSKCC is now my family and New York is my new home!



EXCHANGE PROGRAMME FOR CARDIOVASCULAR RADIOLOGY FELLOWSHIP



Ibukun Anuoluwa Abidoye Afe Babalola University Multi System Hospital, Ado-Ekiti/Nigeria Topic: Cardiovascular Radiology Training Centre: Universitätsmedizin Mainz, Mainz/Germany

Being the first time learning in a different culture and environment, I was exposed to advances in medical education in a developed country. My mind and horizons were broadened during my short stay. I was also challenged about doing the extra in the care of patients. I participated in a lot of scientific researches and paper writings, which will help enhance my career and has placed me in an international academic environment. I made a lot of contacts, which I know will be beneficial for me in the nearest future. I will be pioneering cardiac MRI in Nigeria.



Miroslav Muršić

Clinical Hospital Center Zagreb, Zagreb/Croatia Topic: Cardiovascular Radiology Training Centre: Medical University of Vienna, Vienna/Austria

I am very grateful to ESOR and ESCR for awarding me with this prestigious fellowship in cardiovascular radiology at the Department of Cardiovascular and Interventional Radiology of the largest hospital in Austria, AKH in Vienna. It was an honour to learn cardiac MRI and CT from the experts in the field, and I would like to express my gratitude firstly to the Head of the Department Prof. Christian Loewe and my tutor OA Dr. Dietrich Beitzke, and also all other senior doctors and residents for sharing their experience and their valuable time. During my fellowship, I've been involved in daily practice, discussions of cases, attended regular weekly lectures, participated in multidisciplinary meetings and regional symposiums as well as in the ESOR for EDiR course on cardiac imaging. Also, I went through a big number of very rare and interesting cases in their huge PACS database. This has been a wonderful opportunity to greatly improve my knowledge of cardiovascular imaging and I encourage young radiologists to apply for this fellowship, which is a great opportunity to gain a lot of new knowledge and experience, learning from the biggest experts in their fields.



EXCHANGE PROGRAMME FOR HEAD AND NECK RADIOLOGY FELLOWSHIP



Sumaira Babar

Jinnah Postgraduate Medical Centre, Karachi/Iran Topic: Head and Neck Radiology Training Centre: London Northwest Hospitals NHS Trust & Mount Vernon Cancer Centre, London/United Kingdom

I am hugely indebted to ESOR for providing me with a once in a lifetime opportunity to attend the fellowship program in head and neck radiology. In my country there is no subspeciality training in this field and I hope to change that by introducing it. I am extremely grateful to Dr. Ravi Lingam for mentoring me throughout this journey. His passion for head and neck is infectious and he is a great teacher. I also had the privilege to attend and interact with many other clinicians, attend MDTs and lectures, see ultrasound-guided procedures, to report scans, and to take part in their world famous head and neck course. A big thank you to the entire team at Northwick park Hospital for teaching me and making me feel so comfortable during my stay. I shall forever remember their kindness. I want to thank my professor back home Dr. Tariq Mahmood who is a great inspiration and has encouraged me to grow and pursue my dreams.



Natalia Grondecka

Medical University of Lublin, Lublin/Poland Topic: Head and Neck Radiology Training Centre: University College London Hospital - Royal National Throat, Nose and Ear Hospital, London/United Kingdom

Firstly, I would like to thank ESOR/ESHNR for awarding me the three-month Fellowship in Head and Neck Radiology at University College London Hospital - Royal National Throat, Nose and Ear Hospital, London/ United Kingdom. This fellowship allowed me to expand my theoretical and practical knowledge in head and neck radiology and improve my skills under the supervision of experienced specialists. I have been involved in all clinical and educational activities of the radiology department, such as case reports, multidisciplinary team meetings, tumour boards as well as research projects. I had a chance to learn from outstanding faculty and gain real-life work experience. Finally, I would like to thank my tutor Dr. Tim Beale and all head and neck consultants for the constant support, time and effort. This fellowship was a truly amazing experience that will impact my professional career.





Ipsit Indu Menon University Hospitals of Leicester NHS Trust, Leicester/United Kingdom Topic: Head and Neck Radiology Training Centre: University College London Hospital - Royal National Throat, Nose and Ear Hospital, London/United Kingdom

I would like to express my gratitude to the European Society of Radiology for awarding me a Fellowship in Head and Neck Imaging at the University College London – Royal National Throat, Nose and Ear Hospital under the guidance and supervision of Dr. Timothy Beale. Dr. Beale has been very kind to me and tailored the fellowship schedule to meet my needs and help me achieve standards to operate independently as a Head and Neck Radiologist. During the tenure of my fellowship I was able to participate in all the clinical and academic activities of the department including observing and performing Ultrasound and Ultrasound-guided FNA / biopsies, supervised reporting of CT, MRI, CBCT, Radiofrequency ablation of thyroid nodules and salivary gland procedures along with participation in multidisciplinary meetings, journal club and other academic discussions regarding MRI protocols and newer MRI sequences. I could also access an extensive collection of teaching cases with reports and histopathology correlation which significantly contributed to my learning. Apart from Dr. Beale I would also like to thank Dr. Simon Morley, Dr. Susan Jawad and Dr. Sofia Otero for the warm welcome, support and willingness to share their knowledge and also for the extra time they spent in explaining concepts and clearing my doubts despite their busy schedule. I once again thank The European Society of Radiology (ESR) for giving me an opportunity of a lifetime to be a part of an amazing team.



EXCHANGE PROGRAMME FOR HYBRID IMAGING FELLOWSHIP



Sofia Rykova Lomonosov Moscow State University, Moscow/Russia Topic: Hybrid Imaging Training Centre: University Hospitals Tübingen, Tübingen/Germany

I would like to thank ESOR for providing this great opportunity to expand my knowledge in Hybrid Imaging at the University Hospital in Tübingen, Germany. During the period of my fellowship I had the privilege to participate in the daily clinical work, routine morning conferences and teaching seminars in the radiology department. I was able to join a variety of disease management conferences and multidisciplinary meetings. I am very thankful for being with such an amazing team, especially Prof.Dr. C. Pfannenberg and all the other radiologists and residents of the department for sharing their knowledge and experience with me, which allowed me to widely expand my own expertise. I also want to thank ESOR and the Departments of Diagnostic and Interventional Radiology and Nuclear Medicine at University Hospital Tübingen for this great experience.



EXCHANGE PROGRAMME FOR MUSCULOSKELETAL RADIOLOGY FELLOWSHIP



Ameya Shirish Kawthalkar Sir JJ Hospital Mumbai, Mumbai/India Topic: Musculoskeletal Radiology Training Centre: Sint Maartenskliniek, Nijmegen/The Netherlands

I am very grateful to ESOR and ESSR for selecting me for the Musculoskeletal Radiology Fellowship programme at Sint Maartenskliniek, Nijmegen, Netherlands which is the country's largest and leading orthopaedic and rheumatology hospital. It is a unique opportunity for me given the lack of musculoskeletal imaging and intervention fellowships in my home country. It is a very exciting and humbling experience to work with some of the greatest names in musculoskeletal imaging and interventions. My tutor for the fellowship and head of radiology education at Sint Maartenskliniek, Marina Obradov is very friendly, welcoming and open to sharing her vast knowledge, as are all the radiologists in the department. I work under the supervision of some of Europe's leading musculoskeletal radiologists in the department, performing ultrasounds, reporting MRIs, CTs and radiographs and also performing ultrasound- and fluoroscopy-guided interventions under supervision. I learn new things every day, and it is a joy to work in this department. The Netherlands is a beautiful country, and I also like the fitness and sports culture here. I hope to learn many new diagnostic and interventional skills in this fellowship and apply them upon returning for the benefit of the people of my country.



Clara Morandeira Arrizabalaga

Hospital Universitario Basurto, Bilbao/Spain Topic: Musculoskeletal Radiology Training Centre: Leiden University Medical Centre, Leiden/The Netherlands

I would like to thank ESOR and the MSK section of Leiden University Medical Center for the opportunity of doing the three-month fellowship in their center. Throughout my stay, I have been welcomed in the daily work routine in an active and professionally stimulating environment. I have been able to assist and participate in the debates around the diagnosis and management of the patients and have moreover attended different multidisciplinary meetings and educational conferences which have broadened my understanding of the practice in new and innovative ways. In sum, this experience has been extremely enriching, allowing me to increase my expertise in musculoskeletal radiology and incorporating new perspectives and methodologies in my practice.





Najwan Nassrallah Carmel Medical Center, Haifa/Israel Topic: Musculoskeletal Radiology Training Centre: Hôpital Cochin, Paris/France

I would like to start by expressing my deep gratitude to ESOR for awarding me this amazing opportunity of a 3-month training programme in musculoskeletal imaging at Cochin Hospital in Paris, France. On my arrival, I was warmly welcomed by my tutor, Prof. Antoine Feydy. During my current training period, I participate in academic lectures including case-based teaching, multidisciplinary board meetings, the JFR conference, and the daily routine radiology reporting of all modalities. Moreover, I observe interventional procedures including diagnostic and therapeutic guided by different modalities. I was exposed to variety of cases and diseases, which has truly contributed to my professional and personal skills. This programme is undoubtedly a unique experience and I strongly recommend it for those interested in musculoskeletal imaging.



Caio Siqueira CEDRUL - Centro de Diagnóstico por Imagem, Joao Pessoa/Brazil Topic: Musculoskeletal Radiology Training Centre: Hôpital Roger Salengro - CHRU Lille, Lille/France

I would like to express my profound gratitude to the ESR and the ESOR programme, for granting me this three-month internship in the Départment d'Imagerie Musculo-Squelettique of the Hôpital Universitaire Roger Salengro in Lille, France. I've been able to improve my knowledge on USG, MRI and CT interpretation, with a multidisciplinary approach, only achievable in a respectful university center, such as this. Furthermore, I have observed interventional procedures, from simple intra-articular infiltrations to vertebroplasties, followed by a team of kind and thoughtful specialists and residents, always willing to teach and help. We have been presented different clinical cases and lectures on weekly interactive meetings of great value for refining all the content that had been shown in the interpretation rooms. In addition, I couldn't thank enough Madame Cotten and all her team, for allowing me to spend those three months of great learning within such a light but yet immersive atmosphere in the hospital.



EXCHANGE PROGRAMME FOR NEURORADIOLOGY FELLOWSHIP



Ghazaleh Amjad Shahid Akbar Abadi Hospital, Tehran/Iran Topic: Neuroradiology Training Centre: CHU de Nancy - Hôpital Central, Nancy/France

I am substantially grateful to ESOR for providing me the exceptional opportunity to train at CHU de Nancy - Hôpital Central, Nancy, France, which is one of the most famous neuroradiology centers in Europe. On my arrival, I was warmly welcomed by my tutor, Prof. Anxionnat and he introduced me to a team of excellent professionals in the Neuroradiology field. During the three months of my training period, I had the chance to be familiar with new and novel neuroradiology techniques and I could learn new MRI sequences. I could learn new MRI sequences and their clinical benefits that were dramatically different than those in my home radiology department. I participated in different meetings and educational lectures. This program has pushed the boundaries of science and has opened my mind to new concepts and was markedly beneficial to extend my knowledge and skills in this field. It was a great experience and I definitely encourage all the radiologists to apply for next year.



Ankit Balani

Vijaya Diagnostic Centre, Hyderabad/India Topic: Neuroradiology Training Centre: The National Hospital of Neurology and Neurosurgery UCLH Foundation Trust, London/United Kingdom

I would be forever grateful to ESOR and ESNR for providing me with this exceptional learning opportunity in Neuroradiology at the National Hospital of Neurology and Neurosurgery (NHNN), UCLH, London under the efficient tutelage of Dr. Indran Davagnanam and Head of Department Prof. Tarek Yousry. While another month of my training remains at the time of writing of this general report, I can certainly say that my experience has been nothing less than exceptional. Getting to learn the basics and advances of Neuroradiology from the very knowledgeable and experienced staff is indeed an enriching and enlightening experience. I would like to thank the entire staff of the Department of Neuroradiology at NHNN, 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, Dr. Indran Davagnanam for sharing his amazing knowledge with me and for always being so helpful and positive. During my training, I was actively involved in diagnostic imaging, observing interventional procedures, attending focused consultant training sessions for specialty registrars, multidisciplinary team meetings (MDT), tumour boards and research seminars. I was also allowed to attend weekly sessions and MDT's on orbital imaging at Moorfields eye hospital, London as a part of my training. I have already been enrolled into various research projects of the department, something which I was looking forward to. I was invited to give a lecture on "Acute necrotizing encephalopathy - a different perspective" in Great Ormond Street Hospital for Children, London, UK which was attended by multiple physicians and was well received. 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 NHNN and in the beautiful country of England.





Volodia Dangouloff-Ros Hôpital Necker-Enfants malades, Paris/France Topic: Neuroradiology Training Centre: Maastricht University Medical Center, Maastricht/The Netherlands

I would like to thank ESOR and ESNR for giving me the opportunity to do my three-month training in Neuroradiology at the Maastricht University Medical Center, Netherlands. The team of Prof. Wildberger was very welcoming, and I am very grateful to my tutor Dr. Jacobi-Postma who showed me and explained so many exciting cases. During my training, I mainly practiced brain MRI and it was very easy to be involved since everyone is fluent in English. This fellowship gave me also the opportunity to begin an exciting research project on functional connectivity in epilepsy with the research team of Prof. Backes and Dr. Jansen, and I am sure it will allow fruitful international collaborations between our departments.



Laiz Laura Godoy

Hospital de Clínicas de la Facultad de Medicina de la Universidad de São Paulo, São Paulo/Brazil Topic: Neuroradiology

Training Centre: John Radcliffe Hospital, Oxford/United Kingdom

I am sincerely grateful to ESOR/ESNR for the outstanding opportunity of a visiting fellowship in the department of neuroradiology at a leading institution, the John Radcliffe Hospital, part of Oxford University. During the three-month fellowship, my daily activities included local departmental lectures, teaching sessions, multidisciplinary meetings, discussions of interesting cases, and being actively involved in reporting with senior radiologists. I would like to express my gratitude to Dr. Wilhelm Kuker and his fantastic team for their welcome, support and enthusiasm to share their knowledge. This professional exchange experience in a state-of-the-art institution had a significant impact on my career, encouraging me to return to my country to provide excellence in patient care. I strongly recommend young radiologists to apply for this exceptional opportunity.



Jessica Jesser Heidelberg University Medical Center, Heidelberg/Germany Topic: Neuroradiology Training Centre: Istanbul University Cerrahpasa School of Medicine, Istanbul/Turkey

The European School of Radiology gave me the exceptional opportunity to spend three months at the Neuroradiology Department of Cerrhapaşa University Hospital in Istanbul by awarding me a Fellowship. I am very grateful for the professional and personal experiences I was allowed to make. I want to express my deepest professional respect and personal esteem to my supervisor Professor Naci Kocer as well as his colleagues Professor Civan Işlak and Professor Osman Kızılkılıç, who are impressively skilled and showed a high interest in teaching and education. The passion they and their team, including technicians, residents and fellows, show for their work in interventional radiology is contagious and inspiring. I was following interventional procedures every day and my colleagues in Istanbul were very nice and considerate integrating me into their daily work routines and teaching me as much as possible. This experience will have an enduring impact on my daily work and I hope I can continue to collaborate with the amazing colleagues I met.



EXCHANGE PROGRAMME FOR ONCOLOGIC IMAGING FELLOWSHIP



Andrei Roman Institute of Oncology "Prof dr. Ion Chiricuta", Cluj-Napoca/Romania Topic: Oncologic Imaging Training Centre: Guy's and St Thomas' NHS Foundation Trust, London/United Kingdom

I am grateful to have had the opportunity to improve my skills in oncologic radiology under the supervision of Prof. Vicky Goh and her great team. A high number of both CT and MRI oncological examinations are performed daily within the department which offer an abundance of interesting and rare cases. These are reported by radiologists specialized in different branches of oncologic imaging (gynaecology, gastroenterology, urology etc.). The staff was very friendly, open to discussion and willing to give advice when needed. I have attended multidisciplinary meetings concerning oncological pathology as well as seminars organized by the department. I have also been involved in the research activities of the department. I can strongly recommend this experience to every radiologist interested in oncologic imaging.



EXCHANGE PROGRAMME FOR PAEDIATRIC RADIOLOGY FELLOWSHIP



Kannan Gunasekaran Kovai Medical Center and Hospital, Coimbatore/India Topic: Paediatric Radiology Training Centre: UMC Utrecht/Wilhelmina Children's Hospital, Utrecht/The Netherlands

I am grateful to ESOR for awarding me with this learning opportunity and I feel very fortunate to have spent three months training in Pediatric radiology at Wilhelmina children's hospital, UMC, Utrecht. I would like to express my gratitude to my tutor Dr. Rutger Jan Nievelstein and to all the other radiologists as well as staff for their warm welcome and hospitality. During this period, I participated in all educational activities of the department, including daily reporting sessions, teaching lectures and other collaborative academic sessions. I also attended their interdisciplinary meetings with other specialties including pediatric orthopedics, pediatric surgery, neonatology, pediatrics as well as their solid tumor board, neuro-oncology board and pediatric hematology meeting. They were kind enough to conduct all these sessions in English for my educational benefit. I thank all the department staff, especially Dr. Maarten Lequin (paediatric neuro radiologist) for their ready willingness to share their knowledge and experience thereby providing me with a unique experience and educational training which would stand me in good stead for my academic career ahead. During this time, I also had the chance to be involved in a scientific project on fetal MRI with postnatal correlation. I feel this training has enabled me to get exposed to all the advanced pediatric imaging methods and helped broaden my horizons. I believe that this excellent educational experience will leave an indelible mark as I march forward in my nascent career as pediatric radiologist. This educational opportunity to work at Wilhelmina children's hospital, UMC, Utrecht was once-in-a-lifetime experience for me and I must profusely thank ESOR for it.



Ayşe Kalyoncu Uçar Kanuni Sultan Süleyman Training and Research Hospital Istanbul, Istanbul/Turkey Topic: Paediatric Radiology Training Centre: Emma Children's Hospital – Academic Medical Center, Amsterdam/The Netherlands

I am grateful to ESOR/ESPR for giving me such an opportunity to be trained at the Academic Medical Center/Emma's Children Hospital in Amsterdam. I had the opportunity to participate in all available activities of the pediatric radiology department, including teaching lectures and daily multidisciplinary meetings, complicated and rare case presentation sessions. I also had the opportunity to learn from the pediatric radiology archive. The whole department including the residents, technicians and the nursing staff are very helpful and cooperative. I would like to thank all the staff of the department of Radiology and especially my tutor Prof. Rick van Rijn and his colleagues, Dr. Anne Smets, Dr. Eline E. Deurloo, Dr. Joost Van Schuppen for the support and willingness to share their knowledge with me. I would like to thank ESOR for this experience. Thank you for designing such a great training programme. This fellowship has had so many positive aspects on my professional and personal life. So I would like to encourage all young radiologists to apply for this great opportunity offered by ESOR.





Heena Rajani Safdarjung Hospital, New Delhi/India Topic: Paediatric Radiology Training Centre: Sheffield Children's Hospital, Sheffield/United Kingdom

Words can't be enough to express my gratitude to ESOR for giving me this opportunity to work as a fellow in the Department of Pediatric Radiology at the Sheffield Children's Hospital, UK, which gave me a chance to grow tremendously, both professionally and as a person. At the very outset, I received a very warm welcome from the entire department here, which very soon became my second family. This dedicated children's hospital caters to a wide spectrum of pediatric cases and apart from one-on-one sessions with specialist radiologists doing pediatric neuro-imaging, musculoskeletal, body imaging, interventional, accident and emergency cases, fetal and neonatal imaging, I got ample opportunities to attend all multi disciplinary meetings and even conduct a few of them as a radiologist. Journal clubs' presentations and audit meets further enriched my academic and clinical experience here. I was offered a sponsorship from the department to attend the annual meeting of the British Society of Pediatric Radiology 2019, which provided a forum to interact with the pediatric radiologists from all over the world. Last and far from least, I will forever be indebted to my tutor here, Dr. Iwan Roberts and all the other consultants, whose excellent reporting/ teaching sessions instilled in me an entirely new and holistic approach to pediatric care and imaging.



EXCHANGE PROGRAMME FOR THORACIC RADIOLOGY FELLOWSHIP



Suzan Bahadır Yuksek Ihtisas University, Ankara/Turkey Topic: Thoracic Radiology Training Centre: Heidelberg University Medical Center - Thoraxklinik Heidelberg, Heidelberg/Germany

I want to express my sincere gratitude to ESOR and ESR for giving me a chance to have a three-month fellowship programme in the Thorax Clinic, Heidelberg, Germany. Thorax Clinic is one of the best center for thoracic imaging and dedicated to all lung and chest diseases. Also, I had a chance to work in the Kinder Clinic and Chirurgie Clinic, in Heidelberg University which are well known departments all around Europe. During my training I attended all scientific meetings, multidisciplinary lectures and case discussions that occurred on a daily basis. Moreover, I had the opportunity to observe CT-guided biopsy procedures and daily reporting routines. I sincerely thank my tutors, colleagues, residents and secretaries for their kind manners, willingness to help me and their warm welcome. I am of the opinion that this fellowship period contributed to my professional academic life positively as well as to personal experiences in a picturesque city, Heidelberg.



Doriana Vergara

Federico II University Hospital, Naples/Italy Topic: Thoracic Radiology Training Centre: Royal Brompton and Harefield NHS Trust, London/United Kingdom

I would like to express my deepest thanks to ESOR and ESTI for these 3 months training in Thoracic Radiology at Royal Brompton Hospital in London. I am participating in all activities of the department: multidisciplinary meetings, radiology reporting and educational lectures. The reporting activity is giving me a strong methodological approach and my self-confidence is increasing. In addition, it is a great honor for me to have Prof. Desai as tutor. I think this experience is providing me with an incredibly valuable educational experience, increasing both my knowledge and my capacity to work in a multidisciplinary team.



Martina Vivoda Tomšič The University Clinic of Pulmonary and Allergic Diseases Golnik, Golnik/Slovenia Topic: Thoracic Radiology Training Centre: University Hospitals Leuven, Leuven/Belgium

A three-month training fellowship in thoracic radiology at the Department of radiology, University Hospitals Leuven was a valuable career experience that enabled me to expand my knowledge and gain a broader perspective in dealing with thoracic pathology. I participated in daily reporting sessions, observed trans-thoracic biopsies, attended multidisciplinary meetings and weekly lectures. I am sincerely grateful to my tutor Prof. Dr. Verschakelen as well as other members of the thoracic radiology team - Prof. Dr. De Waver, Prof. Dr. Coolen and Dr. Dubbeldal - for sharing their in-depth knowledge with me. I am thankful to ESTI and ESOR for awarding me the fellowship program. I would strongly encourage young radiologists to gather knowledge in other teaching centers by participating in the ESOR fellowships.



ONE-YEAR FELLOWSHIPS

My experience

ABDOMINAL RADIOLOGY



Natela Pakashvili

Tbilisi State Medical University, Tbilisi/Georgia Topic: Abdominal Radiology Training Centre: Hadassah Hebrew University Medical Center, Jerusalem/Israel

I would like to express my gratitude to the ESOR Committee for the unique opportunity of expanding my knowledge in Abdominal Radiology. I started my one-year Abdominal Radiology fellowship at Hadassah Hebrew University Medical Center only a 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 thank my supervisor Prof. Jacob Sosna, and the entire radiology team for welcoming me and involving me in their work and academic environment. I am confident this experience will significantly influence my future choices and my work. I hope my remaining period will be as productive as my first months have been.



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 to ESOR and my tutors for the unique opportunity to expand my knowledge in Cardiac MRI and to become a part of such an inspiring team. I was engaged in scientific work and research projects, participated in all available activities, including case presentations and lectures that cover different topics. I also had the opportunity to present the result of our work at several conferences. This fellowship was a chance not only to increase my professional skills but also for social experience and the chance to get integrated into different culture, which was priceless. I would like to express my gratitude to Prof. Michael Fuchsjäger and Dr. Ursula Reiter and the whole cardiac team for making me feel welcome and for their support and all the expertise they shared with me. I strongly encourage all young radiologists to apply for all the great programs offered by ESOR.



CARDIOVASCULAR IMAGING



Maksim ZaguraTartu University Hospital, Tartu/EstoniaTopic: Cardiovascular ImagingTraining Centre: Erasmus University Medical Centre, Rotterdam/The Netherlands

So far I had the opportunity to spend three months of training at Erasmus University Medical Center in Rotterdam. At the beginning of the fellowship I participated in an excellent hands-on cardiac CT course organized by Dr. Ricardo Budde and Dr. Alexander Hirsch. Each participant of the course could review cardiovascular CT exams at a workstation and discuss the imaging findings with supervisors. I have significantly improved my knowledge in the diagnosis of coronary artery disease, coronary anomalies and congenital heart disease. In addition, I took part in case reporting and discussions, multidisciplinary meetings and other educational activities. I am deeply grateful to ESOR for an opportunity to spend three months in one of the leading centers in cardiac imaging and looking forward to continuing the fellowship.



IMAGING OF CANCER



Eun Kyoung Hong Seoul National University Hospital, Seoul/Korea Topic: Imaging of Cancer Training Centre: Netherlands Cancer Institute - Antoni van Leeuwenhoek, Amsterdam/The Netherlands

It is a great honour to receive a One-year Fellowship in Oncologic Imaging and I would like to thank Professor Beets-Tan and the ESOR team for this opportunity. I would like to also take this opportunity to thank everyone in the radiology department in the Netherlands Cancer Institute - Antoni van Leeuwenhoek for their kind welcome. For the past 2 months, I have been participating in diverse research and clinical activities here in the Netherlands Cancer Institute. It has been a very pleasant experience to be part of such an inspiring research group and presented to so many valuable opportunities to learn and develop my knowledge and skills in the field of oncologic imaging research. Thank you again for this exciting opportunity and I am very looking forward to the rest of my fellowship here in Amsterdam.



INTERVENTIONAL NEURORADIOLOGY



Victor Cuba Camasca Universitario Clinic Barcelona, Barcelona/Spain Topic: Interventional Neuroradiology Training Centre: Hospital Clinìc of Barcelona, Barcelona/Spain

First of all I would like to thank ESOR/ESR for the great opportunity provided through a one-year fellowship in interventional neuroradiology at the Hospital Clinic in Barcelona. This fellowship has allowed me to acquire new technical skills and knowledge in the area of Neuro-interventional radiology. During this unforgettable time I was able to expand my knowledge and interests in the field of interventional neuroradiology, participating in radiological sessions and multidisciplinary meetings. Daily clinical work was a very memorable experience that deeply influenced and expanded my practical skills. I have had the opportunity to learn from outstanding teachers. I am extremely grateful to the head of the Radiology Department, Dr. Luis San Roman for his warm welcome and I would also like to thank the staff members: Dr. Juan Macho, Dr. Jordi Blasco, Dr. Antonio Blasco and Dr. Moreno, for all their efforts and time dedicated to teaching. Each 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 to be a better Neuro-Interventional radiologist.



PAEDIATRIC IMAGING



Pradeep Raj Regmi HAMS Hospital, Kathmandu/Nepal Topic: Paediatric Imaging Training Centre: University of Ioannina, Ioannina/Greece

I would like to express my sincere gratitude to the European School of Radiology (ESOR) committee and the European Society of Radiology (ESR) for providing this wonderful opportunity, which is the first of its kind till date, to young and emerging radiologists like me from Nepal, a developing country. It is my great pleasure to write this report as a fellow in Pediatric Imaging, at the University Hospital of Ioannina, Ioannina, Greece under the mentorship of Prof. Maria I. Argyropoulou (Head of Department of Radiology). I would like to thank the other two mentors Dr. Vassalis Xydis and Dr. Anastasia Giantsouli for their extreme help and guiding me every day in Ioannina. As this hospital is the one of the best centers in Greece, I get the wonderful opportunity to learn about pediatric, neonatal as well as fetal imaging (CT, MRI, Ultrasound, Fluoroscopic procedures) and to participate in the daily case discussions, interdepartmental meetings. I am also getting involved in a few projects done within the department of Radiology under the guidance of Prof. Maria. All the staff in the hospital is amazing and always ready to help which makes me feel at home even if I am many miles away from my homeland. With this wonderful and once in a lifetime experience gained here, it will be definitely an immense help to upgrade my future career as a Pediatric Radiologist and serve the people in my country, Nepal, and I hope ESOR provides similar opportunities to the graduates from Nepal in the near future.



BRACCO FELLOWSHIPS

My experience

BRACCO CLINICAL



Lukasz Abraszek

Maria Skłodowska-Curie Memorial Cancer Center, Institute of Oncology, Warsaw/Poland Topic: Optimizing cost-effectiveness of current breast MRI protocols Training Centre: Medical University of Vienna, Vienna/Austria

I would like to express my deep gratitude for having received the ESOR Bracco Clinical Fellowship in Breast Imaging at the Department of Radiology and Nuclear Medicine of the Medical University of Vienna. It proved to be an amazing opportunity to broaden my horizons and improve my skills in state-of-the-art breast imaging. I had a unique chance to follow some really complex and rare cases in this field. What is more, the fellowship was extremely helpful in understanding better the decision-making process in some challenging areas e.g. post-treatment patients. I would like to thank the whole team of the Breast Imaging Unit for their warm welcome, regular feedbacks and constant support. I do hope that thanks to this fellowship I will be able to help my patients in a better way and provide them with a high-quality service.



Ahmed Imam Abdelghany Ahmed

South Egypt Cancer Institute - Assiut University, Assiut/Egypt Topic: Microwave ablation in the treatment of primary and secondary lung tumors and management of post-ablation complications Training Centre: Universitätsklinik Frankfurt, Frankfurt/Germany

The ESOR Bracco Fellowship Programme was a great chance to spend a 2-month training period in the Interventional Radiology section of the Department of Radiology at Frankfurt University Hospital, one of the most active interventional radiology centers in Europe. It was a rewarding experience and I was able to gain profound knowledge from professionals such as the head of department Prof. Dr. Thomas J. Vogl and other colleagues in the department (especially Prof.Dr. Nour El-Dien and Prof. Dr. Nagy Naguib). My everyday activity included, in addition to the planning and performance of a broad range of interventional procedures, also educational lectures, teaching sessions, and multidisciplinary meetings. I had the opportunity to learn how to work with the most modern diagnostic and interventional tools and I am sure that this fellowship has enhanced my skills in interventional radiological procedures, especially the oncological ones and gave me a better understanding of the central role of interventional radiology in the multidisciplinary patient management. I recommend this experience to colleagues who are considering applying for this programme and offer my assurance that the training will surely fulfil all their expectations. I would like to thank ESOR, my tutor, Dr. Prof. Dr. Vogl, and all the staff members for making this amazing experience possible. Thank you so much! I will keep this experience in my heart forever!





Luca Basso

San Martino Hospital, Genoa/Italy Topic: Computed Tomography (CT)-guided cryoablation of focal renal cancer lesions: Contrast-Enhanced Ultrasound (CEUS) as imaging technique for monitoring efficacy of interventional treatment Training Centre: Ospedale Cattinara - University of Trieste, Trieste/Italy

I am very thankful to ESOR for awarding me with this two-month clinical fellowship in Contrast-Enhanced Ultrasound (CEUS) at Cattinara University Hospital in Trieste, Italy. I would like to express my deep gratitude to the Head of the Radiology Department, Prof. Maria A. Cova for giving me the opportunity to take part in this clinical fellowship, which represents an outstanding opportunity for my professional career. A special thanks goes to Professor Michele Bertolotto for all his teachings: it was exciting and stimulating to work with such a passionate person, who enjoys his work and is willing to share his knowledge. During my time spent in Trieste, he gave me the opportunity to take part both in clinical and scientific activities and he made me feel active part of a multidisciplinary team, participating in meetings and teaching sessions in urogenital imaging. He showed me the importance of the correct radiological approach in different clinical settings, teaching me the usefulness of multimodality imaging, with a special focus on CEUS in kidney pathologies. I am grateful to him for being a professional and human example which have immensely contributed to my next professional steps. I also want to thank the Head of the Urology Department, Prof. Carlo Trombetta and all the radiologists, residents and the staff of the Radiology Department for welcoming me.



Iryna Bekalo

Into-Sana Private Clinic, Odessa/Ukraine Topic: CEUS and US-elastography for carotid plaque evaluation Training Centre: Policlinico Umberto I, Rome/Italy

It was a great honor and at the same time a great pleasure for me to have the possibility to work with Prof. Cantisani and his wonderful team during my Bracco fellowship in Rome. It was one of the best periods of my life, it was the dynamic, interesting and informative work that I have always dreamed about. I had the possibility to participate in all activities, which took place in the department. I was involved in all practical and scientific work, had the possibility to observe and take part in CEUS of atherosclerotic plaques, liver, breast, thyroid and kidneys. With much gratitude to Professor Vito Cantisani and his great team, who became my family during these two months.



Nunzia Capozzi

Policlinico Sant'Orsola-Malpighi, Bologna/Italy Topic: Value of MRE as biomarker to predict the response to biological treatment in patients with Crohn's disease Training Centre: Hospital Clinic of Barcelona, Barcelona/Spain

The ESOR/BRACCO Clinical Fellowship Programme gave me the incredible opportunity to spend a twomonth training period in the Abdominal Radiology section of the Department of Radiology at the Hospital Clinic in Barcelona, Spain. I was warmly welcomed in the Department by the whole team and I had the opportunity to attend all the multidisciplinary meetings, lectures and conferences that were scheduled during my stay. In particular, my fellowship was focused on inflammatory bowel disease (IBD) and I had the privilege to work with renowned experts in the field, getting accustomed to the newest imaging modalities and improving my clinical skills in the management of IBD patients. I would like to express all my gratitude to my tutor Dr. Jordi Rimola for the enthusiasm and the generosity in sharing his knowledge and professional skills with me; I really benefited from discussing difficult and interesting cases with him. Finally, I truly recommend this experience to all the residents.

esor.org





Danoob Dalili

Chelsea and Westminster Hospital NHS Foundation Trust, London/United Kingdom Topic: Interventional Magnetic Resonance Imaging and musculoskeletal oncological applications Training Centre: Johns Hopkins Hospital, Baltimore/USA

I am indebted to ESOR for the opportunity that has been bestowed upon me in facilitating my MSK fellowship to The Johns Hopkins University School of Medicine. The experience was unique, intensive and very rewarding, coinciding with the ideal time in my career. I am grateful to the Musculoskeletal faculty for their tutelage and mentorship. I was welcomed and made to feel part of the team from the outset, participating in the daily read out of hundreds of cases from all imaging modalities, whilst gaining experience in novel MR imaging-guided techniques, which I look forward to incorporating into my own practise in the near future.



Alberto Di Napoli

Sant'Andrea Hospital, Rome/Italy Topic: Multiparametric Imaging of brain and spine Training Centre: Mount Sinai Medical Centre, New York/USA

I am deeply grateful to ESOR for the opportunity to attend at Mount Sinai Hospital in New York through the Bracco Clinical Fellowship. My experience was extremely positive as I had the chance to attend reporting sessions and lectures in one of the best centers in United States with two of the most renowned radiologists in their field, respectively Dr. Thomas Naidich in Neuroradiology and Dr. Peter Som in Head and Neck Radiology. I strengthened my knowledge in both subspecialties, participated in lectures, multidisciplinary meetings with neurologists and neurosurgeons, and performed brain cutting in the pathology department which gave me in deep knowledge of human brain anatomy. I am sure that everything I learned during my experience in New York will be useful in my future practice.



Ioana Dumitrescu

Elias Emergency University Hospital, Bucharest/Romania Topic: Musculoskeletal Imaging Training Centre: Heidelberg University Medical Center, Heidelberg/Germany

I would like to thank the ESOR and Bracco committee for granting me the amazing opportunity of joining the diagnostic and interventional radiology team at the Orthopedics Center within Heidelberg University Clinic for a period of two months. As soon as I arrived there, I was warmly welcomed by the whole department and was immediately integrated in the daily activities. I was fortunate enough to observe and learn a lot of interesting procedures, such as MR arthrographies, CT-guided biopsies, nerve infiltrations, osteoid osteoma radiofrequency ablations. Because of this amazing opportunity I can proudly say that I have reached my goal to strengthen my knowledge in MRI musculoskeletal pathology and I am confident to write well-structured MRI reports within this particular area of interest. I would like to express my very great appreciation to my tutor, Dr. Christoph Rehnitz and his whole team of doctors, particularly Dr. Thomas Schneider and Dr. Christian Lückerath who helped me tremendously in daily activities.





Marco Femia Universitá degli Studi di Milano, Milan/Italy Topic: Interventional Neuroradiology Training Centre: University Hospital of Geneva, Geneva/Switzerland

The 2-month clinical fellowship I attended at the Interventional Neuroradiology Unit of the Hôpitaux Universitaires de Genève was a great opportunity to enrich my knowledge of this field and its related procedures. During this time, I had the opportunity to be actively engaged in every activity of the interventional neuroradiology unit. Beyond the angiographic procedures, I also had the chance to attend multidisciplinary meetings alongside neurosurgeons, neurologists, cardiologists, and vascular surgeons. These activities broadened my knowledge of therapeutic alternatives and strategies for better managing neurovascular pathologies. It was a great honour to work with my tutor, Dr. Paolo Machi, who welcomed me into his unit and made me feel included from the very beginning, always encouraging me to be close and attentive to the procedures in order to capture every single detail. I am also grateful to Dr. Bernava and Dr. Rosi, who involved me in every daily activity and constantly conveyed their passion for neurovascular interventional radiology. In fact, every staff member with whom I worked was willing to answer all of my questions, which allowed me to improve my knowledge and cultivate my passion for the field. I would like to thank the Head of the Department, Professor Lövblad, who involved me in every department meeting as if I were a permanent member of the staff. Thanks to ESOR and Bracco that provided me with an incredible opportunity to work with outstanding professionals in an excellent neuro-centered environment.



Aleksandra Gawrońska

University Hospital in Kraków, Krakow/Poland Topic: The role of Ultrasound and MRI in sport medicine: diagnosis and management in sport injuries Training Centre: King's College Hospital, London/United Kingdom

I was extremely fortunate to participate in Clinical Bracco Fellowship at King's College Hospital in London. The two months of intense musculoskeletal training were an excellent chance to broaden my knowledge and intensify my interest in that field of radiology. During the course of the fellowship, I was involved in the everyday life of this hardworking department (case reports, multidisciplinary meetings, teaching sessions) and had a chance to do my own reports. I was also involved in performing RCR National Audit. Moreover, thanks to my supervisor I had the opportunity to participate in the ultrasound course that took place in central London. Finally, this fellowship provided me with a valuable educational and cultural experience, which broadened my horizons and changed the way I think about radiology and clinical work. I am very grateful to my tutor, Dr. David Elias, and the whole musculoskeletal team for their didactic approach and for their willingness to teach and share knowledge. I would also like to thank all registrars and remaining radiology team for their warm welcome, support and common time spent in the department.



Francesco Giganti

University College London Hospital, London/United Kingdom Topic: Multiparametric magnetic resonance imaging in men on active surveillance for prostate cancer: a double centre validation of the PRECISE guidelines Training Centre: Policlinico Umberto I, Rome/Italy

I consider this educational opportunity offered by the European School of Radiology and sponsored by Bracco an important asset to my professional career as a clinician and a researcher. I was able to report over 300 serial MR scans in men on active surveillance for prostate cancer according to the PRECISE recommendations under the supervision of Prof. Valeria Panebianco at La Sapienza University in Rome. I have considerably improved my skills as a young radiologist, while at the same time having had the opportunity to engage in numerous research activities related to my ongoing PhD. I am very thankful for being awarded with this fellowship, being a truly incredible learning journey, and I plan to maintain strong academic links with Prof. Panebianco, Prof. Carlo Catalano (Chair) and their outstanding team in Rome.

esor.org



Jūratė Kemėšienė

Clinics of Lithuanian University of Health Sciences, Kaunas/Lithuania Topic: Current imaging techniques for evaluation of bone tumors Training Centre: University Hospital Zurich, Zurich/Switzerland

The time spent in the University Hospital of Zurich allowed me to gain more experience in MRI, CT and ultrasound evaluation, mostly in the musculoskeletal area. What is more, I was also involved in a research project, which was an exciting experience for me. These two months were more than about learning radiology, during this time I also learned about another country's culture and working principles. The radiology department at the University Hospital of Zurich is a really well-equipped unit and I was trying to see as many different areas as I could. What I want to mention the most, is that all my tutors, that were working with me, were really great. I was always feeling welcomed here and they treated me like a part of a team. Also, I want to say a special thanks for my tutor, Dr. Andreas Boss for his warm welcome, for showing me everything around and for accepting me as a part of the team. And to all other doctors, who met me and shared their knowledge with me, I want to say a big thank you, you made these two months for me an unforgettable experience. And finally, I am very grateful to ESOR and Bracco for offering these extraordinary opportunities to young radiologists. This is a huge step in our further careers, I know that from my earlier experience, and I hope you will keep doing this important work for many more years.



Himansu Shekhar Mohanty

Rajiv Gandhi Cancer Hospital & Research Center, New Delhi/India Topic: Oncoimaging and Interventional Radiology: Pancreatic and colorectal carcinoma Training Centre: Inselspital, University Hospital Bern, Bern/Switzerland

I would like to express my gratitude to ESOR/Bracco for giving me the opportunity to spend two months at Inselspital, Bern, Switzerland. It was a memorable and rewarding experience to work alongside with Prof.Dr. Martin Maurer and Prof.Dr. Johannes T. Heverhagen. My everyday activity was replete with academic lectures, teaching sessions, case reports, tumor board meetings, observation of many interventional procedures including stereotactic CT-guided microwave ablations of liver lesions. I had the opportunity to learn how to work with up-to-date diagnostic imaging tools and sequences in areas of oncologic imaging. I was able to participate in day to day case discussions and share my inputs. I have no doubt this experience will broaden my horizons and will contribute immensely to my next professional steps.



Suna Örs Kokurcan

Van Training and Research Hospital, Edremit/Turkey Topic: Advanced Neuroimaging techniques and its clinical application Training Centre: The National Hospital of Neurology and Neurosurgery UCLH Foundation Trust, London/United Kingdom

I would like to thank ESOR/Bracco for awarding me with a two-month clinical fellowship at the National Neurology and Neurosurgery Hospital in London which has several branches of clinical and research teams in dementia, epilepsy, oncology and ophthalmology. 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 am very grateful for Prof. Tarek Yousry, Dr. Steffi Thust and Prof. Rolf Jager and the whole neuroradiology team for an invaluable experience. My topic for the two-month training period was "Advanced neuroimaging techniques and its clinical applications". Alongside daily routine work I was able to attend multidisciplinary meetings, educational lectures, conferences and to be included even in a review concerning IDH mutation and gliomas. This experience abroad definitely improved my knowledge in neuroimaging and neuro-oncology. I would definitely recommend this experience to all specialists who wants to improve their skills in a selected topic of interest.





Angeliki Pastroma

University Hospital Attikon, Athens/Greece Topic: Mastery of neuroradiology by implementation of standard and advanced imaging techniques Training Centre: VU University Medical Centre, Amsterdam/The Netherlands

I am very grateful to ESOR and Bracco for granting me the opportunity of a clinical fellowship in Neuroradiology at an institution of high repute, at the Radiology and Nuclear Medicine Department at the VU Medical Center in Amsterdam, the Netherlands. During my two-month fellowship, I participated actively in all daily clinical activities. I attended numerous multidisciplinary meetings and was given access to the department's PACS system, reviewing over 500 cases. Apart from broadening my knowledge in Clinical Neuroradiology, I had the opportunity to be involved in research projects, by co-authoring an article and reviewing the literature for a review scientific paper. I would like to express my appreciation to Professor Barkhof for enabling me to be a part of his team and to Dr. Sanchez for her motivating guidance. Overall, it has been a fruitful experience on a professional and personal level, highly recommended to fellow radiologists.



Luca Jacopo Pavan University of Turin, Turin/Italy Topic: Training in Musculoskeletal Radiology with special focus on interventional procedures Training Centre: Hôpital Pasteur - CHU de Nice, Nice/France

My two-month stage at "CHU de Nice" under the supervision of Dr. Nicolas Amoretti was a great opportunity to improve my skills in musculoskeletal radiology, especially in the interventional field. Dr. Amoretti introduced me to various interventional procedures, and under his supervision I had the opportunity to perform autonomously minor procedures and to actively participate in major interventions. Every week we had multiple detailed courses, case discussions and meetings, in which we were all actively involved. This was a very enriching experience and I want to thank the Bracco Fellowships Programme for the support provided, as well as Dr. N. Amoretti and the whole Radiology Department at "CHU de Nice".



Martin Reim

Tartu University Hospital, Tartu/Estonia Topic: Novel interventional radiology treatment methods in emergency medicine, clinical oncology and in the management of vascular diseases Training Centre: Clinical Hospital Dubrava, Zagreb/Croatia

The multimodality approach of Dubrava Clinical Hospital offered me a great possibility to understand better the diversity and possibilities of angiography, CT and ultrasound-guided interventions. Interventions, together with diagnostic imaging studies, gave a good holistic approach to the patient management and the treatment of vascular, oncological and emergency diseases. The positive learning focused atmosphere and possibility to personally perform different types of interventions fulfilled my personal goals for the fellowship. Great hospitality and supportive attitude from the colleagues made this fellowship an experience to remember for the rest of my life.





Giorgia Soppelsa

Ospedale Cattinara - University of Trieste, Trieste/Italy Topic: Assessing of whole breast Ultrasound in screening assessment clinics of breast cancer Training Centre: Cambridge University Hospitals NHS Trust - Addenbrooke's Hospital, Cambridge/United Kingdom

I would like to thank ESOR for awarding me this clinical fellowship at the Cambridge Breast Unit, Addenbrooke's Hospital. It has been a privilege and an excellent education opportunity to work with the Breast Unit team. With their help I was able to participate in a structured modular training on breast imaging. I had the opportunity to follow and participate in the core knowledge training program throughout tutorials, followed by routine clinical cases and up-to-date modality techniques and protocols. Participating in daily routine work and also being involved in research, gave me a comprehensive understanding of the subject in the field. This fellowship provided me with an excellent educational and social experience which I greatly appreciate.



Chloë Standaert

Ghent University Hospital - UZG, Ghent/Belgium Topic: Female pelvic MRI in a high volume centre of excellence Training Centre: Imperial College Healthcare NHS Trust, London/United Kingdom

I would like to thank ESOR/ESR for awarding me this two-month Clinical Bracco Fellowship at Imperial College Healthcare NHS Trust in London, where I was able to improve my knowledge and skills in gynecologic and urogenital imaging, and more specific MRI of the female pelvis. During my training period I took part in daily reporting with the staff, I was able to follow all the available imaging modalities, as well as to attend professional-enriching multidisciplinary meetings and educational lectures on a weekly basis. I was also able to contribute in a multi-center prospective study on MRI in ovarian cancer which has definitely enhanced my knowledge in this topic. I am very grateful to Professor Andrea Rockall who provided a great teaching environment and was very compassionate to me. This fellowship was undoubtedly a great opportunity and will contribute to my future clinical career as a radiologist. This unforgettable experience has definitely fulfilled my expectations, and I would recommend it to every young radiologist.



Csaba Imre Szalay

Semmelweis University Heart and Vascular Center, Budapest/Hungary Topic: Minimally invasive techniques in cancer treatment Training Centre: Hannover Medical School, Hannover/Germany

I am profoundly grateful to both ESOR and Bracco for providing me this two-month fellowship in interventional radiology at the Hannover Medical School (MHH), under the supervision of Prof. Dr. med. Bernhard Meyer and PD Dr. med. Jan Hinrichs. Both of them are experts in their field, and they were kindly sharing with me useful bits of their vast knowledge. During my stay at MHH I was able to witness numerous minimal invasive techniques, got familiar with the equipment being used, and attended case discussions after each session. I was also involved in the daily activity of the department. During the time of the fellowship, I could attend multidisciplinary meetings and hands-on trainings, where I could practice CT or cone beam CT-guided procedures in training phantoms. These two months gave me invaluable experience in my professional career. I would like to express my gratitude to the head of the department, Prof. Dr. med. Frank Wacker, both of my tutors and the medical staff in MHH for all their help and kind hospitality.





Poh Sen Tav

Sarawak General Hospital, Kuching/Malaysia Topic: Advanced Neuroimaging - Techniques and Clinical Applications Training Centre: St George's Hospital, London/United Kingdom

I would like to express my gratitude to ESOR and Bracco for giving me the opportunity to conduct a clinical fellowship at Atkinson Morley Department of Neuroradiology, St. George's University Hospital in London. During this two-month fellowship, I have attended both diagnostic and interventional activities, multidisciplinary meetings and educational case discussions. I am also very grateful to my tutor, Dr. Andrew Mackinnon, who is a very enthusiastic and dedicated neuroradiologist. He gave me the opportunity to be involved in a research project and guided me throughout this fellowship. This experience has largely exceeded my expectation. I highly encourage young radiologists to apply and gain the most from this fellowship.



Tsvetelina Georgieva Teneva University Hospital Saint Marina, Varna/Bulgaria Topic: Cardio-thoracic radiology Training Centre: University Medical Center Hamburg-Eppendorf, Hamburg/Germany

It has been an honour to be a part of such a competent and efficient team in the Department of Imaging Diagnostics at UKE. It has been a worth-the-effort experience, and all my expectations have been perfectly met. I was regularly involved in the diagnostic work concerning cardio-thoracic, abdominal and musculoskeletal radiology. Observing the practical application of cardiac MRI was of the greatest benefit for my fellowship at UKE. I am happy to have had the chance to learn and expand my knowledge and skills.



Irene Vicente Zapata

Hospital General Universitario Jose María Morales Meseguer, Murcia/Spain Topic: Learning hybrid and pediatric abdominal imaging and its clinical interventionists applications Training Centre: Great Ormond Street Hospital for Children NHS Trust, London/United Kingdom

I would like to thank ESOR/Bracco for this great opportunity. These two months of fellowship have been a very enriching experience, both from the professional and also personal side. I have been able to participate in all daily clinical activity of the department, to attend the incredibly interesting multidisciplinary team meetings and to take part to the amazing weekly teaching sessions given by very experienced consultants in different areas. Moreover, I have been involved in departmental clinical sessions and in the preparation of a case report. For all this, I believe that I have improved my knowledge in Paediatric Radiology and I thank the staff, registrars, fellows and consultants, especially my tutor, Dr. Easty, for this unforgettable fellowship.



BRACCO MANAGEMENT



Costin Minoiu

Bucharest Emergency University Hospital, Bucharest/Romania Topic: Elaborating a strategy for productivity enhancement in the Radiology Department Training Centre: Hospital Clinic of Barcelona, Barcelona/Spain

I must start by saying that this was not an ordinary fellowship, but an extraordinary opportunity. I am very grateful to ESOR for the chance to be a Bracco fellow in management at the Hospital Clinic in Barcelona. Before my arrival I had no real idea about what is going to happen, especially due to the quite unusual topic, compared to other professional and scientific fellowships. But in the two months spent under the tutorship of Prof. Luis Donoso, I managed to acquire an important set of managerial skills, as well as to understand new approaches on how to integrate the Radiology Department within the hospital and outside. I am most happy to say that I found in Barcelona a real mentor, always happy to share and offer guidance. My belief is that such experiences should be accessed by more and more young radiologists, as the continuity of our profession can only be assured through mentoring and will always be linked to its leadership.



BRACCO RESEARCH



Riham Dessouky Zagazig University, Faculty of Medicine, Zagazig/Egypt Topic: Atherospectral-CT: Atherosclerosis and myocardial imaging by spectral photon counting CT Training Centre: Université Claude Bernard Lyon 1, Lyon/France

I would like to thank ESOR for the opportunity to join Prof. Philippe Douek and his team for a four-month research fellowship at Université Claude Bernard Lyon 1. This fellowship has offered me unique insight into the preclinical and clinical applications of spectral photon counting CT, more knowledge in Cardiac CT and MRI, and a greater understanding of basic and clinical research. Special thanks to Prof. Douek and Prof. Loic Boussel for their mentorship, Dr. Salim Si-Mohamed for introducing me to basic research, and Dr. Sara Boccalini for her clinical insight. I would also like to express my gratitude to the exceptional team of physicists and research engineers especially Monica Sigovan, Marine Breuilly, and Thomas Broussard, whose help made this experience much better.



João Filipe Pinheiro de Amorim Centro Hospitalar do Porto, Porto/Portugal Topic: Quantitative structured reporting in hepatocarcinoma Training Centre: Hospital Universitario y Politecnico La Fe, Valencia/Spain

It was an extremely rewarding experience to spend four months as a research fellow in the La Fe Health Research Institute/La Fe Universitary and Politecnic Hospital. I was warmly welcomed in the research and clinical teams from day one. I was able to participate in all research and clinical meetings, and had the opportunity to learn a lot from experts in very different fields. During this time, I had the continuous support from Professor Luis Marti-Bonmati and Professor Angel Alberich-Bayarri, to whom I am very grateful for the opportunities they provided me and their outstanding mentoring. I am participating in ongoing research projects and intend to continue working on structured reporting and imaging biomarkers, and greatly encourage any resident or radiologist interested in research to apply to the ESOR Research Fellowships.





Maria Vittoria Raciti

IRCCS Policlinico San Matteo, Pavia/Italy Topic: A study to clinically qualify whole-body diffusion-weighted MRI in patients with metastatic castration resistant prostate carcinoma with bone metastases Training Centre: Hospital Universitari Vall d'Hebrón, Barcelona/Spain

I am very grateful to ESOR and Bracco for giving me an invaluable opportunity to work within the radiomics group at the Vall d'Hebron Institute of Oncology (VHIO), a cutting-edge research group under the guidance of Dr. Raquel Perez-Lopez, in effervescent Barcelona. It was really an amazing scientific fellowship, which I will never forget. I actively participated in the iPROMET study. This research project aims to clinically qualify whole-body multiparametric MRI with diffusion-weighted imaging as a response biomarker in patients with prostate cancer and bone metastases. I also was involved and contributed to other research projects within the group, gaining knowledge on advanced image post-processing, radiomics and statistical analysis. This fellowship allowed me to closely work with an extraordinary team at the VHIO aiming to advance in cancer research from a multidisciplinary approach. Thus, during this great experience, I expanded my knowledge in advanced oncological imaging and I had the opportunity to learn about different fields of research in oncology. I am sure this fellowship will boost my academic career!



Amir Hossein Sarrami

Semnan University of Medical Sciences, Semnan/Iran Topic: Carotid webs in acute ischemic stroke Training Centre: Erasmus University Medical Centre, Rotterdam/The Netherlands

I had this opportunity to attend one of the best neurovascular research teams as a Bracco research fellow and to be involved in MR CLEAN trial. I have learned a lot both in the research methodology area and in the neurointerventional field of radiology. Regular research meetings were held in the department with the head of department. Moreover, I had the opportunity to observe various neurovascular interventions in the angiography room. Clinical neurovascular meetings were held twice a week, in which some interesting neurovascular cases of the hospital were discussed by physicians from other relevant departments. It was a great experience.



Žiga Snoj

University Clinical Centre Ljubljana, Ljubljana/Slovenia Topic: Effect on prostate location of MRI scanning in lateral decubitus compared to supine positions

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

As a research fellow I visited the University Department of Radiology at Addenbrooke's Hospital, University of Cambridge for a period of 4 months. Over this period, I was trusted with a project I applied for - Prostate positioning project, the effect of bladder and patient position. Despite the short time period, I am delighted to say we were able to finish the project. In the time spent at the University Department of Radiology I was able to appreciate the importance of having a multidisciplinary team with background knowledge in computational sciences. The experience met my expectations and experiences gained will serve me well in my academic career.





Jing Zhao

The First Affiliated Hospital of Sun Yat-sen University, Guangzhou/China Topic: The post-resection active monitoring phase in low grade glioma: is watchful waiting justified in all molecular subtypes? Training Centre: Erasmus University Medical Centre, Rotterdam/The Netherlands

The neuro-oncology imaging research group in Erasmus MC, which under the guidance of Prof. Marion Smits, is a great team. In these few months, I was actively involved with team members in several projects. Learning and researching in such a great team has greatly improved my academic research ability and I successfully finished the project. Participating in MDT activity has also helped me immensely. My interactions with the staff at the neuroimaging research group and radiology department have helped me evolve into a better academic researcher, physician, and human being as a whole. Overall, the four-month training has gone beyond my expectations.



NICHOLAS GOURTSOYIANNIS TEACHING FELLOWSHIP

My experience

NICHOLAS GOURTSOYIANNIS TEACHING FELLOWSHIP



Miltiadis Krokidis

Cambridge University Hospitals NHS Trust - Addenbrooke's Hospital, Cambridge/United Kingdom Topic: Interventional Radiology Training Centres: Clinical Hospital Dubrava, Zagreb/Croatia; Hacettepe University Hospitals, Ankara/Turkey

What would be medicine without teaching? Medical teaching forms doctors but also changes patients' life. I strongly believe in teaching and am an active teacher in my everyday practice. I applied for the ESOR Nicholas Gourtsoyiannis Teaching fellowship this year not only because it is probably the highest professional honour to serve the vision of my mentor - Prof. Nick Gourtsoyiannis himself - but also because it is maybe a unique opportunity for a young academic to be exposed to a different teaching habitat. My experience was as expected extremely positive with valuable feedback and a number of new friends in both departments that I visited. My feeling is that I managed to share my vision for Interventional Radiology and to transpire useful knowledge. The European School of Radiology has given me this valuable opportunity and I am deeply grateful.





Faculty 2019





<mark>Zhanar Abdrakhmanova</mark> Nur-Sultan/Kazakhstan



Fernando Aparici Valencia/Spain



<mark>Ustun Aydingoz</mark> Ankara/Turkey



José Tiago Baptista Lisbon/Portugal



Regina Beets-Tan Amsterdam/The Netherlands



Sotirios Bisdas London/United Kingdom



Helen Clare Addley Cambridge/United Kingdom



Maria Argyropoulou Ioannina/Greece



Arshid Azarine Paris/France



<mark>Ignasi Barber</mark> Barcelona/Spain



Jerome Berge Bordeaux/France



J. Mark Bishop m London/United Kingdom



Gabriel Adelsmayr Graz/Austria



Christoph Artzner Tübingen/Germany



Akshay Baheti Mumbai/India



Ahmed Ba-Ssalamah Vienna/Austria



Olvert Berkhemer Amsterdam/The Netherlands



Fabrice Bonneville Toulouse/France



Andrea Alcalá-Galiano Madrid/Spain



Alexandra Athanasiou Athens/Greece



Pascal Baltzer Vienna/Austria



Timothy Beale London/United Kingdom



Yves Berthezène Lyon/France



Gregoire Boulouis Paris/France



Sergio Alfieri Rome/Italy



Heinrich Audebert Berlin/Germany



Fabian Bamberg Freiburg/Germany



Christoph D. Becker Geneva/Switzerland



Guillaume Bierry Strasbourg/France



Adrian Brady Cork/Ireland



Jens Bremerich Basel/Switzerland



Kyung Ah Chun Incheon/Korea



Tairkhan Dautov Nur-Sultan/Kazakhstan



Lorenzo Derchi Genoa/Italy



Clarisse Dromain Lausanne/Switzerland



Laure Fournier Paris/France



Boris Brkljačić Zagreb/Croatia



Anchalee Churojana Bangkok/Thailand



Irma D. David-Kintanar Quezon City/Philippines



Nandita deSouza Sutton/United Kingdom



Eva Maria Fallenberg Munich/Germany



Marco Francone Rome/Italy



Cem Calli Izmir/Turkey



Charlotte Cordonnier Lille/France



Marleen De Bruijne Rotterdam/The Netherlands



Hannes Deutschmann Graz/Austria



Carol Fernandes Jerzewski Sotero da Cunha Porto Alegre/Brazil



Tomás Franquet Barcelona/Spain



Christophe Cassinotto Montpellier/France



Anne Cotten Lille/France



Milko Charles De Jonge Woerden/The Netherlands



Pilar Dies Suárez Mexico City/Mexico



Javier Fernandez Jara Madrid/Spain



Michael Fuchsjäger Graz/Austria



Francesco Cellini Rome/Italy



Cyril Dargazanli Montpellier/France



Dominique Deplanque Lille/France



Arnd Dörfler Erlangen/Germany



Rosemarie Forstner Salzburg/Austria



Jurgen Futterer Nijmegen/The Netherlands



Faculty 2019



Karthik Ganesan Mumbai/India



Benjamin Gory Nancy/France



Sven Haller Geneva/Switzerland



Nigel Howarth Chêne-Bougeries/Switzerland



Aikaterini Kanavaki Athens/Greece



Karina Kovaleva Graz/Austria



Fabio Garcia-Castro Valencia/Spain



Sofia Gourtsoyianni Athens/Greece



Bernd Hamm Berlin/Germany



Lennart Jans Ghent/Belgium



Apostolos Karantanas Heraklion/Greece



Alexandre Krainik Grenoble/France



Maria Pilar Garcia-Peña Barcelona/Spain



Claudio Granata Genoa/Italy



Thomas Helbich Vienna/Austria



Zhengyu Jin Beijing/China



Hans-Ulrich Kauczor Heidelberg/Germany



Josef Kramer Linz/Austria



Sorin Ghiea Bucharest/Romania



Albert Gubern-Mérida Nijmegen/The Netherlands



Manuel Hernández Cruz Puebla/Mexico



Sofie Kakhadze Tbilisi/Georgia



Fleur Kilburn-Toppin Cambridge/United Kingdom



Koert Kuhlmann Amsterdam/The Netherlands Paris/France



Patrick Goldstein Lille/France



Adalgisa Guerra Lisbon/Portugal



Peter Hoskin London/United Kingdom



Alexandros Kallifatidis Thessaloniki/Greece



Elmar Kotter Freiburg/Germany



Bertrand Lapergue





Anna Rita Larici Rome/Italy



Roberto Llorens Valencia/Spain



<mark>Agata Majos</mark> Lodz/Poland



Roberto Maroldi Brescia/Italy



Peter Mildenberger Mainz/Germany



Daniel Mysler Buenos Aires/Argentina



Nathalie Lassau Villejuif/France



Christian Loewe Vienna/Austria



<mark>Jakob Mandl</mark> Graz/Austria



Luis Marti-Bonmati Valencia/Spain



Ingrid Millet Montpellier/France



<mark>Ana Navas</mark> Leiden/The Netherlands



Xavier Leclerc Lille/France



Federico Lubinus Bucaramanga/Colombia



Riccardo Manfredi Rome/Italy



Carlo Martinoli Genoa/Italy



Paulina Montaño Ascencio León/Mexico



Emanuele Neri Pisa/Italy



Didier Leys Lille/France



<mark>Ioana Gabriela Lupescu</mark> Bucharest/Romania



Ritse Mann Nijmegen/The Netherlands



Celso Matos Lisbon/Portugal



São Paulo/Brazil



Konstantin Nikolaou Tübingen/Germany



<mark>Shiyuan Liu</mark> Shanghai/China



Bin Lv Beijing/China



Corrie A.M. Marijnen Amsterdam/The Netherlands



Nicolas Menjot de Champfleur Montpellier/France



Eduardo Moreno Lisbon/Portugal



Volha Nizhnikava Minsk/Belarus



Faculty 2019



Teresa Nunes Lisbon/Portugal



Nickolas Papanikolaou Lisbon/Portugal



Roberto Pozzi Mucelli Trieste/Italy



Erik Ranschaert Tilburg/The Netherlands



<mark>Ursula Reiter</mark> Graz/Austria



Maxime Ronot Clichy/France



Philip O'Connor Leeds/United Kingdom



Paul Parizel Antwerp/Belgium



Mathias Prokop Nijmegen/The Netherlands



Alban Redheuil Paris/France



Marie-Pierre Revel Paris/France



Olivier Rouvière Lyon/France



<mark>Michael Okukava</mark> Tbilisi/Georgia



Aida Perez Lara Mexico City/Mexico



Helmut Prosch Vienna/Austria



Daniele Regge Candiolo/Italy



<mark>Katrine Riklund</mark> Umeå/Sweden



Daniel Rueckert London/United Kingdom



Miguel Augustin Palacios Montesinos Mexico City/Mexico



Warinthorn Phuttharak Khon Kaen/Thailand



Jean-Pierre Pruvo Lille/France



Clemens Reiter Graz/Austria



Simon G.F. Robben Maastricht/The Netherlands



Hanna Sartor Lund/Sweden



András Palkó Szeged/Hungary



Maciej Piskunowicz Gdansk/Poland



Maria Raissaki Heraklion/Greece



<mark>Gert Reiter</mark> Graz/Austria



Andrea Rockall London/United Kingdom



Benedikt Schaarschmidt Düsseldorf/Germany





Johannes Schmid Graz/Austria



Valentin Sinitsyn Moscow/Russia



Christoforos Stoupis Maennedorf/Switzerland



Leandro Tavares Lucato São Paulo/Brazil



Emmanuel Touzé Caen/France



Igor Tyurin Moscow/Russia



Sabine Schmidt Kobbe Lausanne/Switzerland



<mark>Erich Sorantin</mark> Graz/Austria



Reto Sutter Zurich/Switzerland



Bernardo Tessarollo Rio de Janeiro/Brazil



Nikoleta Traykova Plovdiv/Bulgaria



Carlos Valls Stockholm/Sweden



<mark>Saugata Sen</mark> Kolkata/India



Jacob Sosna Jerusalem/Israel



Emina Talakic Graz/Austria



Harriet Thoeny Fribourg/Switzerland



Charikleia Triantopoulou Athens/Greece



Cornelis van de Velde Leiden/The Netherlands



Maryam Shahabpour Brussels/Belgium



Slavica Sotirović Seničar Novi Sad/Serbia



Patrice Taourel Montpellier/France



Isabelle Thomassin-Naggara Paris/France



Dimitros Tsetis Heraklion/Greece



Luc Van den Hauwe Antwerp/Belgium



<mark>Raju Sharma</mark> New Delhi/India



Sanja Stojanovic Novi Sad/Serbia



Christian Taschner Freiburg/Germany



<mark>Majda M. Thurnher</mark> Vienna/Austria



George Tsivtsivadze Tbilisi/Georgia



Peter van Ooijen Groeningen/The Netherlands



Faculty 2019



Hendrik van Poppel Leuven/Belgium



Pedro Vilela Lisbon/Portugal



Toby Walsh Sydney/Australia



Lei Xu Beijing/China



<mark>Jiayin Zhang</mark> Shanghai/China



Johan Van Goethem Antwerp/Belgium



Valérie Vilgrain Clichy/France



Yining Wang Beijing/China



Fuhua Yan Shanghai/China



Marc Zins Paris/France



Filip M. Vanhoenacker Antwerp/Belgium



Geert Villeirs Ghent/Belgium



Marc-André Weber Rostock/Germany



Ik Yang Seoul/Korea



Berit Verbist Leiden/The Netherlands



Jacob Johannes Visser Rotterdam/The Netherlands



Yang Wenjie Shanghai/China



Tarek Yousry London/United Kingdom



Koenraad Verstraete Ghent/Belgium



Denis Vivien Caen/France



Mark O. Wielpütz Heidelberg/Germany



Sophia Zackrisson Malmö/Sweden





Ayan Abdrakhmanov Nur-Sultan/Kazakhstan

Bakhyt Abishev Nur-Sultan/Kazakhstan

Makhinur Aisarova

Serik Alimbaev

Marat Aripov

Almaty/Kazakhstan

Nur-Sultan/Kazakhstan

Nur-Sultan/Kazakhstan

Nur-Sultan/Kazakhstan

Tatjana Arsenijevic

Brussels/Belgium

Zhanibek Baiturlin

Jee Won Chai Seoul/Korea

Carlos Carvalho

Lisbon/Portugal

Mireia Castillo

Lisbon/Portugal

Elmira Chuvakova Nur-Sultan/Kazakhstan

Durval Costa Lisbon/Portugal

Bruno Costa Da Silva Lisbon/Portugal

António Coutinho Lisbon/Portugal

Jacques Devière

Jörg Elstner

Graz/Austria

Lille/France

Paulo Fidalgo

Lisbon/Portugal

Laurent Estrade

Gregory Kuchcinski Lille/France Brussels/Belgium

> Julien Le Faivre Lille/France

Ciro Franzese

Milan/Italy

Dong-Ho Ha

Busan/Korea

Hilde Henon

Lille/France

Jasminka Igrec

Apolline Kazémi

Graz/Austria

Lille/France

Masoom Haider

Toronto/Canada

Kulash Maer Nur-Sultan/Kazakhstan

Zhanara Kozhakhmetova

Nur-Sultan/Kazakhstan

Markus Mauerer Lisbon/Portugal Saule Mukhametzhanova Nur-Sultan/Kazakhstan

Nasreddine Nouri Lille/France

Oriol Pares Lisbon/Portugal

Thomas Personnic Lille/France

Hidde Ploegh Boston/United States

Raushan Rakhimzhanova Almaty/Kazakhstan

Ricardo Rio Tinto Lisbon/Portugal

Antonio Sa-Cunha Villejuif/France

Aigul Saduakasova Nur-Sultan/Kazakhstan

Michael Schmid Liverpool/United Kingdom

Helmut Schöllnast Graz/Austria

Sabine Schwarz-Oswald Graz/Austria

Nikolay Shimanovskiy Moscow/Russia

David Tuveson Cold Spring Harbor/ United States

Laura Wood Baltimore/United States

Charlotte Barbier Caen/France

Eduardo Barroso Lisbon/Portugal

Axel Behrens London/United Kingdom

Nicolas Bricout Lille/France



INING EUROPEAN SOCIETY OF RADIOLOGY 113



Tutors 2019





Oshaani Abeyakoon University College London Hospital - Centre for Medical Imaging London/UK Breast Imaging



Friedrich Aigner Innsbruck Medical University Innsbruck/AT Urogenital Radiology



Deniz Akata Hacettepe University Hospitals Ankara/TR Interventional Radiology



Hatem Alkadhi University Hospital Zurich Zurich/CH Cardiac Imaging



René Anxionnat CHU de Nancy -Hôpital Central Nancy/FR Neuroradiology



Fernando Aparici Hospital Universitario y Politecnico La Fe Valencia/ES Neuroradiology



Maria Argyropoulou University of Ioannina Ioannina/GR Paediatric Radiology



Arshid Azarine Hôpital Saint-Joseph Paris/FR Cardiac Imaging



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



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



Tristan Barrett Cambridge University Hospitals NHS Trust -Addenbrooke's Hospital Cambridge/UK Effect on prostate location of MRI scanning



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



Timothy Beale University College London Hospital - Royal National Throat, Nose and Ear Hospital London/UK Head and Neck Radiology



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



Massimo Bellomi European Institute of Oncology Milan/IT Abdominal Radiology



Patrick Chevallier Hôpital Archet Nice/FR Oncologic Imaging



Boris Brkljačić Clinical Hospital Dubrava Zagreb/HR Interventional Radiology



Ricardo P.J. Budde Erasmus University Medical Centre Rotterdam/NL Cardiovascular Imaging



Luca Alessandro Carbonaro University of Milan, IRCCS Policlinico San Donato San Donato Milanese/IT Breast Radiology



De-Hua Chang Heidelberg University Medical Center Heidelberg/DE Interventional Radiology





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



Markus Düx Krankenhaus Nordwest Frankfurt/DE Abdominal Radiology



Nyree Griffin Guy's and St Thomas' NHS Foundation Trust London/UK Abdominal Radiology



Lucia Kroft Leiden University Medical Centre Leiden/NL Cardiac Imaging



David Elias

London/UK

Musculoskeletal

sport medicine

Thomas Helbich

Breast Radiology,

Optimizing cost-

Miltiadis Krokidis

Cambridge/UK

Cambridge University

Hospitals NHS Trust

Addenbrooke's Hospital

Interventional Radiology

Vienna

Vienna/AT

Medical University of

effectiveness of current breast MRI protocols

King's College Hospital

Radiology, The role of

Ultrasound and MRI in

Maria Assunta Cova Ospedale Cattinara -University of Trieste Trieste/IT Computed Tomography (CT)-guided cryoablation of focal renal cancer lesions



Indran Davagnanam The National Hospital of Neurology and Neurosurgery UCLH Foundation Trust London/UK Neuroradiology



Jan Fritz Johns Hopkins Hospital Baltimore/US Interventional Magnetic Resonance Imaging and musculoskeletal oncological applications



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



Wilhelm Kuker John Radcliffe Hospital Oxford/UK Neuroradiology



Fiona J. Gilbert

Cambridge/UK

imaging

Naci Kocei

Medicine

Istanbul/TR

Max Lahave

Leeuwenhoek

Amsterdam/NL

Netherlands Cancer

Institute - Antoni van

Abdominal Radiology

Neuroradiology

Istanbul University

Cerrahpasa School of

Cambridge University

Addenbrooke's Hospital

Percutaneous interventions for Peripheral Arterial

Disease (PAD) and vascular

Hospitals NHS Trust

Rosa Domínguez Oronoz Hospital Universitari Vall d'Hebrón Barcelona/ES Musculoskeletal Radiology



Luís Donoso Hospital Clinic of Barcelona Barcelona/ES Elaborating a strategy for productivity enhancement in the Radiology Department



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



Karl-Friedrich Kreitner Universitätsmedizin Mainz Mainz/DE Cardiovascular Radiology



Ravi Lingam London Northwest Hospitals NHS Trust & Mount Vernon Cancer Centre London/UK Head and Neck Radiology



Tutors 2019



Christian Loewe Medical University of Vienna Vienna/AT Interventional Radiology



Pitié-Salpêtrière University Hospital Paris/FR Abdominal Radiology



Juan Macho Hospital Clinic of Barcelona Barcelona/ES Interventional Neuroradiology



Luis Marti-Bonmati Hospital Universitario y Politecnico La Fe Valencia/ES Quantitative Structured Reporting in Hepatocarcinoma



Celso Matos Champalimaud Foundation Lisbon/PT Abdominal Radiology



Hans-Joachim Mentzel Jena University Hospital Jena/DE Paediatric Radiology



Razvan Lucian Miclea Maastricht University Medical Center Maastricht/NL Abdominal Radiology



Memorial Sloan Kettering Cancer Center New York/US Breast Imaging



Mario Muto AO Cardarelli Naples/IT Neuroradiology



UMC Utrecht/Wilhelmina Children's Hospital Utrecht/NL Paediatric Radiology



Iris Nöbauer-Huhmann Medical University of Vienna Vienna/AT Musculoskeletal Radiology



Marina Obradov Sint Maartenskliniek Nijmegen/NL Musculoskeletal Radiology



Valeria Panebianco Policlinico Umberto I Rome/IT Multiparametric magnetic resonance imaging in men on active surveillance for prostate cancer



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



Raquel Perez-Lopez Hospital Universitari Vall d'Hebrón Barcelona/ES Whole-body diffusion-weighted MRI in patients with metastatic castration resistant prostate carcinoma with bone metastases



Iwan Roberts Sheffield Children's Hospital Sheffield/UK Paediatric Radiology



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



Nadya Pyatigorskaya Pitié-Salpêtrière University Hospital Paris/FR Head and Neck Radiology



Monique Rejinierse Leiden University Medical Centre Leiden/NL Musculoskeletal Radiology



Medical University of Graz - LKH Graz/AT Cardiac MRI





Andrea Rockall Imperial College Healthcare NHS Trust London/UK Female pelvic MRI in a high volume centre of excellence



Alex Rovira Hospital Universitari Vall d'Hebrón Barcelona/ES Neuroradiology



Evis Sala Cambridge University Hospitals NHS Trust -Addenbrooke's Hospital Cambridge/UK Oncologic Imaging



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



Vijay Sawlani University Hospital Birmingham - Queen Elizabeth Medical Centre Birmingham/UK Neuroradiology

TUTORS 2019



Paul Sidhu King's College Hospital London/UK CEUS



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



Marion Smits Erasmus University Medical Centre Rotterdam/NL The post-resection active monitoring phase in low grade glioma



Rick van Rijn Emma Children's Hospital - Academic Medical Center Amsterdam/NL Paediatric Radiology



Johny Verschakelen University Hospitals Leuven Leuven/BE Thoracic Radiology



Thomas J. Vogl Universitätsklinik Frankfurt Frankfurt/DE Microwave ablation in the treatment of primary and secondary lung tumors



Marc-André Weber Universitätsmedizin Rostock Rostock/DE Emergency Radiology



Mark O. Wielpütz Heidelberg University Medical Center -Thoraxklinik Heidelberg Heidelberg/DE Thoracic Radiology



Hôpital Saint-Joseph Paris/FR Abdominal Radiology



Tutora 2019

Peter Bannas

TUTORS 2019

University Medical Center Hamburg-Eppendorf Hamburg/DE Cardio-thoracic radiology

Marco Bartolini

Azienda Ospedaliero Universitaria Careggi Florence/IT Musculoskeletal Radiology

Dietrich Beitzke

Medical University of Vienna Vienna/AT Cardiovascular Radiology

Andreas Boss

University Hospital Zurich Zurich/CH Current imaging techniques for evaluation of bone tumors

Vito Cantisani

Policlinico Umberto I Rome/IT CEUS and USelastography for carotid plaque evaluation

Costantino Del Giudice

Hôpital Européen Georges Inselspital, University Pompidou Paris/FR Interventional Radiology

Philippe Douek

Université Claude Bernard Lyon 1 Lyon/FR Atherospectral-CT

Marina Easty

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

Antoine Feydy Hôpital Cochin Paris/FR Musculoskeletal Radiology

Amanda Isaac

Guy's and St Thomas' NHS Foundation Trust London/UK Musculoskeletal Radiology

Linda Jacobi-Postma

Maastricht University Medical Center Maastricht/NL Neuroradiology

Maastricht University

University Hospital of

Ulrich C. Lalji

Medical Center

Maastricht/NL

Breast Imaging

Paolo Machi

Geneva/CH

London/UK

Applications

Martin Maurer

Hospital Bern

Oncoimaging and Interventional Radiology:

Pancreatic and colorectal

Azienda Ospedaliero

Universitaria Careggi

Emergency Radiology

King's College Hospital

Nicola Mulholland

Oncologic Imaging

Mount Sinai Medical

of brain and spine

Thomas Naidich

Bern/CH

carcinoma

Vittorio Miele

Florence/IT

London/UK

Centre New York/US

Interventional

Neuroradiology

Andrew MacKinnon

St George's Hospital

Advanced Neuroimaging

- Techniques and Clinical

Geneva

Heidelberg/DE Musculoskeletal Imaging

Medical Center

Jordi Rimola Gibert

Christina Pfannenberg

University Hospitals

Hybrid Imaging

Christoph Rehnitz Heidelberg University

Tübingen Tübingen/DE

Hospital Clinic of Barcelona Barcelona/ES Value of MRE as biomarker to predict the response to biological treatment in patients with Crohn's disease

Esther Sanchez

VU University Medical Centre Amsterdam/NL Mastery of neuroradiology by implementation of standard and advanced imaging techniques

Federico Torre

Hôpital Pasteur - CHU de Nice Nice/FR Musculoskeletal Radiology

Adriaan van Es

Erasmus University Medical Centre Rotterdam/NL Carotid Webs in Acute Ischemic Stroke

Frank Wacker

Hannover Medical School Hannover/DE Minimally invasive techniques in cancer treatment

Jason Wilkins

King's College Hospital London/UK Interventional Radiology

Caterina Giannitto

European Institute of Oncology Milan/IT Head and Neck Radiology

Nahum Goldberg

Hadassah Hebrew University Medical Center Jerusalem/IL Abdominal Radiology

Simon Padley Royal Brompton and Harefield NHS Trust London/UK Thoracic Radiology

Multiparametric Imaging





ESOR AT ECR 2019



ESOR SESSION ARTIFICIAL INTELLIGENCE: PRESENTED WITH NEW LECTURE FORMATS

Moderators

B. Brkljačić, Zagreb/HR V. Vilgrain, Clichy/FR

Introduction B. Brkljačić, Zagreb/HR

ESOR in action 2019 V. Vilgrain, Clichy/FR

Artificial intelligence (AI) and machine learning (ML) in medical imaging W.J. Niessen, Rotterdam/NL

Deep learning (DL) in medical imaging A. Alberich-Bayarri, Valencia/ES

My experience: one-year fellowship Y. Purcell, Dublin/IE

Y. Purcell, Dublin

Awards

On the occasion of the session, scholars and fellows were awarded certificates for successfully completing the 2018 ESOR Scholarship and Fellowship Programmes.



ESOR LOUNGE -Coffee & Talk Sessions

Date: February 27

Meet the Professor

Moderator: V. Vilgrain, Clichy/FR Speakers: M. Ronot, Clichy/FR V. Vilgrain, Clichy/FR

The scholar and fellow's experience

Moderator: B. Brkljačić, Zagreb/HR

Speakers: I. Blazic, Belgrade/RS L. Ebner, Bern/CH M.E. Laino, Rome/IT C. Olchowy, Wroclaw/PL

Date: February 28

A Heart's Matter – Cardiac Mentoring, Tutoring and Learning within the ESOR community

Moderator: C. Loewe, Vienna/AT Speakers: D. Beitzke, Vienna/AT M. Hrabak-Paar, Zagreb/HR C. Loewe, Vienna/AT M. Petrini, Milan/IT

What is a fellowship in management?

Moderator: H.-U. Kauczor, Heidelberg/DE Speakers: M. Buk, Prague/CZ H.-U. Kauczor, Heidelberg/DE C.A. Minoiu, Bucharest/RO P. Mildenberger, Mainz/DE O. von Stackelberg, Heidelberg/DE

Date: March 1

How to enhance the role of junior radiologists in Europe Moderator: C. Catalano, Rome/IT

Speakers: L.A. Carbonaro, Milan/IT C. Catalano, Rome/IT G. De Rubeis, Rome/IT M. Lisitskaya, Moscow/RU

The European Diploma in Radiology as an instrument to develop a professional career

Moderator: L. Oleaga Zufiría, Barcelona/ES Speakers: L. Oleaga Zufiría, Barcelona/ES A. Pons Escoda, Barcelona/ES A. van Hoyweghen, Antwerp/BE

Date: March 2

Why are research fellowships important for young radiologists?

Moderator: L. Martí-Bonmatí, Valencia/ES Speakers: L. Martí-Bonmatí, Valencia/ES N. Plakhotina, Moscow/RU P. Rodriguez Carnero, Madrid/ES A. Uysal, Ankara/TR

Why it is important to have an academic career

Moderator: V. Goh, London/UK

- Speakers: D. Caruso, Rome/IT
- Z. Elkarghali, Amsterdam/NL
- V. Goh, London/UK
- S. Gourtsoyianni, Athens/GR
- D. Prezzi, London/UK



E³ - RISING STARS PROGRAMME: Joint Sessions of the ESR and ESOR

Date: February 27

Radiologic anatomy: chest

Moderator: J. Vilar, Valencia/ES Topics and Speakers: *Mediastinal* M. Occhipinti, Florence/IT *Lungs* C.M. Schaefer-Prokop, Amersfoort/NL *Vasculature* M. Francone, Rome/IT

Radiologic anatomy: abdomen

Moderator: A. Palkó, Szeged/HU Topics and Speakers: *Small bowel* S.A. Taylor, London/UK *Anorectal* S. Gourtsoyianni, Athens/GR *Peritoneum and mesentery* P. Prassopoulos, Alexandroupolis/GR

Date: February 28

Radiologic anatomy: head and neck Moderator: M. Becker, Geneva/CH Topics and Speakers: *Neck spaces* A. Trojanowska, Lublin/PL *Temporal bone* J.W. Casselman, Bruges/BE *Larynx* R. Maroldi, Brescia/IT



ESOR AT ECR 2019



CITIES/COUNTRIES VISITED 2006-2019 EUROPE

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

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

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

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

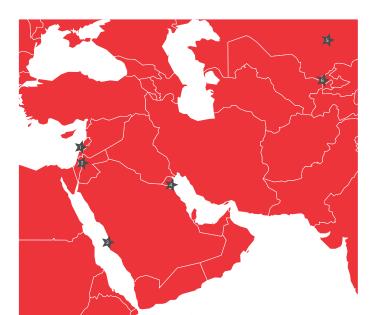


ASIA

- 1 Beijing/China
- 2 Qingdao/China
- 3 Nanjing/China
- 4 Shanghai/China
- 5 Kunming/China
- 6 Guangzhou/China
- 7 Hangzhou/China
- 8 Chengdu/China
- 9 Changsha/China
- 10 Dalian/China
- 11 Suzhou/China
- 12 Shenzhen/China
- 13 Guilin/China
- 14 Shenyang/China
- 15 Shijiazhuang/China
- 16 Xi'an/China
- 17 Wuhan/China
- 18 Hefei/China
- 19 Tianjin/China
- 20 Zhengzhou/China
- 21 Chongqing/China
- 22 Fuzhou/China
- 23 Taiyuan/China
- 24 Harbin/China
- 25 Jinan/China
- 26 Urumqi/China
- 27 Changchun/China
- 28 Nanchang/China
- 29 Ningbo/China
- 30 Haikou/China
- 31 Wuxi/China
- 32 Yinchuan/China
- 33 Seoul/Korea
- 34 Bangkok/Thailand
- 35 Manila/The Philippines
- 36 Kolkata/India

LATIN AMERICA

- 1 Santiago/Chile
- 2 Rio de Janeiro/Brazil
- 3 Belo Horizonte/Brazil
- 4 São Paulo/Brazil
- 5 Salvador/Brazil
- 6 Brasilia/Brazil
- 7 Porto Alegre/Brazil
- 8 Mexico City/Mexico
- 9 San Miguel de Allende/Mexico
- 10 Campinas/Brazil
- 11 Recife/Brazil
- 12 Mérida/Mexico
- 13 Guadalajara/Mexico
- 14 Cancùn/Mexico
- 15 Bogotá/Colombia
- 16 Cartagena/Colombia
- 17 Curitiba/Brazil
- 18 Monterrey/Mexico
- 19 Puebla/Mexico
- 20 Mar del Plata/Argentina
- 21 León/Mexico



MIDDLE EAST

- 1 Beirut/Lebanon
- 2 Jeddah/Saudi Arabia
- 3 Amman/Jordan
- 4 Kuwait City/Kuwait
- 5 Nur-Sultan/Kazakhstan
- 6 Tashkent/Uzbekistan

123

ESORF OF RADIOLOGY ELSERF OF RADIOLOGY



EDUCATION IN PARTNERSHIP

ESOR Office | European Society of Radiology

Am Gestade 1 | 1010 Vienna | Austria Phone: +43-1-533 40 64-535 esor@myesr.org

esor.org

© all rights reserved by the **European Society of Radiology**