

European Congress of Radiology

ECR 2013

Vienna

March 7–11

Preliminary
Programme

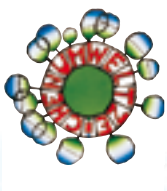
*Edición
Invierno*



ESR

European Society of Radiology

The ECR is the annual meeting of the European Society of Radiology.



Printed on environmental
friendly paper.

Coordination

ESR Office, Neutorgasse 9,
1010 Vienna, Austria
Phone: (+ 43 1) 533 40 64-0
Fax: (+ 43 1) 533 40 64-441
E-mail: communications@myESR.org
www.myESR.org

Managing Editor: Julia Patuzzi
Art Direction: Daniel Hanould
Layout: Philipp Stöhr
Printed by Holzhausen
All data as per date of printing:
November 2012

Photo Credits:

Pages 8, 12, 28, 32, 36, 42, 48, 54, 58,
64, 79, 90, 92, 95, 104, 110, 116, 120,
130, 138, 140:
shutterstock.com

Unless otherwise indicated all pictures
© ESR – European Society of Radiology.

Table of Contents

General Information

2	Foreword by the ESR President
4	Foreword by the ECR Congress President
7	Your ECR 2013 Timeline
9	Online Registration
10	Timetable
146	Dignitaries to be honoured at ECR 2013
151	ESR Executive Council
153	ECR 2013 Committees
156	ECR 2013 Topic Coordinators

Scientific Highlights

16	'ESR meets Spain' will show imaging's central role in patient management
20	Chile looks forward to 'ESR meets' and new forms of cooperation in the future
22	A paradise of opportunities for radiographers at ECR 2013
30	Radiologists gather to contemplate the future of MR/PET
44	Working in a special environment requires special expertise: Imaging in intensive care patients
46	Safety first: tablets and mobile technology in radiology
52	From the backseat to the driver's seat: how radiologists should guide diagnostic investigation
98	Foundation Course on neuroimaging: All you need to know in 18 easy lessons

Scientific Programme

13	ESR meets ... Sessions	84	Head and Neck
27	New Horizons Sessions	86	Interventional Radiology
33	State of the Art Symposia	88	Musculoskeletal
37	Special Focus Sessions	90	Neuro
49	Professional Challenges Sessions	92	Paediatric
55	Multidisciplinary Sessions	93	Physics in Radiology
57	Managing Patients with Cancer	94	Radiographers
59	Categorical Courses	96	Vascular
60	CLICK (Clinical Lessons for Imaging Core Knowledge): Never without Arteries	98	Oncologic Imaging
61	Oncologic Imaging: Follow-up of Systemic and Local Therapies	101	Emergency Radiology
63	Urogenital Imaging	105	EFOMP Workshop
65	Mini Courses	105	New technology in diagnostic radiology: new frontiers in imaging of the lung
66	Organs from A to Z: Heart	107	E³ – European Excellence in Education
66	Controversies in Breast Imaging	109	Foundation Course: Neuroimaging
67	The Beauty of Basic Knowledge: Head and Neck	110	Interactive Teaching Sessions
67	The Beauty of Basic Knowledge: Musculoskeletal Imaging	114	ESOR ASKLEPIOS Course on Imaging Biomarkers
69	Joint Course of ESR and RSNA	117	Accompanying Sessions
71	Refresher Courses	121	MIR@ECR 2013
72	Abdominal and Gastrointestinal	123	Plenary Sessions
74	Breast	125	EPOS Discussions
75	Cardiac	127	Rising Stars at ECR
78	Chest	129	Update Your Skills (Practical Courses)
80	Computer Applications	131	How to biopsy with US guidance
81	Molecular Imaging and Contrast Media	131	Image-Guided Tumour Ablation: How to do it
82	Genitourinary	133	Satellite Symposia
		143	Industry Hands-On Workshops

Foreword



Dear ESR Members,
Dear Readers,

As president of such a large society I have had an extremely busy and demanding year so far, but an enormously enjoyable one too. The huge number and range of activities undertaken by the European Society of Radiology, from confidential personal meetings right up to public events in the chambers of the European Parliament, has ensured a very challenging yet satisfyingly varied time at the helm. The year is far too short to achieve everything we have set out to accomplish, but we can already look back on an exciting and very productive period.

There is also much to look forward to, not least of all our forthcoming congress, which already looks very promising. Everyone involved in the organisation of our annual meeting is delighted and very proud that abstract submission is once again on the rise. The response to the call for paper abstracts has been nothing short of superb, especially considering continued economic difficulties. On a personal level, I am also particularly pleased with the high percentage increase in submissions from the Netherlands. I very much look forward to seeing the final figures once EPOS submission closes at the end of December.

With Prof. Bilbao in charge, I am confident this will be a highly successful congress that will raise the bar even higher for next year's organising committees. With that in mind, a new subcommittee has already been established, chaired by the 2nd vice-chair of the Congress Committee, to ensure that the ECR's tradition of breaking new ground can be continued. The newly created Congress Innovations subcommittee has been charged with the task of finding new paths to take and new corners to turn, so that our congress will always feature something original with which to capture the imaginations of our participants.

For the upcoming congress, we can again look forward to a programme that offers something for everyone. This preliminary programme will give you a comprehensive overview of what to expect in March, and Prof. Bilbao's introduction will take you through some of the highlights and new features at ECR 2013, but I would also like to give special mention to some key sessions. The 'ESR Meets' sessions always prove to be fascinating and I am sure this year will prove to be no exception as we welcome Chile; South Africa; and Prof. Bilbao's homeland, Spain, to the ECR; as well as this year's partner society, the European-African Hepato-Pancreato-Biliary Association. I am also proud to say that this congress will boast a broad selection of sessions

by the ESR President

for radiographers, which you can see previewed by Prof. Paulo, the president of the European Federation of Radiographer Societies on page 22. Of particular note is 'EFRS Meets Spain', which represents the first time a partner society has hosted a 'Meets' session at the ECR. Indeed, we are very pleased that the wide community of radiographers in Europe also considers the ECR to be 'their' congress. I very much hope that 'EFRS Meets' sessions will become a regular ECR fixture.

Aside from preparing for our annual meeting, the ESR's main activities this year have focused on emphasising international relations: we have established an office in Brussels so that we can take a proactive approach to making our collective voice heard in the European Commission on topics that affect our profession; we are intensifying relations with associate members and other societies outside of Europe; and we are also bringing our institutional member societies closer to the fold, by having each one represented at ESR committee level by its president. We are also delighted with the involvement of so many groups from all over the world in the very first International Day of Radiology (IDoR), which took place on November 8. Prompted by the success of the European Day of Radiology last year, which proved to be a very popular event, IDoR 2012 was introduced to provide the first truly global celebration of radiology, and we were happy that so many radiologists joined us in marking the day and promoting our profession.

With so much already achieved, I am relishing the prospect of addressing you all in a few months' time, to look back upon a full year's work. Even more so, I am looking forward to joining you all at ECR 2013 for the scientific, educational and social highlight of our year.



Gabriel P. Krestin
ESR President

Foreword



Dear Colleagues,

I have the great pleasure and honour of presenting the programme for ECR 2013. Thanks to the hard and dedicated work of a great team, which includes specialists from every corner of Europe and every radiological subspecialty, this new ECR programme is now ready for you.

The programme offers many sessions, in many different formats, with the aim of educating and entertaining at the same time. The ECR is the event where specialists, from all over the world and many different disciplines can come together and take advantage of a unique opportunity to meet with others in their field.

The ECR programme has been arranged into different groups of sessions. For 2013, some of them will continue with successful sessions from previous congresses and some others will be new, as is always the case with the ECR. The congress is constantly evolving, and the Programme Committee as well as the ESR Office strives tirelessly to stay ahead of the educational needs and demands of radiologists and radiographers. We try to imagine the future and invest in it. The 'Rising Stars' programme is aimed at attracting future specialists to the radiological sciences, please take a look at its sessions and promote them among your young colleagues and students.

ECR 2013 will have three Categorical Courses. 'Never without Arteries' will take place within the 'Clinical Lessons for Imaging Core Knowledge – CLICK' sessions and will present some of the straightforward answers that radiology can provide for complex and frequent clinical vascular questions. 'Urogenital Imaging' will be a continuation of the ECR 2012 session, and it will cover new topics, which aim to meet all the educational needs of this specific topic. 'Oncologic Imaging: Follow-up of Systemic and Local Therapies' will summarise the most update information about how responses, to any kind of therapy, should be evaluated in most oncologic situations. The course will present radiological findings and fields of research, both morphological and functional, within this challenging field of daily practice.

Complex liver tumours need the multidisciplinary approach of several specialties. The ECR 2013 programme includes three sessions that will show how experts from different disciplines, within the same institution, interact and decide on the best way to approach specific clinical situations. In these particular Multidisciplinary Sessions, radiology will be represented by colleagues from both diagnostic and interventional radiology.

The number of Mini Courses has been increased. Courses on basic radiological concepts have proven particularly popular and so the number of lessons on this topic, taught by experienced professors, has been doubled. This year 'The Beauty of Basic Knowledge' course will have two different topics: head and neck imaging and musculoskeletal imaging. ECR 2013 will also continue with the subject of 'Controversies', the most current clinical hot topics in our specialty, and this year these sessions will concentrate on breast imaging.

by the ECR Congress President

The programme has been prepared with the aim of facilitating interaction, since the exchange of ideas is a major way to teach and learn. This year the successful 'European Excellence in Education - E³' will include fourteen 90-minute sessions, which will cover all the major aspects of radiology with attractive titles such as 'tips and tricks' and 'pitfalls'. The Foundation Course will deal with neuroimaging and, as in previous years, will be followed by a self-assessment test. There will be two practical courses on how to 'Update Your Skills', which will provide interactive demonstrations and opportunities for hands-on experience on 'How to biopsy' and 'How to ablate.'

Once again, the ESR will have three countries and one partner discipline share their expertise through its dedicated 'ESR Meets' programme. Chile, South Africa, Spain and the European-African Hepato-Pancreato-Biliary Association will present their most recent scientific developments in joint sessions and try to strengthen links between professionals. For the first time, ECR 2013 will include a new session entitled 'EFRS meets' (European Federation of Radiographer Societies) and this year they will be meeting Spain. The ESR and EFRS are actively working together to build even closer relations between both societies and for this purpose the ECR is an excellent event.

Is it time for radiologists to come out of the dark? Should we improve the visibility of radiologists? Are the radiologist, the clinician and the patient an impossible trio? These, among others, burning questions will be tackled in one Professional Challenges Session (PC). Other important topics, which are also directly related to our future, such as 'Personalised radiology', will be discussed in different PC sessions and we highly recommend you attend.

The ECR 2013 programme includes many other sessions. You will have the opportunity to attend Refresher Courses and State of the Art Symposia, learn more about the most recent New Horizons in radiology or concentrate on Special Focus Sessions that cover a wide variety of topics. But the ECR is much more than what I have been able to describe here. Thanks to the active participation of attendees, the support of industry and the extraordinary team in the ESR Office, our congress is now one of the most important radiological events in the world.

José Ignacio Bilbao
ECR 2013 Congress President



INTERNATIONAL DAY OF RADIOLOGY

NOVEMBER 8, 2012

WWW.IDOR2012.ORG

*Thank you to everyone who celebrated with us
and helped to raise the profile of our specialty!*

See how the ESR marked the day:



FIND OUT MORE AT
WWW.INTERNATIONALDAYOFRADIOLOGY.COM

Your **ECR 2013** Timeline

March 2012 – December 31, 2012	All-year Online Poster Abstract Submission to EPOS™ (Electronic Presentation Online System)
March 2012 – January 31, 2013	Upload of Accepted Exhibits to EPOS™
From August 31, 2012	Online Registration Open
Beginning of September 2012	ECR 2013 Accommodation Service Open
November 16 – December 20, 2012	Registration Middle Fee
From November 16, 2012	Present from Home Registration Open
From December 21, 2012	Registration Late Fee
March 7–11, 2013	ECR 2013

Congress Venue

Austria Center Vienna
Bruno Kreisky Platz 1
1220 Vienna, Austria

Congress Language

English

CME Accreditation

Each ECR delegate receives a confirmation of all activities attended (CME confirmation – Record of attendance). The approximate maximum number of hours of scientific activity attendance is 40 (please note that this number differs from the maximum number of UEMS/EACCME credits).

The ECR 2013 is expected to be designated for a maximum of 27 hours of European external CME credits.

Facts & Figures 2012

- 20,023 Participants
- 102 Countries
- 274 Scientific and Educational Sessions
- 3,000 Scientific and Educational Exhibits
- 1,020 Scientific Papers
- 580 Invited Lectures
- Fully Electronic Scientific Exhibition
- Industrial Exhibition
300 exhibitors from 37 countries
26,000 m²

Scientific and Educational Programme

- 3 Honorary Lectures
- 1 Opening Lecture
- 4 ESR meets Sessions
- 1 EFRS meets Session
- 2 Image Interpretation Quizzes
- 3 New Horizons Sessions
- 3 State of the Art Symposia
- 18 Special Focus Sessions
- 5 Professional Challenges Sessions
- 3 Multidisciplinary Sessions: Managing Patients with Cancer
- 3 Categorical Courses (18 Sessions)
- 5 Mini Courses (20 Sessions)
- 75 Refresher Courses
 - 1 Foundation Course: Neuroimaging (6 Sessions)
- 14 Interactive Teaching Sessions
 - 1 e-Learning Centre with Self Assessment Tests
 - 1 RTF – Radiology Trainees Forum:
Highlighted Lectures
 - 2 Update Your Skills (Practical Courses)
 - 1 EFOMP Workshop
 - 1 ESOR Session
 - 1 ESR Audit Session
 - 1 ESR Radiation Protection Session
 - 1 Joint Session of the ESR and the EFSUMB
 - 1 Post-Processing Face-Off Session
- Satellite Symposia & Industry Hands-On Workshops



Online Registration

Registration Fees (including 20% VAT):

→ Easy to manage
online registration
for groups and
companies!

→ **Free registration**
for students up to
30 years!

	Middle Fee	Late Fee
Full Fee Non-Member	€ 860	€ 990
ESR Full Member	€ 510	€ 670
ESR Associate Member	€ 650	€ 890
ESR Corresponding Member	€ 650	€ 890
Resident Non-Member	€ 430	€ 590
Resident Member	€ 350	€ 490
Hospital Manager	€ 650	€ 890
Nurse**	€ 290	€ 440
Radiographer Non-Member	€ 400	€ 550
Radiographer Member	€ 290	€ 440
Present from home**	€ 330	€ 330
Oral Presenter Member	€ 250	-----
Single Day Ticket	onsite only	€ 300
Student@ECR*	free	free

* Students under the age of 30, who do not yet have an academic degree, can register completely free of charge.

** Present from home

The registration category 'present from home' has been created for individuals who are NOT able to attend the congress in person but would still like their EPOS poster to be shown during and after the congress.

Registration as Member

In order to qualify for reduced member registration fees for ECR 2013, ESR Membership for the year 2012 must have been settled by August 29, 2012. All other participants must register as non-members.

ECR Registration Deadlines

Middle Fee:	November 16 – December 20, 2012
Late Fee:	from December 21, 2012 onwards

Public Transportation

Tickets for public transport in Vienna, valid from March 6 to March 11, 2013 are available within the MyUserArea upon registration. The ticket costs € 20, which cannot be refunded upon cancellation of registration or non-participation.

Cancellation Insurance

The ESR offers all pre-registered participants the option of taking out a cancellation policy with our partner 'Europäische Reiseversicherung'. The insurance fee depends on the ticket selected and can only be booked during online registration. After completion of registration and/or payment, insurance can no longer be selected. The ESR itself will not refund any registration fees.

For further information please visit www.myESR.org/registration2013 or contact registration@myESR.org

Accommodation & Flights

The ECR 2013 Accommodation Service has been online since September. Book your rooms at www.myESR.org/ECR2013

Flights can be booked via Star Alliance™. Star Alliance™ is the official airline network for ECR 2013.

Timetable

Thursday, March 7

08:30 09:00 09:30 10:00

10:30 11:00 11:30 12:00

Scientific Sessions
(100)

Siemens Healthcare Symposium

1

12:15 13:00 13:30 14:00

Mini Courses
MC 24A, MC 25A

Bayer HealthCare Symposium
SuperSonic Imagine Symposium
Siemens Healthcare Symposium

Friday, March 8

State of the Art Symposium
SA 4
Special Focus Sessions
SF 4a, SF 4b
Professional Challenges Session
PC 4
Mini Courses
MC 422, MC 423, MC 428
Multidisciplinary Session
MS 4
Refresher Courses
E³ Session
Update Your Skills (Introductory Lecture)
(400)

EIBIR/EORTC Symposium

Rising Stars Basic Session

Post-Processing Face-Off Session

4

ESR meets Spain
Mini Course
MC 528
E³ Sessions
Scientific Sessions
Update Your Skills (Introductory Lecture)
(500)

Rising Stars Basic Session
Rising Stars Student Workshop

5

Josef Lissner Honorary Lecture

Gold Medal Awards

Mini Courses
MC 24B, MC 25B

Bayer HealthCare Symposium
Bracco Symposium
GE Healthcare Symposium
Siemens Healthcare Symposium

Saturday, March 9

New Horizons Session
NH 8
Special Focus Sessions
SF 8a, SF 8b
Categorical Courses
CC 818, CC 819
Refresher Courses
E³ Sessions
Update Your Skills (Introductory Lecture)
(800)

EFOMP Workshop

Rising Stars Student Session

8

ESR meets South Africa
E³ Sessions
Scientific Sessions
Update Your Skills (Practical Courses)
(900)

EFOMP Workshop

Standards and Audit Session

Rising Stars Student Session

9

Wilhelm Conrad Röntgen Honorary Lecture

Mini Courses
MC 24C, MC 25C

E³ FC Self Assessment Test

MIR@ECR

Siemens Healthcare and Bayer HealthCare Joint Symposium
Bracco Symposium
Siemens Healthcare Symposium
GE Healthcare Symposium
Guerbet Symposium
Philips Healthcare Symposia

Sunday, March 10

Special Focus Session
SF 12
Professional Challenges Session
PC 12
Categorical Courses
CC 1218, CC 1219, CC 1221
Refresher Courses
E³ Session
(1200)

Rising Stars Basic Session

12

ESR meets Chile
Professional Challenges Session
PC 13
Categorical Course
CC 1321
Scientific Sessions
Update Your Skills (Practical Courses)
(1300)

RTF Highlighted Lectures

13

Santiago Ramón y Cajal Honorary Lecture

Junior Image Interpretation Quiz

Mini Courses
MC 24D, MC 25D

GE Healthcare Symposium
Samsung Symposium
Philips Healthcare Symposium
Bracco Symposium

Monday, March 11

Special Focus Sessions
SF 16a, SF 16b, SF 16c
Categorical Courses
CC 1618, CC 1619, CC 1621
Refresher Courses
E³ Session
(1600)

Joint Session of the ESR and EFSUMB

16

E³ Sessions
Scientific Sessions
(1700)

17

Mini Courses
MC 24E, MC 25E

Timetable

14:00 14:30 15:00 15:30	16:00 16:30 17:00 17:30	17:45 18:00 18:30 19:15	
<p>E³ Session Scientific Sessions (200)</p> <p>Siemens Healthcare Symposium</p> <p style="text-align: right;">2</p>	<p>Professional Challenges Session PC 3 Mini Course MC 322 Multidisciplinary Session MS 3 Refresher Courses E³ Session (300)</p> <p>ESR Radiation Protection Session</p> <p style="text-align: right;">3</p>	<p>Opening Ceremony Presentation of Honorary Members</p> <p>Opening Lecture</p>	Thursday, March 7
<p>Mini Courses MC 623, MC 628 E³ Session Scientific Sessions Update Your Skills (Practical Course) (600)</p> <p>ESOR Session</p> <p>Rising Stars Student Session Rising Stars Student Workshop</p> <p style="text-align: right;">6</p>	<p>ESR meets E-AHPBA New Horizons Session NH 7 Special Focus Sessions SF 7a, SF 7b, SF 7c Categorical Course CC 719 Mini Courses MC 722, MC 723, MC 728 Refresher Courses E³ Sessions Update Your Skills (Practical Course) (700)</p> <p>Rising Stars Student Session</p> <p style="text-align: right;">7</p>		Friday, March 8
<p>EFRS meets Spain Image Interpretation Quiz Update Your Skills (Practical Courses)</p> <p>MIR@ECR</p> <p>Hologic Symposium Toshiba Symposia GE Healthcare Nycomed Symposium</p> <p style="text-align: right;">10</p>	<p>State of the Art Symposium SA 11 Special Focus Session SF 11 Professional Challenges Session PC 11 Categorical Courses CC 1118, CC 1121 Multidisciplinary Session MS 11 Refresher Courses E³ Session Update Your Skills (Practical Course) (1100)</p> <p>MIR@ECR Rising Stars Student Workshop</p> <p style="text-align: right;">11</p>		Saturday, March 9
<p>New Horizons Session NH 14 Special Focus Sessions SF 14a, SF 14b, SF 14c Categorical Courses CC 1418, CC 1419, CC 1421 Refresher Courses E³ Session Update Your Skills (Practical Course) (1400)</p> <p>Rising Stars Students Final Session Rising Stars Student Workshop</p> <p style="text-align: right;">14</p>	<p>State of the Art Symposium SA 15 Special Focus Sessions SF 15a, SF 15b Categorical Courses CC 1518, CC 1519, CC 1521 Refresher Courses E³ Session Update Your Skills (Practical Course) (1500)</p> <p style="text-align: right;">15</p>		Sunday, March 10
<p>Scientific Sessions (1800)</p> <p style="text-align: right;">18</p>	<p>Special Focus Session SF 19 Refresher Courses (1900)</p> <p style="text-align: right;">19</p>		Monday, March 11



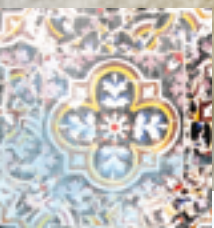


ESR meets ... *Sessions*

Once again, the ESR will welcome three countries and a partner society to share their expertise through its dedicated 'ESR meets' programme during ECR 2013. Chile, South Africa, Spain and the European-African Hepato-Pancreato-Biliary Association (E-AHPBA) will host joint sessions. This year will also see the EFRS hosting their own 'meets' session for the first time, as they welcome the Spanish Association of Radiological Technicians as their guests.

On the following pages you will find interviews with the presidents of both the Radiological Society of Chile (SOCHRADI) and the Spanish Radiological Society (SERAM).

Interviews with the presidents of the Radiological Society of South Africa (RSSA) and the European-African Hepato-Pancreato-Biliary Association (E-AHPBA) were published in the first edition of the ECR 2013 preliminary programme.



ESR meets Sessions

Friday, March 8, 10:30–12:00, Room B

ESR meets Spain

EM 1: Imaging: essential tool from diagnosis to treatment

Presiding:

C. Ayuso; Barcelona/ES
 J.I. Bilbao; Pamplona/ES
 G.P. Krestin; Rotterdam/NL

• **Introduction**

C. Ayuso; Barcelona/ES

• **Ischaemic stroke**

J. Macho; Barcelona/ES

• **Interlude:**

Spanish radiologists: open to the world

E. Fraile Moreno; Madrid/ES

• **Aortic aneurisms**

J.J. Martínez Rodrigo; Valencia/ES

• **Interlude: Radiologists and Spanish wines**

L. Martí-Bonmatí; Valencia/ES

• **Hepatocellular carcinoma: the BCLC approach**

M. Burrel; Barcelona/ES

• **Panel discussion:**

Is the multidisciplinary environment the natural way to develop excellence and leadership in clinical imaging?

Friday, March 8, 16:00–17:30, Room B

ESR meets E-AHPBA (European-African Hepato-Pancreato-Biliary Association)

EM 2: Pancreatic cystic neoplasms 2013

Presiding:

J.I. Bilbao; Pamplona/ES
 P.-A. Clavien; Zurich/CH
 G.P. Krestin; Rotterdam/NL

• **Introduction**

P.-A. Clavien; Zurich/CH
 K. Conlon; Dublin/IE

• **Classification/pathology**

C. Verbeke; Stockholm/SE

• **Radiological diagnosis**

S. Skehan; Dublin/IE

• **Current role of endoscopic ultrasonography**

P. Bauerfeind; Zurich/CH

• **How aggressive should the surgeon be?**

K. Conlon; Dublin/IE

• **Panel discussion**

Saturday, March 9, 10:25–12:00, Room B

ESR meets South Africa

EM 3: Imaging HIV and TB

Presiding:

J.I. Bilbao; Pamplona/ES
 G.P. Krestin; Rotterdam/NL
 C.W. Sperry; Cape Town/ZA

• **'Big Five' video**

• **Introduction**

C.W. Sperry; Cape Town/ZA

• **HIV-related cerebrovascular disease: the South African experience**

V. Mngomezulu; Johannesburg/ZA

• **Interlude:**

Radiology training in South Africa

Z. Lockhat; Pretoria/ZA

• **New concepts in the pathogenesis of cerebral TB**

P. Janse van Rensburg; Stellenbosch/ZA

• **Interlude:**

South Africa: the country, its people, its diversity and its attractions

Z. Lockhat; Pretoria/ZA

• **Spinal tuberculosis in children**

T. Kilborn; Cape Town/ZA

• **Chronic chest radiographic changes in a cohort of HIV-infected South African children**

R. Pitcher; Cape Town/ZA

• **Panel discussion:**

HIV and TB: What impact do they have on health care workers?

ESR/EFRS meets Sessions

Sunday, March 10, 10:30–12:00, Room B

ESR meets Chile

EM 4: Topics of ongoing radiological research from the Andes

Presiding:

J.I. Bilbao; Pamplona/ES

G.P. Krestin; Rotterdam/NL

M.A. Pinochet; Santiago/CL

- **Introduction:**
Radiology in Chile: reality and challenges
P. Soffia; Santiago/CL
M.A. Pinochet; Santiago/CL
- **TI-RADS: a US classification of thyroid nodules related to cancer risk**
E. Horvath; Santiago/CL
- **Interlude:**
Chile, land of geographical and cultural contrasts
G. Soto Giordani; Santiago/CL
- **Neuroimaging in epilepsy: in search of invisible lesions**
M. Galvez; Santiago/CL
- **Interlude:**
Chile, land of wine and poets
G. Soto Giordani; Santiago/CL
- **MDCT patterns in mesenteric ischaemia: usefulness in predicting clinical outcome**
A. Huete; Santiago/CL
- **Panel discussion:**
Creating networks between Latin American and European radiology: a unique opportunity for collaborative research projects

Saturday, March 9, 14:00–15:30, Room B

EFRS meets Spain

(European Federation of Radiographer Societies)

EM 5: Knowledge development as a tool for radiographers' professional improvement

Presiding:

G. Paulo; Coimbra/PT

C. Ruiz Blanco; Madrid/ES

- **Introduction**
G. Paulo; Coimbra/PT
C. Ruiz Blanco; Madrid/ES
- **The Spanish radiographer's role in advanced MRI research**
E. Alfayate Sáez; Madrid/ES
- **The radiographer's specialisation in ultrasound: two decades of experience in a public hospital**
M.P. Peña Fernández; Madrid/ES
- **Interlude:**
Radiology and Spanish art
C. Ruiz Blanco; Madrid/ES
- **The radiographer as the interface between patient and technology in promoting safety in radiation protection**
J.A. Sória Jerez; Madrid/ES
- **Educational status of radiographers in Spain: comparison with the EU**
M.R. Soto García; Barcelona/ES
- **Panel discussion:**
Could a transnational and multi-professional combined statement contribute to professional development?

'ESR meets Spain'

By Méliande Rouger

Friday, March 8,
10:30–12:00

ESR meets Spain

EM 1:

Imaging:
essential tool
from diagnosis
to treatment

Spain, home to the ECR 2013 Congress President, Professor José Ignacio Bilbao, will be a guest within the 'ESR meets' programme next March in Vienna. The European Society of Radiology (ESR) spoke with **Professor Carmen Ayuso**, president of the Spanish Society of Medical Radiology (SERAM), ahead of the session, which will focus on ischaemic stroke, aortic aneurysms and hepatocellular carcinoma imaging, as well as the general state of radiology in Spain.

The European Society of Radiology (ESR): What are the latest advances and remaining challenges in ischaemic stroke imaging?

Carmen Ayuso: The latest advances in this field are the generalised use of diffusion-perfusion and perfusion CT in evaluating the penumbra area in stroke patients, and the selection of good candidates for endovascular rescue after endovascular treatment failure. The accurate measure of the real penumbra volume based on these techniques and their accurate correlation with clinical evolution remain a challenge.

ESR: What modalities are used to image ischaemic stroke and are there enough equipment and qualified staff to do so in Spain?

CA: We actually prefer to use perfusion CT in selecting anterior circulation 0–6h stroke onset patients because of their accessibility and our results. We tend to use diffusion/perfusion MRI in posterior fossa and unknown onset stroke patients. There are enough qualified staff and equipment in the reference centres where endovascular (EV) treatment is offered.

ESR: What modalities are used to image patients suffering from aortic aneurysms? What role do these modalities play in diagnosis, treatment and follow-up?

CA: CT and MR angiography are the imaging techniques most often used for patients suffering from aortic aneurysms. Angio CT plays a prominent role in the diagnosis, treatment planning and follow-up of patients treated with EV techniques.

ESR: Are there any promising developments in this field?

CA: Complex EVAR (endovascular aneurysm repair) including branched, fenestrated and chimney procedures, allows a wider indication for this treatment. Repair of endoleaks by direct puncture of the residual aneurysmal sac using 3D navigators is a promising complementary treatment technique for these technical and clinical problems.

will show imaging's central role in patient management

ESR: Could you please tell me more about the Barcelona Clinic Liver Cancer (BCLC) staging system?

CA: Up to now, the only proposal linking staging to prognostic prediction and treatment indication has been the BCLC approach. This classification has emerged as the standard classification for the clinical management of HCC. The BCLC classification has been validated externally in prospective studies and different settings, and establishes treatment recommendations for all stages of HCC. It has been endorsed by several scientific associations (EASL, AASLD, ESMO, WGO). It was presented in 1999 (Llovet JM, et al. *Semin Liver Dis* 1999; 19: 329–38) and since then it has been refined according to new scientific evidence. The last update was published in 2012 (Forner A, et al. *Lancet* 2012;379:1245).

ESR: How high is the incidence of HCC in Spain?

CA: The latest estimates from the International Agency for Research on Cancer (IARC) indicate an age-adjusted incidence rate in men of 9.2 x 100.000, while it is significantly lower in women. This corresponds to an intermediate rate similar to other countries of southern Europe. However, it is important to note that HCC is currently the main cause of death in patients with cirrhosis, and accounts for more than 30% of patients registered for liver transplantation all over Europe.

ESR: Why did you choose these three topics to illustrate Spanish radiology at ECR 2013?

CA: I chose topics where radiologists are involved in the management of the patient, from beginning to end, from screening to treatment, and even further into the follow-up after treatment. Radiology in Spain is completely integrated into multidisciplinary teams for many specific processes like participating in the decision-making process and improving efficacy. I selected three topics in which we have a particularly important role.



Professor Carmen Ayuso from Barcelona, president of the Spanish Society of Medical Radiology (SERAM), will preside over the 'ESR meets Spain' session.

ESR: What do you expect from your participation in the 'ESR meets' programme?

CA: I particularly expect to increase knowledge and awareness of the tasks of Spanish radiologists in Europe. Also, I expect to make deeper ties with other researchers and groups working with imaging to enrich radiology and Spanish radiology in a general sense.

ESR: Scientific research has been hit hard by Spain's austerity budget. How does this affect imaging research across the country?

CA: These are hard times in Europe, especially in southern countries. Nevertheless these challenging situations create an opportunity for creative and imaginative people like us to innovate and take advantage of this moment. Scientific research is carrying on with enthusiasm as we will show in our session on Spanish radiology at ERC 2013.

ESR: Has this translated into a renewed interest from Spanish radiologists in international projects? Is it more interesting for Spanish radiologists to take part in international conferences such as the ECR now than a few years ago?

CA: Of course we are interested in new research fields and professional options, but this is not new. We have consolidated researchers working in international projects not only in Europe, but also in the United States. We also have well-known radiologists deeply involved in the ECR and ESR, such as Professors Luis Donoso and Luis Martí-Bonmatí. Professor José Ignacio Bilbao is president of ECR 2013, and Spanish radiologists have been very active participants in the ECR in recent years.

ESR: Are Spanish radiologists looking forward more to developing their careers outside their country nowadays?

CA: In the global world we live in, frontiers are less rigid. Nowadays, we have more Spanish radiologists working outside the country and we also have more foreign radiologists working in Spain.

ESR: Do you think cooperation between European radiologists is generally satisfactory? Could it be improved and, if yes, how?

CA: Yes, cooperation exists and it can always be improved. Communication, scientific rigour, compromise and seriousness are the most important elements to improve confidence and cooperation.

ESR: Are you a regular visitor to the ECR? What do you enjoy the most at the congress?

CA: Yes, I regularly attend the ECR because it is a very good opportunity to share professional experiences, results, doubts and initiatives with other colleagues, who also regularly attend the congress. You learn during the sessions and also outside of them.

ESR: Are you looking forward to any scientific sessions in particular at ECR 2013?

CA: From an organisational point of view, I am interested in a controversial topic that will be discussed in the Special Focus Sessions entitled 'Radiographers and ultrasonography in Europe.' Also, I am interested, of course, in the Multidisciplinary Sessions dedicated to Hepatocellular Carcinoma (MS4), which is my particular field of interest, to see the Pamplona (Spain) team in action, and to share experiences and discuss approaches with them.

ESR: Is there anything you would like to add?

CA: I am pretty sure that with international collaboration, Europe will contribute significantly to the improvement and global success of radiology. The ECR is the best place to do so.

Chile looks forward to 'ESR meets' and new forms of cooperation in the future

By Mélisande Rouger

Sunday, March 10,
10:30–12:00

ESR meets Chile
EM 4:

Topics of ongoing
radiological research
from the Andes

Next year, 'ESR meets' will mark Latin America's return to the ECR. After Argentina in 2010 and Brazil in 2011, Chile will be a guest within the popular programme, which promotes dialogue between radiologists from all over the world. ECR delegates will be given the opportunity to learn about the latest developments in Chilean radiology and appreciate the local realities of this faraway country. The ESR spoke with **Professor Miguel Ángel Pinochet**, president of the Chilean Society of Radiology, ahead of the meeting.

The European Society of Radiology (ESR): Chile is the third Latin American country invited to take part in the 'ESR meets' programme. What do you expect from your participation?

Miguel Ángel Pinochet: We have great expectations. As a small country, it is a great honour to be invited to this meeting. We hope that our European colleagues will enjoy and learn from our speakers. They have prepared very interesting talks about recent advances in common medical conditions, which every radiologist should know about.

ESR: Do you think cooperation between Chilean, and more generally South American, and European radiologists is satisfactory? Could it be improved and, if yes, how?

MAP: Usually, young Chilean radiologists tend to apply for subspecialty fellowships in the United States, but we are aware that European radiology has many advantages. I am sure that the ESR could participate more in congresses and specific courses in Latin America, sharing costs with local radiological societies. Such initiatives would increase the influence of European radiology in our area.

ESR: Chile is very diverse and multi-ethnic. Is that a challenge for a homogenous national radiology training?

MAP: The main challenge is to increase the number of radiology residency programmes. Today, there are only eight in the country, training 40 residents per year. We need to double this number, as there is a deficit of radiologists that exceeds 300 positions, mainly at public hospitals. Also, there is nothing like a national curriculum in Chile, and there are big differences in terms of programme quality. We need to advance into a national curriculum, and maybe the ESR could be a reference standard for us.

ESR: What is the current state of radiological care in Chile? Do patients have access to the technology and expertise they need?

MAP: Seventy-three percent of Chilean citizens are beneficiaries of the public health system, which has nationwide coverage. Sixteen percent of Chileans have private insurance. Most hospitals have adequate radiological equipment, but the main problem is the shortage of radiologists. Most radiologists prefer to work at private centres, because public salaries are too low. As a national radiological society, we encourage radiologists to split their work between private and public hospitals, because most Chileans cannot afford private institutions. Nevertheless, health indicators are among the best in Latin America.

ESR: Have you already attended the ECR? If yes, what did you enjoy the most at the congress?

MAP: Yes, I have been at the ECR meeting several times. I think the scientific level is excellent, and, of course, I enjoy the city.

ESR: Are you looking forward to any scientific sessions in particular at ECR 2013?

MAP: As a breast imaging specialist, I am very interested in the Special Focus Session SF 15b, to be held on Sunday March 10, about digital breast tomosynthesis. We expect to get new equipment this year, so I am very excited to see if it really has something new to add to cancer diagnosis.

ESR: The ECR is a long way to go for South American radiologists. What do you think of the initiative 'ECR Goes to', which broadcasts live sessions from the congress online? Did some of your colleagues make use of this new service during ECR 2012?

MAP: Not really, as it is a new initiative. We will promote it among our nationals and members.

ESR: Is there anything you would like to add?

MAP: We are looking forward to having more and more cooperation with European radiologists in the next few years. I am sure that there are a lot of opportunities to share education and research with our fellow European societies.



Professor Miguel Ángel Pinochet from Santiago, president of the Chilean Society of Radiology, will lead the team of Chilean experts for the 'ESR meets Chile' session.

A paradise of opportunities for radiographers at ECR 2013

The quality of the ECR's sessions for radiographers has been given a welcome seal of approval from the European Federation of Radiographer Societies (EFRS) who recently elected the ECR as their official annual scientific meeting. EFRS president, **Professor Graciano Paulo** from the college of health technology of Coimbra, Portugal, has been coming to the ECR for more than a decade and firmly believes the upcoming congress boasts one of the best selections yet for radiographers.

Here he gives his personal preview of ECR 2013 and each of these sessions:



EFRS president, Prof. Graciano Paulo from Coimbra, Portugal, confirms that the ECR has become one of the most important meetings worldwide for radiographers.

Graciano Paulo: The ECR is really a paradise of opportunities. This congress is worth visiting just for the chance to meet people from throughout the profession, to network, and to get a wider perspective on the world of medical imaging. But of course the superb scientific sessions and the knowledge shared within them are the core of this meeting. The radiographers' sessions at the ECR have been increasing in quality every year, and for 2013 there will be some new additions to the programme that will make it one of the best ever. I would like to personally thank the chairs of the radiographers subcommittee, Dean Pekarovic and Valérie Vilgrain, who have ensured a very high quality programme, and I am also very grateful to ECR president Prof. Bilbao for giving us the opportunity to have the EFRS Meets session for the first time.

EFRS meets Spain

Saturday, March 9, 14:00–15:30, Room B

The EFRS is very optimistic about this session. It's the first year that this kind of session is being held, and by destiny we are meeting with one of the countries that the federation is really interested in. Spanish Radiographers have developed their professional competencies in recent years, and want to see that recognised by National Health and Education authorities, by transferring their education programmes into Higher Education Institutions. This session gives us a vital opportunity to discuss that, by observing the quality of their professional practice, and to reflect on the improvement in the quality of care expected, if the Spanish government give their radiographers the chance to be educated and trained at University level, as observed in almost all European countries.

All of the speakers in this session have more than 20 years of experience and belong to a group of 30 Spanish radiographers who decided to cross the border to study in Portugal at the College of Health Technology of Coimbra to obtain university diplomas. They are clearly strong advocates for the university system and excellent role models for other Spanish radiographers.

SF 7a: Radiographers and ultrasonography in Europe

Friday, March 8, 16:00–17:30, Room B

This is a very important session covering an issue that is a little controversial, because radiographers are not performing ultrasound in all EU countries. The session should give us a chance to see the main advantages of radiographers performing ultrasound themselves. We are very much in favour of the 'radiology family'; the idea that there should be permanent links between radiologists and radiographers in all techniques and modalities and that these techniques should be kept within the remit of the radiology department in order to deliver the best care possible for patients. The matter of who is allowed to perform ultrasound is completely unregulated and in several countries other professions use it with no experience or specialist knowledge and probably with less-than-ideal outcomes for patients.

RC 714: Clinical audit: from EURATOM to the clinical environment

Friday, March 8, 16:00–17:30, Room B

According to the literature, there is a severe lack of implementation of clinical audit, as described in the EURATOM treaty, in radiology departments in the majority of EU countries. In this session we will try to understand what is going on in Europe, looking at experiences in different countries with different models, and we will try to understand what kind of impact the implementation of these audit guidelines could bring to health systems. If you look at what should be controlled, assessed and evaluated in daily practice, it is all with the purpose of improving quality and patient security, and promoting a radiation protection culture. Even when clinical audit is not being implemented, it is important for radiographers to be aware of the concept and to know what to check in order to avoid errors.

RC 1114: Hot topics in magnetic resonance imaging
Saturday, March 9, 16:00–17:30, Room B

There are three separate but important topics being addressed in this session. The first will aim to help us gain a better understanding of what we mean when we talk about MR safety. The second will highlight how it is possible to do more with our MR systems and what radiographers can do to improve. The final talk is called 'Challenges and opportunities in paediatric MR' and provides a very good example of the way that radiographers need to think in all modalities. There are a tremendous number of factors challenging radiographers on a daily basis in all fields, but just as many opportunities to make those vital adjustments that can vastly improve the quality of the services we provide.

RC 1214: Dose optimisation in computed tomography
Sunday, March 10, 08:30–10:00, Room B

This is always an important topic for radiographers because technology is improving so fast that we always need to know how to keep up. Whenever we use CT we are using a modality that in the last ten years has increased the population dose more than five-fold. So the purpose of this session is for us to understand what kind of innovations are being made in dose optimisation; the possibilities of new equipment, new protocols, and the new ways of doing things that can help radiographers in daily practice to decrease dose not only in patients, but also in staff. It is always possible to do better with less, but there is not always a bridge between technological development and daily practice. So we need to develop a team concept in order to translate new advances into the hospital, to achieve better optimised procedures to decrease dose in the patient.

**RC 1414: Towards advancing and developing
the role of radiographers****Sunday, March 10, 14:00–15:30, Room B**

This Refresher Course aims to help attendees understand the situations in different countries and how they have affected the development of the profession, as well as their impact on health systems and healthcare delivery. The take-home message will be that a profession can only develop if its body of knowledge is defined and a strategy is put in place to develop that body of knowledge. This has to involve research and particularly evidence-based practice research, so we will try to understand how we can do that research and implement the results in daily practice. Continued professional development is also very important in maintaining and improving the quality of care delivered to the patient. We hope that we can provide plenty of examples in this session for people to take home and hopefully use to influence change on a national level.

RC 1514: Hybrid imaging technologies**Sunday, March 10, 16:00–17:30, Room B**

What are the recent developments in hybrid imaging technologies, what are they used for, and most importantly, how should radiography education look at them to understand what kind of output to provide for the market? There are currently only two or three countries that have separate education for nuclear medicine and radiography; in most countries they are combined. We have to look at this and see how it is possible to combine these two modalities, these two specialised fields, and still guarantee the quality of the young graduates that we put into the market and the quality of the care delivered to the patient. It is difficult, but by the end of this session we would like to understand how radiography education should develop in the future regarding emerging technology.





New Horizons *Sessions*

The New Horizons Sessions aim to provide practitioners with an overview of the new developments in a specific area of practice, whether it is a subspecialty, a particular technique, or certain diseases. These developments may become routine within a few years, or may indicate a new direction for research and clinical application.

Each session is 90 minutes long and features an introduction from a chairman, followed by three or four brief presentations on different aspects of the main subject, and concluded by a panel discussion that will hopefully answer some critical questions.

Places are allocated on a first-come, first-served basis.



New Horizons Sessions

Friday, March 8, 16:00–17:30, Room C NH 7: Cartilage imaging

- **Chairman's introduction**
V.N. Cassar-Pullicino; Oswestry/UK
- **Sodium imaging**
S. Trattinig; Vienna/AT
- **dGEMRIC**
(delayed gadolinium-enhanced MR imaging of cartilage)
G. Welsch; Erlangen/DE
- **Diffusion tensor imaging**
C. Glaser; Munich/DE
- **CEST (chemical exchange saturation transfer)**
B. Schmitt; Vienna/AT
- **Panel discussion:**
What are the envisaged future advances in these cartilage imaging techniques and can we expect to introduce them into clinical practice?

Saturday, March 9, 08:30–10:00, Room C NH 8: MR/PET: a marriage made in heaven or hell?

- **Chairman's introduction**
B. Hamm; Berlin/DE
- **MR/PET in neuroimaging: nuclear medicine**
O. Sabri; Leipzig/DE
- **MR/PET in neuroimaging: radiology**
B.R. Rosen; Charlestown, MA/US
- **MR/PET in oncologic imaging: nuclear medicine**
O. Ratib; Geneva/CH
- **MR/PET in oncologic imaging: radiology**
H.-P. Schlemmer; Heidelberg/DE
- **Panel discussion:**
What benefits and risks should we expect in terms of basic research, clinical service, and economics?

Sunday, March 10, 14:00–15:30, Room B NH 14: Imaging of the mind

- **Chairman's introduction:**
New insights into the state of consciousness through neuroimaging
S. Sunaert; Leuven/BE
- **Brain wiring: resting state fMRI**
F. Barkhof; Amsterdam/NL
- **fMRI in disorders of consciousness: diagnostic and legal challenges**
C. Di Perri; Liège/BE
- **fMRI of cognitive functions: discriminating normal aging, minimal cognitive impairment and Alzheimer's disease**
A. Falini; Milan/IT
- **Panel discussion:**
New insights into the state of consciousness through neuroimaging. Where are we and where should we go?

Radiologists gather to contemplate the future of MR/PET

By Méliande Rouger

Saturday, March 9,
08:30–10:00

NH 8:
MR/PET:
a marriage made in
heaven or hell?

The field of possibilities offered by MR/PET is exciting but remains unclear. Only a few machines are available worldwide and very little information exists about this new hybrid modality. Research is ongoing, but it is still too early to produce results. Always at the forefront of innovation, the ECR will feature a special New Horizons Session to present delegates with the prospects, potential and requirements of MR/PET in neurological and oncologic imaging, next March in Vienna.

MR/PET is a completely new technology, introduced about two years ago. As such, it requires clinical evaluation and raises many questions regarding its value, explained session chairman Professor Bernd Hamm, director of the Institute of Radiology at the Charité University Hospital in Berlin.

“The questions are: in which indication will we have a benefit, and how big will these benefits be? In other words, is MR/PET just a very expensive new toy without real medical benefits or does it offer completely new diagnostic insights that would improve the treatment of patients?” he said.

Sequential imaging of both modalities already provides very good morphological and metabolic information. MR is considered to have the best contrast resolution in cross-sectional imaging; it provides a lot of anatomical detail, and offers the option of measuring parameters of perfusion, cell density and metabolism, while PET allows the study of metabolic changes with sensitivity in the picomolar range. The information from MR and PET images is highly valuable in many fields, including oncologic, cardiovascular and neurological imaging.

So why would a combination of MR with PET be of value? Many arguments speak in favour of such a union. One such argument is that it could improve tumour detection, by allowing the visualisation of a lesion through both morphological and metabolic images with unrivalled sensitivity. Professor Heinz-Peter Schlemmer, head of the radiology department at the German Cancer Research Centre, has worked extensively on comparative studies with whole-body MR and PET/CT for the detection of solid tumours. He found that, while all modalities are useful for this task, depending on the particular tumour entities, MR and PET have the highest accuracy.

“Interestingly the important information came either from MR or PET studies, but CT was often not that relevant. We thought that the combination of PET and MR would be ideal to detect and typify tumours. Locally, the tumour can be imaged with the best anatomical resolution by MR, and in addition you have this metabolic and membrane receptor information about cells from PET, so together you increase your sensitivity and specificity for tumour detection and characterisation,” he said.



Professor Bernd Hamm from Berlin, Germany, will chair the New Horizons Session on MR/PET.



Professor Heinz-Peter Schlemmer from Heidelberg, Germany, will talk about the role of MR/PET in oncologic imaging.

The combination of morphological, functional and metabolic information proves useful at every step of cancer imaging. It enables radiologists to detect and characterise tumours very accurately, by showing tumour size, infiltrative pattern and growth potential. It is very good for local staging, distant metastatic staging, treatment monitoring, and follow-up.

“For instance in patients with pole melanoma, we use FDG PET/CT with glucose to assess tumour spread. MR is very important to detect tumour spread in the brain, liver and bone marrow and PET allows us to see tumours early, particularly in lymph nodes. If you put it all together, you obtain very precise information about tumour spread, which you can use not only for therapy follow-up, but also for early detection,” Schlemmer said. MR/PET could also be used for patients with other types of solid tumour, e.g. breast and prostate tumours, he suggested.

Another argument in favour of MR/PET is that it generates very low levels of radiation. This could be particularly important for repeated imaging during therapy monitoring and follow-up as well as imaging of young patients, for instance young men with testicular cancer.

Having all the information in one examination represents a significant time-saver, which means that treatment could be started or modified earlier. It would also prove more comfortable and less stressful for patients, who wouldn't have to wait for another examination or new results.

It might also be easier to put in place an MR/PET machine than merge sequential imaging at a later stage. “In principle, you could do a PET/CT first and then an MR examination; sophisticated software would process and merge the images. It might work that way, but in daily practice it sounds unlikely because it is too complex and time consuming, whereas having an MR/PET machine would allow you to have all the information in 45 minutes without further post-processing,” he said.

If the clinical benefits prove to be worthwhile, MR/PET could be useful in imaging tumour entities, despite the difficulties, he predicted. “According to my experience, it would be worth it, but it would also be quite complex. PET and MR are the most sophisticated imaging modalities, and both require a lot of expertise. To have it all in one machine, you would need even greater expertise to interpret the images. You would need to know a lot about PET and MR, and about oncology and treatment. But once the expertise is there, it could offer a very fast and comprehensive assessment for detection and staging of tumours as well as therapy monitoring,” said Schlemmer, who trained in physics before becoming a medical doctor.

Working with MR/PET means working closely with physicists, radiopharmacists, oncologists and, naturally, nuclear doctors, especially for making diagnoses. The level of cooperation between radiologists and nuclear physicists demanded by hybrid modalities might require more than just an interest in the other's discipline; it might require further subspecialisation. Only the future will tell.





State of the Art *Symposia*

These sessions will inform the audience about the ‘real state of the art’ of a given subject. Each of the lecturers is an expert on the given topic as a whole or on a specific aspect of the topic.

The 90-minute sessions are chaired by a moderator who will introduce three to four speakers addressing various issues within wider subjects such as anatomical regions, specific diseases, or particular techniques. The presentations will be followed by a discussion conducted by the panellists, led by the chairman.

Places are allocated on a first-come, first-served basis.



European Radiology

now at your fingertips



Carry Europe's leading radiology journal with you wherever you go – with the new FREE European Radiology App for iPhone, iPad and iPod touch

More info at www.european-radiology.org

Download at bit.ly/ER-app

Download the app in the iTunes store.

State of the Art Symposia

Friday, March 8, 08:30–10:00, Room E1

SA 4: Diffusion-weighted imaging (DWI) of the abdomen

- **Chairman's introduction**
Y. Menu; Paris/FR
- **DWI of the abdomen: a tutorial for beginners**
H.C. Thoeny; Berne/CH
- **Liver and pancreas: answering burning questions**
F. Caseiro-Alves; Coimbra/PT
- **DWI of abdominal lymph nodes: PET competitive or just pseudo?**
S. Gourtsoyianni; London/UK
- **Clinical cases**

Saturday, March 9, 16:00–17:30, Room B

SA 11: Evaluation of response in haematological malignancy

- **Chairman's introduction**
E. de Kerviler; Paris/FR
- **Opportunities and limitations of PET, CT and MRI answering the haematologist's questions**
T.C. Kwee; Utrecht/NL
- **Evaluation of response in multiple myeloma**
J. Hillengass; Heidelberg/DE
- **Evaluation of response in lymphoma with PET/CT**
S.F. Barrington; London/UK
- **Panel discussion:**
Is it time for biomarker response criteria in haematological malignancies?

Sunday, March 10, 16:00–17:30, Room E2

SA 15: Imaging impingement syndromes

- **Chairman's introduction**
C.W.A. Pfirrmann; Zurich/CH
- **Shoulder**
P. Robinson; Leeds/UK
- **Ankle**
M. Maas; Amsterdam/NL
- **Hip**
K. Wörtler; Munich/DE
- **Panel discussion:**
Form or function:
is impingement a clinical or imaging diagnosis?



Special Focus *Sessions*

The concept of a Special Focus Session is to deal with a topic at the cutting edge of development and clinical application. A traditional approach is inappropriate for such a session, which should reflect the lecturers' forthright personal views on a developing subject. The topics of these sessions should be presented in such a way as to promote debate and give an in-depth analysis.

The chairman will introduce each aspect of the topic and the panellists will then discuss their different perspectives and opinions. The audience will have the opportunity to discuss their ideas with the lecturers. Session length: 90 minutes; three to four speakers.

Places are allocated on a first-come, first-served basis.



Special Focus Sessions

Friday, March 8, 08:30–10:00, Room F2 SF 4a: 'MRI of the lung: to go?'

- **Chairman's introduction: 'Apéritif'**
H. Kauczor; Heidelberg/DE
- **'The sequence buffet'**
J.M. Wild; Sheffield/UK
- **'Preparing your menu'**
J. Biederer; Heidelberg/DE
- **'Bon appétit! Starters':**
cystic fibrosis, pneumonia and pulmonary embolism
M.U. Puderbach; Heidelberg/DE
- **'Bon appétit! Main course':**
pulmonary and mediastinal neoplasms
E.J.R. van Beek; Edinburgh/UK
- **Panel discussion:**
'Bon appétit! Dessert':
what are the benefits of MRI of the lung in clinical workflow and decision-making?

Friday, March 8, 08:30–10:00, Room Q SF 4b: Justifying CT in paediatric radiology

- **Chairman's introduction**
C. Owens; London/UK
- **How should CT be optimised?**
W.A. Kalender; Erlangen/DE
- **When, how, and why I perform CT**
C. Owens; London/UK
- **Why and when CT does not need to be performed**
M. Claudon; Vandoeuvre-les-Nancy/FR
- **Panel discussion:**
Do we have guidelines for paediatric CT? Do we have alternatives?

Friday, March 8, 16:00–17:30, Room F1 SF 7a: Radiographers and ultrasonography in Europe

- **Chairmen's introduction**
D. Pekarovic; Ljubljana/SI
V. Vilgrain; Clichy/FR
- **Levels of training and competencies across Europe**
M. Stanton; Dublin/IE
- **The role and impact of the radiographer conducted US in Portugal**
R. Ribeiro; Lisbon/PT
- **Evolution of radiography education for US in the Netherlands since 1990, and its influence on their role**
G. Plug; Haarlem/NL
- **Panel discussion:**
What are the challenges and barriers facing role extension?

Friday, March 8, 16:00–17:30, Room F2 SF 7b: Imaging and radiotherapy: all you need to know

- **Chairman's introduction**
V.J. Goh; London/UK
- **Modern radiotherapy: what are the new technologies?**
V. Valentini; Rome/IT
- **PET/CT for radiotherapy planning: how does it assist IMRT?**
A. Loft; Copenhagen/DK
- **Response evaluation and treatment adaptation**
K. Haustermans; Leuven/BE
- **MR imaging biomarkers for response evaluation**
R.G.H. Beets-Tan; Maastricht/NL
- **Panel discussion:**
How can imaging improve outcomes in radiotherapy?

Special Focus Sessions

Friday, March 8, 16:00–17:30, Room Q SF 7c: Imaging in intensive care patients

- **Chairman's introduction**
A. Palkó; Szeged/HU
- **Value of MRI for intensive care coma patients with unclear brain pathology**
P.C. Maly Sundgren; Lund/SE
- **Computed tomography of pathologic lung conditions complicating intensive care treatment**
C.M. Schaefer-Prokop; Amersfoort/NL
- **Point-of-care versus diagnostic ultrasound in the intensive care unit**
E. Danse; Brussels/BE
- **Imaging in polytrauma**
U. Linsenmaier; Munich/DE
- **Panel discussion:**
What training and special skills are radiologists expected to have in order to work with intensive care units? How should we manage the clinical and technical challenges posed by this very specific environment?

Saturday, March 9, 08:30–10:00, Room B SF 8a: Is diagnostic catheter angiography still useful in neuroimaging?

- **Chairman's introduction**
M. Essig; Erlangen/DE
- **What can we expect from vascular diagnostic procedures?**
R. Siemund; Lund/SE
- **Can non-invasive techniques as CTA and MRA replace catheter angio for diagnostic work-up?**
L. Van den Hauwe; Brasschaat/BE
- **Diagnostic catheter angiography is not dead: current indications and advantages over the non-invasive techniques**
T. Engelhorn; Erlangen/DE
- **Panel discussion:**
The pros and cons of diagnostic catheter angiography in neuroimaging

Saturday, March 9, 08:30–10:00, Room F2 SF 8b: GI imaging: technological advances and clinical applications

- **Chairman's introduction**
S.A. Jackson; Plymouth/UK
- **CEUS of the bowel wall: when and how**
F. Maccioni; Rome/IT
- **Dual-energy (spectral) CT: GI applications**
P. Rogalla; Toronto, ON/CA
- **MR imaging of GI tract motility**
S.A. Taylor; London/UK
- **Panel discussion:**
When should we integrate these technological advances into our routine practice?

Saturday, March 9, 16:00–17:30, Room F1 SF 11: Adults with congenital heart disease (GUCH)

- **Chairman's introduction:**
Why should a radiologist gather information on GUCH patients?
M. Gutberlet; Leipzig/DE
- **A list of typical surgical procedures: the top ten in GUCH**
M. Hübler; Berlin/DE
- **'Adults are not just big children': differences between children and adults**
A.M. Taylor; London/UK
- **Which modality, for which patient? MRI or CT, that's the question**
J. Bremerich; Basle/CH
- **Panel discussion:**
Can we now get all the information we need to treat GUCH patients, non-invasively?

Special Focus Sessions

Sunday, March 10, 08:30–10:00, Room F1

SF 12: Quantitative imaging biomarkers in cardiac radiology

- **Chairman's introduction**
A. van der Lugt; Rotterdam/NL
- **Imaging biomarkers**
J.-P. Vallée; Geneva/CH
- **Imaging biomarkers for myocardial function**
J. Bogaert; Leuven/BE
- **Imaging biomarkers of myocardial viability**
P. Croisille; Saint-Etienne/FR
- **Imaging biomarkers of myocardial ischaemia**
L. Natale; Sesto Fiorentino/IT
- **Panel discussion:**
How should we implement quantitative biomarkers in clinical practice?

Sunday, March 10, 14:00–15:30, Room F1

SF 14a: Palliative interventional techniques in cancer

- **Chairman's introduction**
K.A. Hausegger; Klagenfurt/AT
- **Cementoplasty of lytic bone metastasis**
A. Gangi; Strasbourg/FR
- **Pleural drainage, pleurodesis**
E. Gleeson; Oxford/UK
- **Percutaneous nephrostomy (PCN) and ureteral stenting**
F. Orsi; Milan/IT
- **Biliary procedures**
M. Krokidis; Cambridge/UK
- **Panel discussion:**
How invasive can palliation be? When to say no to palliative treatment?

Sunday, March 10, 14:00–15:30, Room G/H

SF 14b: Comprehensive CT cardiothoracic imaging: a new challenge for radiologists

- **Chairman's introduction**
L. Bonomo; Rome/IT
- **How to optimise integrated cardiothoracic imaging with CT**
U.J. Schoepf; Charleston, SC/US
- **Coronary artery imaging from a chest CT examination: when and how**
R. Marano; Rome/IT
- **Cardiopulmonary functional imaging from a chest CT examination: when and how**
E.J.R. van Beek; Edinburgh/UK
- **Panel discussion:**
Is a single CT scan technique and protocol feasible for all the cardiothoracic problems?

Sunday, March 10, 14:00–15:30, Room Z

SF 14c: Advances in forensic radiology

- **Chairman's introduction**
G. Guglielmi; Foggia/IT
- **Imaging in forensic medicine**
M. Thali; Zurich/CH
- **Advances in post-mortem CT angiography**
S. Grabherr; Lausanne/CH
- **Virtual anthropology and forensic identification using MDCT**
F. Dedouit; Toulouse/FR
- **Forensic MR imaging**
T. Ruder; Zurich/CH
- **Panel discussion:**
Which imaging technique for which forensic scenario?

Special Focus Sessions

Sunday, March 10, 16:00–17:30, Room F1 SF 15a: Traumatic brain injury

- **Chairman's introduction**
A. Rovira-Cañellas; Barcelona/ES
- **Acute brain trauma: CT vs MRI**
M. Muto; Naples/IT
- **New imaging techniques in the detection and quantification of brain damage**
S. Sunaert; Leuven/BE
- **Advanced imaging of brain trauma: outcome prediction**
D. Galanaud; Paris/FR
- **Cerebrovascular trauma: diagnosis and therapy**
T. Krings; Toronto, ON/CA
- **Panel discussion:**
Role of neuroimaging in traumatic brain injury in 2013

Sunday, March 10, 16:00–17:30, Room F2 SF 15b: Digital breast tomosynthesis

- **Chairman's introduction**
G. Gennaro; Padua/IT
- **Optimisation of image acquisition and reconstruction in DBT**
M.J. Yaffe; Toronto, ON/CA
- **Current role of DBT in diagnostic imaging**
S. Zackrisson; Malmö/SE
- **Clinical aspects of computer aided detection and diagnosis in DBT**
H.-P. Chan; Ann Arbor, MI/US
- **Panel discussion:**
Digital breast tomosynthesis:
replacing or just supporting standard mammography?

Monday, March 11, 08:30–10:00, Room B SF 16a: My most beautiful mistakes in paediatric radiology

- **Chairman's introduction**
P. Tomà; Rome/IT
- **Abdomen**
S.G.F. Robben; Maastricht/NL
- **CNS**
B. Bernardi; Rome/IT
- **Musculoskeletal**
K. Rosendahl; Bergen/NO
- **Panel discussion:**
How have you changed or improved yourself after recognising your mistakes?

Monday, March 11, 08:30–10:00, Room N/O SF 16b: Head and neck cancer battle: the power of imaging studies

- **Chairman's introduction**
V. Vandecaveye; Leuven/BE
- **Building blocks for locoregional staging of head and neck tumours**
F.A. Pameijer; Utrecht/NL
- **Detection of tumour recurrence in head and neck cancer: challenges and pitfalls**
M. Becker; Geneva/CH
- **Locoregional treatment failure in head and neck cancer: causes and clinical implications**
R. Maroldi; Brescia/IT
P. Nicolai; Brescia/IT
- **Panel discussion:**
Advanced imaging in clinical practice:
how does it help the patient?



Special Focus Sessions

Monday, March 11, 08:30–10:00, Room L/M SF 16c: Making homogeneous HCC readings

- **Chairman's introduction**
C. Bartolozzi; Pisa/IT
- **HCC diagnosis: how to report 'typical' findings**
C. Ayuso; Barcelona/ES
- **How to interpret and report 'atypical' findings**
C.J. Zech; Basle/CH
- **How to evaluate tumour response to therapies**
J. Ricke; Magdeburg/DE
- **Information technology: the practical impact on the management of HCC patients**
I. Bargellini; Pisa/IT
- **Panel discussion:**
Case-based discussion: a practical demonstration of how interpretation and reporting affect patient management

Monday, March 11, 16:00–17:30, Room F1 SF 19: Tablet computers in radiology: friend or foe?

- **Chairman's introduction**
E. Neri; Pisa/IT
- **Tablet computers: a technical overview**
J. Fernandez-Bayó; Sabadell/ES
- **Radiological features of the tablet-computer**
P. Sacco; Siena/IT
- **Reading DICOM images on the tablet**
O. Ratib; Geneva/CH
- **Mobile teleradiology with tablet computers: a critical appraisal**
E.R. Ranschaert; 's-Hertogenbosch/NL
- **Panel discussion:**
Are we ready and confident enough to use tablet computers in clinical practice? How and when?

Working in a **special environment** requires **special expertise**

Imaging in intensive care patients

By David Zizka

**Special Focus
Session**
Friday, March 8,
16:00–17:30
SF 7c:
Imaging in
intensive care
patients

Intensive care units are special working environments, presenting radiologists with complex cases and patients with severe conditions. Diagnostic imaging examinations and the work of the radiologist have to be adapted towards these special circumstances, which can be one of the biggest challenges when working in an intensive care unit. Today there is a strong need for accurate, clinically relevant radiological input, which often has to be worked out while facing a lack of adequate image material and patients suffering from life-threatening conditions.

The ECR 2013 Special Focus Session on imaging in intensive care patients, chaired by ESR Past-President, Professor András Palkó from Szeged Medical School in Hungary, will give an up-to-date overview on the use of common imaging methods in the ICU environment. Special Focus Sessions are clearly aimed at in-depth analysis and the promotion of scientific debate between the speakers and their audience.

“The intensive care unit is a very special environment requiring special expertise from both the technicians and the radiologists working in a technically challenging situation. The patients are typically in very severe conditions, frequently unconscious, and almost always connected to life-support and monitoring equipment,” Prof. Palkó pointed out some of the difficulties of working in an ICU.

As a result of this, the majority of imaging examinations are performed on patients with limited ability to cooperate and often at the bedside. Reports are then typically written with insufficient clinical information, based on technically limited images, even though the need for accurate imaging material and radiological information is even greater than in standard clinical settings.

Intensive care patients are typically in a severe state caused by a wide variety of medical, surgical and neurological conditions and in many cases they are supported or maintained by very complex machines. Cardiovascular instability, ventilation, and additional machines that closely monitor vital functions, contribute to the limited transportability of ICU patients, which again makes some imaging examinations quite difficult.

To make matters worse, imaging examinations requested by ICU doctors are frequently urgent and supposed to be reported on immediately.



Prof. András Palkó from Szeged, Hungary, will chair the session on imaging in intensive care patients.



Prof. Ulrich Linsenmaier from Munich, Germany, will share his expertise in imaging in polytrauma.

“The ICU is the ideal turf for bedside, portable ultrasound and ICU physicians are gaining a certain level of expertise in the so-called point-of-care ultrasound examinations allowing them to follow certain interventions with the assistance of real-time imaging. Diagnostic ultrasound, however, is still the task of the radiologist, who, on the other hand, has to be available for bedside examinations whenever it may become necessary. Portable x-ray machines are using digital technology today, allowing for teleradiology if need be, but still emit ionising radiation, requiring special attention when used in a populated ICU environment,” Prof. Palkó described the importance of choosing the right method and knowing the consequences that come with it.

Mobile CT and MR are not routinely used, as they are not widely available, so not only the patient but also the live supporting machines have to be brought to the examination room. This requires exact planning of transport and logistics when dealing with ICU patients. For MRI examinations there are even more limitations, as only special, and quite large, MR-compatible equipment can be used during the process.

It may come as a surprise, but as Prof. Palkó revealed, there is actually no specialised training to become an ICU radiologist. However, there are other skills needed that can hardly be trained: “There is no special, formal training for radiologists allowing them to work in an ICU-emergency environment, it is much more a state of mind, a special attitude which makes some of the radiologists able to perform well under such demanding circumstances. Of course the above-mentioned expertise has to be acquired, but it may be done much more in daily practice, in close cooperation with the ICU and emergency physicians.”

Another important criterion, which has become important in many other areas of today’s modern medicine, is the ability to act as part of a team of various specialists. A radiologist, serving emergency and ICU patients has to be able to act as a fully cooperative team member and to adapt to the special needs of the environment he is working in. When these qualifications are met the ‘ICU radiologist’ is an essential and highly esteemed member of the ICU staff and plays an important role in the treatment of intensive care patients.

This ECR 2013 Special Focus Session will also feature presentations on the value of MRI in intensive care coma patients with unclear brain pathology, CT of pathologic lung, and point-of-care versus diagnostic ultrasound.

All this will conclude with a presentation by Professor Ulrich Linsenmaier from Munich, president of the European Society of Emergency Radiology, who will share his experience on whole-body CT in polytrauma patients and their follow-up in intensive care units. He will also give the audience in-depth insights into the special role of imaging, the diagnostic algorithms as well as the technical, organisational and training requirements for the diagnosis and follow-up of polytrauma patients.

Safety first: **tablets** and **mobile technology** in radiology

By Simon Lee

**Special Focus
Session**
Monday, March 11,
16:00–17:30
SF 19:
Tablet computers
in radiology:
friend or foe?

Tablet computers can be a surprisingly divisive subject. The passion with which some people argue the relative merits of competing devices and operating systems can be almost frightening. In the field of medicine, however, there appears to be very little argument about the top product, with professionals from many disciplines enthusiastically embracing the iPad as a tool for research, education and general communication. Instead the most important debate is focused elsewhere, on matters of data security and patient privacy.

As mobile technology spreads throughout the hospital, data naturally follows, and it is slowly falling into the hands of an increasingly broad spectrum of people. Radiologists and clinicians therefore need to be aware, not just of the many mobile applications and resources that can potentially aid their work, but of the associated risks and best practices concerning the use of tablet technology.

“When it comes to the iPad, it’s the same for radiologists as it is for everyone else; everyone wants to use them,” said Dr. Erik Ranschaert, staff radiologist at the Jeroen Bosch Ziekenhuis teaching hospital in ‘s-Hertogenbosch, the Netherlands. “I use mine to keep up with literature and store important articles, to take notes and integrate pictures, and I also use it during image interpretations, when I need to look things up like literature or anatomy. There are a vast number of tools available for radiologists on the iPad and I think curiosity among radiologists, of how to make the best of them, is very high.”

Ranschaert will speak during the Special Focus Session ‘Tablets in radiology: friend or foe’ at ECR 2013, which aims to provide an overview of the current status of tablet technology and a discussion on the pros and cons of the use of tablets in radiology. Talks will touch on all aspects of how tablets can assist working radiologists, residents, and students, including a review of radiological resources and a close look at DICOM viewers, but the downsides will not be overlooked.

“It’s a fact that the use of the iPad is increasing exponentially among medical doctors, not only radiologists, but there are still a lot of issues that need to be examined. For example, when you’re sending images to mobile applications, how safe is it and how can you guarantee patient confidentiality is not lost? The range of clinicians who make use of and require access to images is increasing, so images are on the move more frequently and this is all due to the availability of these new technologies,” said Ranschaert.



Dr. Erik Ranschaert (left – pictured here with Dr. Jan Schillebeeckx) from 's-Hertogenbosch, the Netherlands, will speak on mobile teleradiology with tablet computers in this Special Focus Session.

Cardiologists, emergency doctors and surgeons, among others, are finding more and more uses for iPads, from showing images to patients during bedside consultations, to using them for orientation in surgery; and patients themselves are also gradually taking possession of their own images in digital formats. With data flowing more freely, and mobile applications beginning to appear that offer patients services like second opinions, clarification of findings, and report explanations, the question of how to safeguard patient confidentiality is becoming all the more pressing.

“Especially in hospitals, it’s becoming more and more common to have a general hospital policy that before doctors start using mobile applications or tablets, they should sign an agreement to guarantee privacy and security. Images should be available everywhere because they are very important; they can help to improve quality, avoid mistakes, and generally improve services to patients, but I think perhaps not enough hospitals are aware of the safety and security issues raised by mobile technology,” said Ranschaert.

A report last year by the Ponemon Institute, an American research centre focusing on privacy, data protection and information security, suggests that although employees in approximately 81 percent of healthcare organisations “are using mobile devices to collect, store and/or transmit some form of protected health information, 49 percent admit their organisations are not doing anything to protect these devices.”¹ One concern is that mobile devices are easily lost, and if confidential patient data is stored on board or within applications, it can potentially be accessed by anyone. Ideas to deal with such risks include management from a central location, so that a stray device can be locked down or even wiped at a certain distance.

Such problems may be accentuated by a tendency towards the ‘bring your own device’ (BOYD) model, in which employees use their personal devices for work, entailing an additional set of security and safety issues. For instance, unless specific security measures are put in place, when personally owned devices connect with a hospital network, data shared between them is often not encrypted, leaving it vulnerable to hacking. BOYD also requires additional investment, not just in IT infrastructure, but in training and manpower, to apply and monitor appropriate lines of defence against data breaches.

However mobile technology develops, these issues are clearly in need of greater consideration, so that when guidelines are created in future, more attention is paid to the very specific safety aspects of mobile ‘teleradiology’ inside and outside the hospital. Aside from the risks, all medical staff using mobile technology need to be familiar with the consequences of data breaches, which as well as the violation of patient privacy, may extend to fines, lawsuits or negative publicity. As with any other kind of security issues, until firm recommendations or directives are in place, the key to heading off potential problems is awareness.

“These things need to be discussed and brought to the attention of everyone, and that’s one of the many reasons for a session like this one. People have to start thinking about it; they have to not only consider the advantages but also the disadvantages, because there is an initial enthusiasm about these mobile applications and devices, which is fantastic, but there is also a downside and we have to take that into account,” noted Ranschaert.

1 (source: <http://www.ponemon.org/blog/post/second-annual-patient-privacy-study-released>)

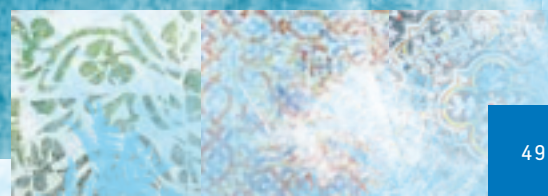


Professional Challenges *Sessions*

The idea of these sessions is to communicate and exchange information on professional issues related to radiology, such as training and education, research networking, radiological management and professional developments.

90-minute sessions; introduction by one or two chairmen; three to four lecturers; panel discussion.

Places are allocated on a first-come, first-served basis.



Professional Challenges Sessions

Thursday, March 7, 16:00–17:30, Room F1

PC 3: Bringing radiology to medical undergraduates

- **Chairman's introduction: why does it matter?**
S.J. Golding; Oxford/UK
- **Establishing a radiological presence in the undergraduate curriculum**
R.N. Gibson; Melbourne, VIC/AU
- **Finding the time and resources in the radiology department**
J.L. del Cura; Bilbao/ES
- **Involving the undergraduate with the radiology department**
K. Verstraete; Gent/BE
- **How to ensure teachers are suitably trained**
E. Szabó; Szeged/HU
- **Panel discussion:**
What needs to be done to overcome the constraints on radiologists?

Friday, March 8, 08:30–10:00, Room P

PC 4: The visibility of the radiologist

- **Chairman's introduction**
J.A. Reekers; Amsterdam/NL
- **How to optimise the visibility of the radiology department**
J.A. Reekers; Amsterdam/NL
- **Start early with radiological visibility**
M. Maas; Amsterdam/NL
- **Clinical radiology puts you in the spotlight: taking over the clinical responsibility**
E. de Kerviler; Paris/FR
- **Radiology in the 21st century: time to come out of the dark?**
A. Adam; London/UK
- **Panel discussion:**
Should we improve the visibility of the radiologist? And if yes, how?

Saturday, March 9, 16:00–17:30, Room F2

PC 11: Personalised radiology

- **Chairman's introduction**
G.P. Krestin; Rotterdam/NL
- **Personalised medicine: hope or hype?**
O. Golubnitschaja; Bonn/DE
- **Imaging for disease prediction**
M. Vernooij; Rotterdam/NL
- **Molecular imaging: a solution for personalised diagnosis and treatment?**
F.M.A. Kiessling; Aachen/DE
- **Role of imaging in personalised therapy monitoring**
A.R. Padhani; Northwood/UK
- **Panel discussion:**
Is imaging providing an added value to the 'omics' of personalised medicine?

Professional Challenges Sessions

Sunday, March 10, 08:30–10:00, Room Z

PC 12: Legal matters related to multimodality techniques

- **Chairman's introduction**
K. Åhlström Riklund; Umea/SE
- **Radiological legal matters in eastern Europe**
M. Studniarek; Gdansk/PL
- **Legal matters in nuclear medicine**
G.K. von Schulthess; Zurich/CH
- **Legal matters in Scandinavia**
K. Åhlström Riklund; Umea/SE
- **International, regional, national and local framework requirements**
A. Perkins; Nottingham/UK
- **Panel discussion:**
A discussion with questions from the audience about the differences across Europe

Sunday, March 10, 10:30–12:00, Studio 2013

PC 13: The radiologist, the clinician and the patient: an impossible trio?

Chairman: Claus D. Claussen; Tübingen/DE

Moderator: Wolfgang Wagner; Vienna/AT

The aim of this session is to initiate an open and frank discussion among different stakeholders about the current role of the radiologist in relation to the patient, other clinicians and the public. Which procedures are efficient? Which are inefficient? What should be changed in future and what is manageable during clinical routine? As the participants represent various disciplines, we hope to come to a realistic outlook.

Participants:

- A. Adam; London/UK (Radiologist)
- G. Marckmann; Munich/DE (Medical Ethicist)
- M. Peck-Radosavljevic; Vienna/AT (Internal Medicine Doctor)

From the backseat to the driver's seat: how radiologists should guide diagnostic investigation

By Mélisande Rouger

Friday, March 8,
08:30–10:00

PC 4:
The visibility of
the radiologist

With the development of functional imaging, the way patients are imaged has changed, and so has the role of the radiologist. While taking pictures in the basement of a hospital was considered good enough in the twentieth century, radiologists are now required to act as clinicians within multidisciplinary teams. Subspecialisation has become necessary for radiologists in order to keep their leading position in image interpretation. But that is not the only field where radiologists should take the lead, some experts believe. If radiologists were to increase their contribution further up in the diagnostic phase, it would have a significant impact on clinical outcomes and healthcare management. A panel of eminent radiologists will explore ways to do so during a dedicated Professional Challenges Session at ECR 2013, next March in Vienna.

In the past, radiologists were expected to act as technicians with excellent knowledge of the anatomy. But with the creation of functional imaging, things have become more complicated. The capacity to depict and interpret functions using MRI or PET/CT scans calls for more than the ability to read images, and now thorough knowledge of functional processes and organ systems is expected of radiologists.

Meanwhile, many physicians have been increasingly working with images in recent years. For instance, surgeons rely on images to prepare for an intervention, and so do radiotherapists to determine the necessary dose and precise location of a tumour to be destroyed. As their experience with reading images is growing, it is likely that these specialists will find it easier to do so without the help of radiologists in the future.

To put it in a nutshell, if radiology is to achieve its full potential, radiologists will have to make a clinical contribution as well. "If radiologists wish to retain their role as experts in image interpretation, they will not only need a thorough understanding of imaging, but also a detailed understanding of anatomy and pathophysiology, and they will need to subspecialise. That is really something we have to take into account in the future. Radiologists will have to get closer to the patient and talk to the referring physician or surgeon. They will have to become more like clinical doctors than they have been until now," said Andy Adam, professor of interventional radiology at the University of London.



Andy Adam, professor of interventional radiology at the University of London, will speak about the role of the radiologist in the 21st century.

Multidisciplinary work is a reality in most fields of medicine, and radiologists have a central place in patient management, providing their expertise at every step of patient care. The best example is probably oncologic medicine, where radiologists assist and sometimes guide the detection, staging, treatment delivery and follow-up of cancer. But overall, they remain too far behind in the initial phase of patient management and let other specialists conduct the diagnostic investigation. To this day, radiologists still send their reports in the post without liaising directly with the referring physician. Their contact with patients is sometimes non-existent or very limited. As a result, patients have to wait several weeks for a complete diagnosis to be made and receive treatment. This situation has become unsustainable, as too much time, money and energy is lost in the process, Prof. Adam believes.

“This is a crazy way to practise medicine in the 21st century. Radiologists act as if they were technicians: they take a picture, explain what it shows in a report, and send it to the referring doctor. Then the doctor asks for another imaging test, and this goes backwards and forwards maybe six, seven or eight times, sometimes more. This costs a lot of money and generates a lot of anxiety for the patients and their families, who always wonder whether a test result is going to be normal or not,” he explained.

A much more sensible way would be for the radiologist to act as a clinical doctor and contact the referring physician directly when significant abnormalities are spotted. “There’s no reason why the radiologist, when he or she sees a clear abnormality, can’t talk to the doctor who sent the patient and organise things in a practical way to speed up the investigation,” he said.

If radiologists took on the role of guiding the investigation rather than just responding to a request, the whole diagnostic process could be accelerated, money could be saved and clinical outcomes and patient welfare could be improved. A practical solution would be to have a senior member of staff acting as a consultant, to liaise directly with the referring physician and the patient, Adam suggested. Radiologists from the same department could take turns for a few hours a week.

“In certain cases, there’s no reason why we can’t have a consultant in the morning and one in the afternoon, whose job it is to discuss things with the patients, phone up the physician who sent the patient, and explain what they have seen and make recommendations. We could really speed things up if we did that. Some of it is happening already and we could do more if we were prepared to change the way we work,” he said.

This last point probably remains the biggest challenge of all. Convincing radiologists that they should change their work habits will prove a tough nut to crack, even if it is in their and the patient’s best interest.

“Cultural changes are always the hardest in anything. People are not used to working differently so they could give you 20 reasons why things can’t be changed. But there is no doubt that we will need to do that, and we will need to emerge from the dark, talk to patients and doctors, and guide the whole investigation,” he concluded.





Multidisciplinary *Sessions*

The concept of these sessions is to promote a multidisciplinary approach to cancer detection and treatment, integrating radiologists, surgeons and oncologists to share their expertise.



EBR

EUROPEAN BOARD OF RADIOLOGY

BOOST YOUR CAREER.

TAKE THE EUROPEAN
DIPLOMA IN RADIOLOGY (EDiR)

www.myESR.org/diploma

Multidisciplinary Sessions

Managing Patients with Cancer

Thursday, March 7, 16:00–17:30, Room E2 MS 3: Colorectal liver metastases

- **Chairman's introduction**
V. Vilgrain; Clichy/FR
- **Role of imaging in the pretreatment assessment**
V. Vilgrain; Clichy/FR
- **Surgical resection of liver metastases: when and how**
J. Belghiti; Clichy/FR
- **Chemotherapy and novel therapy in colorectal liver metastases: rationale, indications and results**
S. Faivre; Clichy/FR
- **Role of image-guided treatment in colorectal liver metastases**
M. Abdel Rehim; Clichy/FR
- **Case presentation and discussion**

Friday, March 8, 08:30–10:00, Room F1 MS 4: Hepatocellular carcinoma

- **Chairman's introduction**
B. Sangro; Pamplona/ES
- **Abdominal radiology**
A. Benito; Pamplona/ES
- **Interventional radiology**
J.I. Bilbao; Pamplona/ES
- **Surgery**
F. Pardo; Pamplona/ES
- **Hepatology/oncology**
B. Sangro; Pamplona/ES
- **Case presentation and discussion**

Saturday, March 9, 16:00–17:30, Room E2 MS 11: Cholangiocarcinoma

- **Chairman's introduction**
B. Hamm; Berlin/DE
- **Surgery of hilar and extrahepatic cholangiocarcinoma**
P. Neuhaus; Berlin/DE
- **Radiology – diagnostics and portal vein embolisation in hilar and extrahepatic cholangiocarcinoma**
T. Denecke; Berlin/DE
- **Medical treatment of cholangiocarcinomas**
H. Riess; Berlin/DE
- **Radiology – diagnostics and image guided therapies in intrahepatic cholangiocarcinomas**
B. Gebauer; Berlin/DE
- **Case presentation (part 1): hilar cholangiocarcinoma**
- **Case presentation (part 2): CCC multimodal treatment**





Categorical Courses

Categorical Courses are the most substantial courses at ECR, concentrating on a major radiological topic over a series of sessions and designed with the more specialised radiologist in mind, from beginners to those with advanced experience.

Each course is organised by a coordinator from the programme planning committee, with the subject and coordinator being chosen by the Congress President according to which topics are of particularly current relevance or have not been recently covered.

There will be three Categorical Courses at ECR 2013, divided into six 90-minute sessions, each of which is presented by three lecturers. Two courses will include interactive case discussions.

Sessions are moderated by a chairman, and time is always allowed for an introduction and a discussion. Places are allocated on a first-come, first-served basis.

Categorical Courses

CLICK (Clinical Lessons for Imaging Core Knowledge): Never without Arteries

Saturday, March 9, 08:30–10:00, Room D1

**CC 818: How old are you in reality?
Vascular age and clinical events**

Moderator: L. Lonn; Copenhagen/DK

A. Clinical considerations

E. Minar; Vienna/AT

B. Imaging techniques and typical findings

H.J. Lamb; Leiden/NL

C. Interactive case discussion: how to deal with the results?

A. van der Lugt; Rotterdam/NL



Sunday, March 10, 14:00–15:30, Room D1

**CC 1418: Angina, non-occlusive mesenteric
ischaemia (NOMI) and friends:
vascular causes of acute abdomen**

Moderator: O. Chan; London/UK

A. Clinical considerations

P. Rogalla; Toronto, ON/CA

B. Imaging techniques and typical findings

M. Prokop; Nijmegen/NL

C. Interactive case discussion: how to proceed?

A. Palkó; Szeged/HU



Saturday, March 9, 16:00–17:30, Room D1

CC 1118: Stroke

Moderator: M.M. Thurnher; Vienna/AT

A. Clinical considerations

P.M. Parizel; Antwerp/BE

B. Imaging techniques and typical findings

J. Vymazal; Prague/CZ

**C. Interactive case discussion: what is next after diffusion
and perfusion?**

A. Dörfler; Erlangen/DE



Sunday, March 10, 16:00–17:30, Room D1

**CC 1518: When every step counts: imaging and
management of peripheral arterial
occlusive disease (PAOD)**

Moderator: J.F.M. Meaney; Dublin/IE

A. Clinical considerations

M. Schillinger; Vienna/AT

B. Imaging techniques and typical findings

T. Leiner; Utrecht/NL

C. Interactive case discussion: how to deal with the results?

Typical cases, pitfalls, and what is next?

L.P. Lawler; Dublin/IE



Sunday, March 10, 08:30–10:00, Room D1

CC 1218: Chest pain: vascular non-cardiac causes

Moderator: E. Brountzos; Athens/GR

A. Clinical considerations

R. Iezzi; Rome/IT

B. Imaging techniques and typical findings

F. Wolf; Vienna/AT

C. Interactive case discussion: what is really important?

T.R.C. Johnson; Munich/DE



Monday, March 11, 08:30–10:00, Room D1

**CC 1618: The fast and the furious: vascular
trauma resulting from traffic accidents**

Moderator: U. Linsenmaier; Munich/DE

A. Clinical considerations

H. Hoppe; Berne/CH

B. Imaging techniques and typical findings

H. Alkadhi; Zurich/CH

C. Interactive case discussion

R. Morgan; London/UK



 = Interactive session with electronic voting/self assessment

Categorical Courses

Oncologic Imaging: Follow-up of Systemic and Local Therapies

Friday, March 8, 16:00–17:30, Room D2 CC 719: Imaging after systemic therapies: the standards

Moderator: E.L. van Persijn van Meerten; Leiden/NL

- A. RECIST criteria**
Y. Menu; Paris/FR
- B. PERCIST: evolving considerations for PET response criteria in solid tumours**
T.F. Hany; Zurich/CH
- C. Evaluation of brain tumours**
C. Majós; L'Hospitalet de Llobregat/ES

Saturday, March 9, 08:30–10:00, Room D2 CC 819: Imaging after systemic therapies: advanced techniques

Moderator: D.-M. Koh; Sutton/UK

- A. What can we expect from biomarkers**
B. Van Beers; Clichy/FR
- B. MRI biomarkers: from acquisition to post-processing**
O. Lucidarme; Paris/FR
- C. Assessing the precision and accuracy of biomarker imaging: is it reproducible?**
C.B. Sirlin; San Diego, CA/US

Sunday, March 10, 08:30–10:00, Room D2 CC 1219: Assessing HCC response

Moderator: R. Lencioni; Pisa/IT

- A. Systemic therapies**
V. Vilgrain; Clichy/FR
- B. Endovascular therapies**
R. Salem; Chicago, IL/US
- C. Ablative therapies**
C. Ayuso; Barcelona/ES

Sunday, March 10, 14:00–15:30, Room D2 CC 1419: Follow-up of thermal ablation (part I)

Moderator: W. Prevo; Amsterdam/NL

- A. The zone of cell death and collateral phenomena on cross-sectional imaging: from histopathology to the standardisation of terms**
A. Denys; Lausanne/CH
- B. PET/CT for the evaluation of ablative therapy: Who? Where? When? Does it help?**
D. Deandreis; Villejuif/FR
- C. Everyday practice: MR and CT for evaluating response to thermal ablation**
C. Dromain; Villejuif/FR

Sunday, March 10, 16:00–17:30, Room D2 CC 1519: Follow-up of thermal ablation (part II)

Moderator: P.L. Pereira; Heilbronn/DE

- A. Follow-up imaging of thermal ablative therapies for lung tumours**
A.R. Gillams; London/UK
- B. Follow-up imaging of percutaneous local treatment of bone tumours**
F. Deschamps; Villejuif/FR
- C. Follow-up imaging of thermal ablative therapies for kidney tumours**
D.J. Breen; Southampton/UK

Monday, March 11, 08:30–10:00, Room D2 CC 1619: Follow-up of local treatments of breast cancer

Moderator: M.H. Fuchsjäger; Graz/AT

- A. MRI-guided HIFU therapies in the breast**
M. Sklair-Levy; Tel Aviv/IL
- B. Pre- and post- imaging appearance of breast lesion excision system (BLES) lesions**
S. Allen; Sutton/UK
- C. Common features and pitfalls in imaging the treated breast**
J. Camps Herrero; Valencia/ES

myESR



When you've checked in to ECR 2013 on [foursquare](#)
catch up with the latest #ECR2013 news on [twitter](#)
become a fan and post us a photo on [facebook](#)
and then check out our videos on [YouTube](#)

'ECR 2013' on 4sq - [twitter.com/myESR](#) - [facebook.com/myESR](#) - [youtube.com/myESR](#)

Categorical Courses

Urogenital Imaging

Saturday, March 9, 16:00–17:30, Room C CC 1121: Stones: diagnosis and intervention

Moderator: N.C. Cowan; Oxford/UK

- A. Imaging patients with renal colic**
G. Heinz-Peer; St. Pölten/AT
- B. Percutaneous treatment of renal stones**
S. Moussa; Edinburgh/UK
- C. Intervention in ureteral obstruction and ureteral trauma**
A. Magnusson; Uppsala/SE
- D. Interactive case discussion**
N.C. Cowan; Oxford/UK



Sunday, March 10, 14:00–15:30, Room C CC 1421: The male genital system

Moderator: J.O. Barentsz; Nijmegen/NL

- A. Imaging of prostate cancer: an update**
J.J. Fütterer; Nijmegen/NL
- B. Scrotal tumours**
P.S. Sidhu; London/UK
- C. The penis**
M. Bertolotto; Trieste/IT
- D. Interactive case discussion**
J.O. Barentsz; Nijmegen/NL



Sunday, March 10, 08:30–10:00, Room C CC 1221: Retroperitoneal anatomy, variants and diseases

Moderator: U.G. Mueller-Lisse; Munich/DE

- A. Retroperitoneal anatomy: an embryology based approach**
F.M. Danza; Rome/IT
- B. Anatomical variants and benign diseases**
S. Merran; Paris/FR
- C. Malignant tumours**
R.H. Oyen; Leuven/BE
- D. Interactive case discussion**
U.G. Mueller-Lisse; Munich/DE



Sunday, March 10, 16:00–17:30, Room C CC 1521: Paediatrics

Moderator: M. Claudon; Vandoeuvre-les-Nancy/FR

- A. Imaging strategies for children: urinary tract infection and vesico-ureteral reflux**
M. Riccabona; Graz/AT
- B. Paediatric adrenal tumours**
P.-H. Vivier; Rouen/FR
- C. Prenatal detection of GU diseases**
F.E. Avni; Lille/FR
- D. Interactive case discussion**
M. Claudon; Vandoeuvre-les-Nancy/FR



Sunday, March 10, 10:30–12:00, Room C CC 1321: The female pelvis

Moderator: E. Sala; New York, NY/US

- A. Imaging congenital anomalies of the female genital system**
K. Kinkel; Chêne-Bougeries/CH
- B. Benign ovarian masses**
R. Forstner; Salzburg/AT
- C. Imaging the infertile couple**
J. McHugo; Birmingham/UK
- D. Interactive case discussion**
E. Sala; New York, NY/US



Monday, March 11, 08:30–10:00, Room C CC 1621: The usual, the unusual and the dangerous

Moderator: S.K. Morcos; Sheffield/UK

- A. Imaging of renal trauma**
V. Logager; Copenhagen/DK
- B. Postoperative anatomy and complications after GU interventions**
H.C. Thoeny; Berne/CH
- C. GU complications in patients with spinal cord damage**
S. Agarwal; Wrexham/UK
- D. Interactive case discussion**
S.K. Morcos; Sheffield/UK



 = Interactive session with electronic voting/self assessment





Mini Courses

In terms of their aim, the Mini Courses are similar to Categorical Courses but on a smaller scale; focusing on anatomical regions, particular techniques, or modalities, and designed for radiologists with a specialist interest. The topics and coordinators are again chosen by the ECR President.

Places are allocated on a first-come, first-served basis.

Mini Courses

Organs from A to Z: Heart

Thursday, March 7, 16:00–17:30, Room L/M
MC 322: Technical and anatomical fundamentals for imaging the heart

Moderator: A. de Roos; Leiden/NL



A. Anatomy: too many details in cardiac imaging?

A.J.B.S Madureira; Porto/PT

B. Examination protocols for imaging the heart: CT

H. Alkadhi; Zurich/CH

C. Examination protocols for imaging the heart: MRI

N.L. Kelekis; Athens/GR

• **Interactive case discussion**

A. de Roos; Leiden/NL

Friday, March 8, 08:30–10:00, Room L/M
MC 422: Non-ischaeamic heart disease

Moderator: V.E. Sinitsyn; Moscow/RU



A. Congenital heart disease

M. Gutberlet; Leipzig/DE

B. Valvular disease

J. Bogaert; Leuven/BE

C. Cardiomyopathies

P. Sipola; Kuopio/FI

• **Interactive case discussion**

V.E. Sinitsyn; Moscow/RU

Friday, March 8, 16:00–17:30, Room L/M
MC 722: Ischaemic heart disease

Moderator: C. Catalano; Rome/IT



A. Imaging of the coronary arteries: the Holy Grail

G. Roditi; Glasgow/UK

B. The ischaemic myocardium: what to do?

C. Loewe; Vienna/AT

C. The ischaemic heart after treatment: still alive?

G. Bastarrika; Pamplona/ES

• **Interactive case discussion**

C. Catalano; Rome/IT

Controversies in Breast Imaging

Friday, March 8, 08:30–10:00, Room D1
MC 423: Overdiagnosis from screening mammography: should we care about it?

Moderator: T.H. Helbich; Vienna/AT



Teaser: H.J. de Koning; Rotterdam/NL

A. The risk of overdiagnosis from screening mammography

E. Paci; Florence/IT

B. How breast radiologists should control the risk of overdiagnosis

U. Bick; Berlin/DE

• **Discussion**

T.H. Helbich; Vienna/AT

H.J. de Koning; Rotterdam/NL

Friday, March 8, 14:00–15:30, Room D1
MC 623: Preoperative MRI in newly diagnosed breast cancer: to do or not to do?

Moderator: F. Sardanelli; Milan/IT



Teaser: N. Houssami; Sydney/AU

A. Why we should do preoperative MRI

W.A. Kaiser; Jena/DE

B. Reasons not to do preoperative MRI

M.G. Wallis; Cambridge/UK

• **Discussion**

F. Sardanelli; Milan/IT

N. Houssami; Sydney/AU

Friday, March 8, 16:00–17:30, Room D1
MC 723: Should we add ultrasound to mammographic screening of dense breasts?

Moderator: F.J. Gilbert; Cambridge/UK



Teaser: A. Tardivon; Paris/FR

A. We can reduce the interval cancer rate

W. Berg; Pittsburgh, PA/US

B. Do we have enough radiologists to do it?

Alternatives to ultrasound to reduce interval cancers

A. Frigerio; Turin/IT

• **Discussion**

F.J. Gilbert; Cambridge/UK

A. Tardivon; Paris/FR

= Interactive session with electronic voting/self assessment

Mini Courses

The Beauty of Basic Knowledge: Head and Neck

Thursday, March 7, 12:30–13:30, Room N/O

**MC 24A: A taste of the oral cavity and
salivary glands**

A. Borges; Lisbon/PT

Friday, March 8, 12:30–13:30, Room Q

MC 24B: The infrahyoid neck and lymph nodes

M.G. Mack; Munich/DE

Saturday, March 9, 12:30–13:30, Room N/O

**MC 24C: Main pipelines of the neck:
pharynx and larynx**

M. Becker; Geneva/CH

Sunday, March 10, 12:30–13:30, Room Q

**MC 24D: The suprahyoid neck: anatomy and
diagnostic algorithm of the neck mass**

A. Trojanowska; Lublin/PL

Monday, March 11, 12:30–13:30, Room N/O

**MC 24E: Temporal bone:
so beautiful, yet so complicated**

B. De Foer; Antwerp/BE

The Beauty of Basic Knowledge: Musculoskeletal Imaging

Thursday, March 7, 12:30–13:30, Room P

MC 25A: Trauma

A. Kassarian; Majadahonda/ES

Friday, March 8, 12:30–13:30, Room P

MC 25B: Degenerative disorders

T.M. Link; San Francisco, CA/US

Saturday, March 9, 12:30–13:30, Room P

MC 25C: Inflammatory/infectious disorders

V.N. Cassar-Pullicino; Oswestry/UK

Sunday, March 10, 12:30–13:30, Room P

MC 25D: Neoplastic/non-neoplastic lesions

E.M.H.M. Vanhoenacker; Antwerp/BE

Monday, March 11, 12:30–13:30, Room P

MC 25E: Metabolic/endocrine disease

J. Freyschmidt; Bremen/DE

Visiting Schools
Visiting Seminars
Visiting Scholarship Programmes
Exchange Programmes for Fellowships
Teach-the-Teachers Programme
Visiting Professorship Programme
Online Courses

Join us on
facebook

Mini Courses

Joint Course of ESR and RSNA (Radiological Society of North America)

Friday, March 8, 08:30–10:00, Room I/K
**MC 428: Essentials in oncologic imaging:
 what radiologists need to know
 (part 1)**

Moderator: D.M. Panicek; New York, NY/US

A. Principles of oncologic imaging and reporting

D.M. Panicek; New York, NY/US

B. Lung cancers (primary, metastases)

C.J. Herold; Vienna/AT

C. Colon cancer

R.M. Gore; Evanston, IL/US

- Questions

Friday, March 8, 10:30–12:00, Room I/K
**MC 528: Essentials in oncologic imaging:
 what radiologists need to know
 (part 2)**

Moderator: H. Hricak; New York, NY/US

A. Pancreatic cancer

F. Caseiro-Alves; Coimbra/PT

B. Kidney cancer

E.K. Fishman; Baltimore, MD/US

C. Ovarian cancer

H. Hricak; New York, NY/US

- Questions

Friday, March 8, 14:00–15:30, Room I/K
**MC 628: Essentials in oncologic imaging:
 what radiologists need to know
 (part 3)**

Moderator: Y. Menu; Paris/FR

A. Oncologic imaging: terminology, definitions and buzzwords

Y. Menu; Paris/FR

B. Liver cancers (primary, metastases)

R.L. Baron; Chicago, IL/US

C. Prostate cancer

J.O. Barentsz; Nijmegen/NL

- Questions

Friday, March 8, 16:00–17:30, Room I/K
**MC 728: Essentials in oncologic imaging:
 what radiologists need to know
 (part 4)**

Moderator: M.F. Reiser; Munich/DE

A. Lymphoma

H. Schoder; New York, NY/US

B. Musculoskeletal neoplasms

M.F. Reiser; Munich/DE

C. Chemo- and radiation therapy-induced toxicity

H.-U. Kauczor; Heidelberg/DE

- Questions

 = Interactive session with electronic voting/self assessment



Refresher Courses



Refresher Courses, as the name suggests, aim to refresh knowledge, reviewing and updating the more basic subjects for those who have not kept up to speed with certain developments, or who just need a reminder – something of interest not only to young radiologists but also experienced doctors.

The length of the course is 90 minutes (two parts of 35 minutes or three parts of 23 minutes each) leaving enough time for the introduction (5 minutes) by one of the chairmen and for discussion (15 minutes), either 5 minutes allocated at the end of each lecture, or 15 minutes for a panel discussion.

The course will be given by two or three lecturers and led by one or two moderator(s) on a defined subject of clinical imaging, imaging technique, interventional radiology and related subjects.

Places are allocated on a first-come, first-served basis.

Refresher Courses Scientific Sessions

Abdominal and Gastrointestinal

Thursday, March 7, 2013, 10:30–12:00, Room E2

SS 101a: Acute bowel diseases: challenges and solutions

Moderators: J.B. Dormagen; Oslo/NO
S. Leschka; St. Gallen/CH

Thursday, March 7, 2013, 10:30–12:00, Room I/K

SS 101b: Liver fibrosis and cirrhosis: elastography and biomarkers

Moderators: R. Faschingbauer; Innsbruck/AT
T.J. Kroencke; Berlin/DE

Thursday, March 7, 2013, 14:00–15:30, Room E2

SS 201a: Bowel imaging: protocol optimisation and intervention

Moderators: V. Cantisani; Rome/IT
P. Popovic; Ljubljana/SI

Thursday, March 7, 2013, 14:00–15:30, Room I/K

SS 201b: Hepatocellular carcinoma: diagnosis and management

Moderators: G. Brancatelli; Palermo/IT
M. Bruegel; Munich/DE

Thursday, March 7, 16:00–17:30, Room C

RC 301: Staging and restaging of rectal and anal cancer

- **Chairman's introduction**
R.G.H. Beets-Tan; Maastricht/NL
- A. Local staging of anal and rectal cancer and impact on initial therapeutic strategy**
S. Gourtsoyianni; London/UK
- B. Assessment of rectal cancer response**
L. Curvo-Semedo; Coimbra/PT
- C. Assessment of anal cancer response**
V.J. Goh; London/UK
- **Panel discussion:**
What clinicians expect from us in rectal and anal cancer staging and re-staging? How should we image patients?

Friday, March 8, 08:30–10:00, Room A

RC 401: Pitfalls in interpretation of pancreatic imaging

Moderator: H.-J. Brambs; Ulm/DE

- A. Pancreatic cancer or pancreatitis?**
B.J. Op de Beeck; Antwerp/BE
- B. How can we differentiate cystic neoplasms from pseudocysts?**
T. Denecke; Berlin/DE
- C. How to manage incidental findings**
C. Triantopoulou; Athens/GR

Friday, March 8, 2013, 14:00–15:30, Room F1

SS 601: Liver steatosis: imaging and quantification

Moderators: I. Bargellini; Pisa/IT
B. Van Beers; Clichy/FR

Saturday, March 9, 2013, 10:30–12:00, Room I/K

SS 901: Cross-sectional pancreatic imaging and biomarkers

Moderators: B. Marincek; Cleveland, OH/US
G. Zamboni; Verona/IT

Sunday, March 10, 08:30–10:00, Room B

RC 1201: How I report

- Moderator:** G.A. Rollandi; Genoa/IT
- A. MDCT in the post-operative abdomen**
D.J.M. Tolan; Leeds/UK
 - B. MDCT in a patient with small bowel ischaemia**
S. Romano; Naples/IT
 - C. MDCT in a patient with small bowel obstruction**
P. Taourel; Montpellier/FR

Sunday, March 10, 2013, 10:30–12:00, Room I/K

SS 1301: Abdominal CT: dose reduction and technical improvements

Moderators: D. Tack; Baudour/BE
A. Taibbi; Palermo/IT

Refresher Courses Scientific Sessions

Abdominal and Gastrointestinal

Sunday, March 10, 16:00–17:30, Room B

RC 1501: CT colonography: when the 'new' becomes 'ordinary'

- **Chairman's introduction**
A. Laghi; Latina/IT
- A. State-of-the-art techniques in 2013**
T. Mang; Vienna/AT
- B. How to set up a service**
P. Lefere; Roeselare/BE
- C. Interaction with gastroenterologists: friends or enemies?**
A. Graser; Munich/DE
C. Hassan; Rome/IT
- **Panel discussion:**
How to create an efficient CTC team?

Monday, March 11, 08:30–10:00, Room E1

RC 1601a: Diagnosis and staging of oesophageal cancer

- **Chairman's introduction**
Z. Tarján; Budapest/HU
- A. Diagnosis**
M. Krokidis; Cambridge/UK
- B. Staging**
V. Válek; Brno/CZ
- C. Treatment response**
B. Mahon; Birmingham/UK
- **Panel discussion:**
**Cross-sectional techniques:
developing an integrated imaging algorithm in
oesophageal cancer**

Monday, March 11, 08:30–10:00, Room F1

RC 1601b: Abdominal MRI: standard and advanced protocols in clinical settings

Moderator: M.A. Patak; Zurich/CH

- A. Fistula in ano**
A. Gupta; London/UK
- B. Pelvic floor disease**
M. Bazot; Paris/FR
- C. Suspected biliary tumour**
C. Matos; Brussels/BE

Monday, March 11, 2013, 10:30–12:00, Room E2

SS 1701a: CT/MR colonography: technical issues and clinical studies

Moderators: D. Cano; Pamplona/ES
D.Z. Saranovic; Belgrade/RS

Monday, March 11, 2013, 10:30–12:00, Room I/K

SS 1701b: DWI in pancreatic and hepatobiliary diseases

Moderators: G.J. Munneke; London/UK
D. Weishaupt; Zurich/CH

Monday, March 11, 2013, 14:00–15:30, Room E2

SS 1801a: Colorectal cancer: diagnostic biomarkers and response assessment

Moderators: A. Filippone; Chieti/IT
J. Husty; Brno/CZ

Monday, March 11, 2013, 14:00–15:30, Room I/K

SS 1801b: Liver volume, function and focal lesions

Moderators: B.I. Choi; Seoul/KR
C. Nyhsen; Sunderland/UK

Monday, March 11, 16:00–17:30, Room C

RC 1901: Cross-sectional imaging of colitis

- **Chairman's introduction**
S.A. Taylor; London/UK
- A. What protocol to use?**
S. Schmidt; Lausanne/CH
- B. Differentiating between the causes of colitis**
B. Gallix; Montpellier/FR
- C. The role of cross-sectional imaging in colonic
inflammatory bowel disease**
J. Rimola; Barcelona/ES
- **Panel discussion:**
**The role of cross-sectional imaging in the diagnosis and
follow-up of colitis**

Refresher Courses Scientific Sessions

Breast

Thursday, March 7, 2013, 10:30–12:00, Room F2
SS 102: Breast MRI: improving accuracy and tissue characterisation

Moderators: R. Schulz-Wendtland; Erlangen/DE
 M. Telesca; Rome/IT

Thursday, March 7, 2013, 14:00–15:30, Room F2
SS 202: Improvements in preoperative staging of breast cancer

Moderators: R.A. Kubik-Huch; Baden/CH
 A. Zytoon; Shebin El-Kom/EG

Thursday, March 7, 16:00–17:30, Room F2
RC 302: Functional imaging of the breast

Moderator: G. Esen; Istanbul/TR

A. Contrast-enhanced mammography
 C.S. Balleyguier; Villejuif/FR

B. Ultrasound elastography
 A. Athanasiou; Paris/FR

C. MRI diffusion, perfusion and spectroscopy
 P.A.T. Baltzer; Jena/DE

Friday, March 8, 2013, 10:30–12:00, Room F2
SS 502: Elastography and other advances in breast ultrasound

Moderators: D. Djilas-Ivanovic; Sremska Kamenica/RS
 P. Skaane; Oslo/NO

Friday, March 8, 2013, 14:00–15:30, Room F2
SS 602: Breast imaging after neoadjuvant therapy and surgery

Moderators: G. Gennaro; Padua/IT
 P. Martinez-Miravete; Zaragoza/ES

Saturday, March 9, 08:30–10:00, Room F1
RC 802: Clinical challenges in breast MRI

• **Chairman's introduction**
 F.J. Gilbert; Cambridge/UK

A. High risk patients: establishing clinical protocols
 J. Veltman; Almelo/NL

B. Non-mass like enhancement (NMLE): when to biopsy?
 C.K. Kuhl; Aachen/DE

C. Monitoring response to neo-adjuvant chemotherapy
 T.H. Helbich; Vienna/AT

• **Panel discussion:**
 how can the specificity and sensitivity of breast MRI in these indeterminate clinical and imaging scenarios be maximised?

Saturday, March 9, 2013, 10:30–12:00, Room F2
SS 902: Increased risk of breast cancer

Moderators: L. Ollivier; Paris/FR
 N.N.

Sunday, March 10, 08:30–10:00, Room F2
RC 1202: Multi-modality breast imaging

• **Chairman's introduction**
 M. Lesaru; Bucharest/RO

A. Conventional, functional and interventional lymph node assessment
 P.D. Britton; Cambridge/UK

B. Multi-modality assessment of the breast following oncoplastic surgery
 M. Torres-Tabanera; Madrid/ES

C. Image guided therapy in breast lesions: indications and techniques
 G. Manenti; Rome/IT

• **Panel discussion:**
 how is the evolution of multi-modality breast imaging changing the nature of the multi-disciplinary meeting (MDM)?

Refresher Courses Scientific Sessions

Breast

Sunday, March 10, 2013, 10:30–12:00, Room F2

SS 1302: How to get more from breast imaging modalities

Moderators: N. Houssami; Sydney/AU
M. Nadrljanski; Pancevo/RS

Sunday, March 10, 14:00–15:30, Room F2

RC 1402: How I report

Moderator: A. Tardivon; Paris/FR

A. Mammography

E. Azavedo; Stockholm/SE

B. Breast US

J. Camps Herrero; Valencia/ES

C. Breast MRI

R.M. Mann; Nijmegen/NL

Monday, March 11, 2013, 10:30–12:00, Room F2

SS 1702: Tomosynthesis: a role in clinical practice?

Moderators: S. Allen; Sutton/UK
E.M. Jung; Regensburg/DE

Monday, March 11, 2013, 14:00–15:30, Room F1

SS 1802a: Newer techniques in breast imaging and therapy

Moderators: F. Chamming's; Paris/FR
M. Sklair-Levy; Tel Aviv/IL

Monday, March 11, 2013, 14:00–15:30, Room F2

SS 1802b: Maximising cancer detection in breast screening

Moderators: M. Álvarez-Benito; Córdoba/ES
E. Szabó; Szeged/HU

Monday, March 11, 16:00–17:30, Room F2

RC 1902: Breast ultrasound

Moderator: M. Müller-Schimpfle; Frankfurt a. Main/DE

A. Physics and practical aspects of high-quality hand-held and automated breast US

M.H. Fuchsjäger; Graz/AT

B. Complicated cysts and complex-cystic lesions: differentiation and management

G. Rizzato; Gorizia/IT

C. The use of ultrasound in the evaluation of the nipple-areolar complex

R. Salvador; Barcelona/ES

Refresher Courses Scientific Sessions

Cardiac

Thursday, March 7, 2013, 10:30–12:00, Room B
SS 103: CT and MRI in preoperative and postoperative evaluation

Moderators: G.A. Krombach; Giessen/DE
R. Sanz-Requena; Valencia/ES

Thursday, March 7, 2013, 14:00–15:30, Room P
SS 203: Planning cardiac interventions

Moderators: I. Arkhipova; Moscow/RU
P. Mildenerger; Mainz/DE

Thursday, March 7, 16:00–17:30, Room D2
RC 303: Cardiac imaging: the cutting edge

Moderator: E. Di Cesare; LAquila/IT

A. Cardiac MRI: do we need more than 1.5T?
B.J. Wintersperger; Toronto, ON/CA

B. Cardiac CT: technique in 2020; where to next?
K. Nikolaou; Munich/DE

C. Cardiac hybrid imaging: “One-Stop-Shop”
P.A. Kaufmann; Zurich/CH

Friday, March 8, 2013, 10:30–12:00, Room P
SS 503: Advances in coronary CT angiography

Moderators: S. Bohata; Brno/CZ
L. Natale; Sesto Fiorentino/IT

Friday, March 8, 2013, 14:00–15:30, Room C
SS 603a: CT and MRI: risk stratification

Moderators: E. Mershina; Moscow/RU
J.L. Struyven; Brussels/BE

Friday, March 8, 2013, 14:00–15:30, Room G/H
SS 603b: Cardiomyopathy and fibrosis

Moderators: P. Donato; Coimbra/PT
R. Maksimović; Belgrade/RS

Saturday, March 9, 08:30–10:00, Room P
RC 803: Practical approach to cardiovascular risk stratification with CT and MRI

Moderator: C. Peebles; Southampton/UK

A. Modern views on value of coronary calcium scoring for risk assessment
A. Stadler; Vienna/AT

B. Coronary CTA: from detection of stenosis to prognosis
N.R. Mollet; Turnhout/BE

C. Myocardial perfusion and viability for risk scoring
A. de Roos; Leiden/NL

Saturday, March 9, 2013, 10:30–12:00, Room N/O
SS 903: Myocardial perfusion and coronary artery disease

Moderators: F. Cademartiri; Monastier di Treviso/IT
G.I. Kirova-Nedialkova; Sofia/BG

Sunday, March 10, 2013, 10:30–12:00, Room E2
SS 1303: Towards improved image quality and detection

Moderators: G. Feuchtner; Innsbruck/AT
C. Herzog; Munich/DE

Refresher Courses Scientific Sessions

Cardiac

Sunday, March 10, 16:00–17:30, Room I/K

RC 1503: Cardiac CT and MRI in difficult patients: what to do?

- **Chairman's introduction**
M. Hamilton; Bristol/UK
- A. Coronary CTA in patients with severe arrhythmias and high heart rate**
C. Loewe; Vienna/AT
- B. Severe coronary calcinosis and stents: tips and tricks in image acquisition and interpretation**
F. Pugliese; London/UK
- C. Cardiac MRI: possible problems and how to avoid them**
E. Mershina; Moscow/RU
- **Panel discussion:**
When to scan and when not to? How can we make the best of what we have?

Monday, March 11, 08:30–10:00, Room P

RC 1603: How I report

Moderator: R. Vliegthart; Groningen/NL

- A. Chest x-ray in cardiac disease**
M. Rubens; London/UK
- B. Coronary CTA**
F. Wolf; Vienna/AT
- C. Cardiac MRI in ischaemic heart disease**
J. Bremerich; Basle/CH

Monday, March 11, 2013, 10:30–12:00, Room N/O

SS 1703: Biomarkers, tissue characterisation and remodelling

Moderators: M. Das; Maastricht/NL
K. Gruszczynska; Katowice/PL

Monday, March 11, 2013, 14:00–15:30, Room D1

SS 1803: Cardiac imaging: into the future

Moderators: R.W. Bauer; Frankfurt/DE
E. Canet Soulas; Bron/FR

Refresher Courses Scientific Sessions

Chest

Thursday, March 7, 2013, 10:30–12:00, Room D1
SS 104: Lung cancer: from tissue characterisation to treatment

Moderators: E. Castañer; Sabadell/ES
N. Tacelli; Brussels/BE

Thursday, March 7, 2013, 14:00–15:30, Room D1
SS 204: Airways and infiltrative lung diseases

Moderators: G.R. Ferretti; Grenoble cedex 9/FR
C. Mueller-Mang; Vienna/AT

Thursday, March 7, 16:00–17:30, Room I/K
RC 304: How I report

Moderator: J. Cáceres; Barcelona/ES

A. Bedside chest radiography
R. Eibel; Schwerin/DE

B. CTA and MRA of the pulmonary arteries
J.E. Wildberger; Maastricht/NL

C. PET/CT
C. Keyzer; Brussels/BE

Friday, March 8, 2013, 10:30–12:00, Room D1
SS 504: Lung nodules

Moderators: S. Diederich; Düsseldorf/DE
N. Karabulut; Denizli/TR

Saturday, March 9, 08:30–10:00, Room I/K
RC 804: Patterns in chest radiology: are there subtype patterns of ground glass opacity (GGO)?

- **Chairman's introduction**
A. Oikonomou; Alexandroupolis/GR
- A. Ground glass opacification: why do we see it and what does it mean?**
S.R. Desai; London/UK
- B. Inflammatory and infectious GGO**
K. Marten-Engelke; Göttingen/DE
- C. GGO in dysplasia and neoplasia**
G.R. Ferretti; Grenoble/FR
- **Panel discussion:**
How should we report and manage ground glass opacity?

Saturday, March 9, 2013, 10:30–12:00, Room D1
SS 904: Image quality and dose reduction

Moderators: P.A. Grenier; Paris/FR
J. Vlahos; London/UK

Saturday, March 9, 16:00–17:30, Room I/K
RC 1104: Pulmonary infections: the old and the new

Moderator: F. Gleeson; Oxford/UK

A. Mycobacterial infections
C. Beigelman; Lausanne/CH

B. Infectious disease in immuno-compromised patients
C.P. Heussel; Heidelberg/DE

C. Emerging infections
T. Franquet; Barcelona/ES

Refresher Courses Scientific Sessions

Chest

Sunday, March 10, 08:30–10:00, Room I/K
RC 1204: Lung cancer staging in 2013

- **Chairman's introduction: the latest TNM classification**
J. Biederer; Heidelberg/DE
- A. Local tumour staging**
L. Bonomo; Rome/IT
- B. Lymph node staging**
W.F.M. De Wever; Leuven/BE
- C. Distant metastasis and whole body imaging**
G. Antoch; Düsseldorf/DE
- **Panel discussion:**
Facts and controversies in lung cancer staging

Sunday, March 10, 2013, 10:30–12:00, Room D1
SS 1304: CTPA techniques in lung perfusion and pulmonary hypertension

Moderators: I. Hartmann; Rotterdam/NL
E.J. Stern; Seattle, WA/US

Monday, March 11, 08:30–10:00, Room I/K
RC 1604: Pulmonary embolism: guidelines and best practice throughout Europe

- **Chairman's introduction**
M. Rémy-Jardin; Lille/FR
- A. Pioped 1-2-3: what have we learned so far?**
C. Engelke; Göttingen/DE
- B. PE in oncologic patients**
B. Ghaye; Brussels/BE
- C. PE during pregnancy and puerperium**
M.-P. Revel; Paris/FR
- **Panel discussion:**
Pulmonary embolism work-up in 2013

Monday, March 11, 2013, 10:30–12:00, Room D1
SS 1704: Technological refinements: from x-rays to micro-imaging

Moderators: A.P. Parkar; Bergen/NO
C.M. Schaefer-Prokop; Amersfoort/NL

Monday, March 11, 16:00–17:30, Room I/K
RC 1904: Phenotypes in obstructive airway disease: how should I image, analyse and report?

Moderator: P.A. Gevenois; Brussels/BE

- A. Asthma and associated conditions**
P.-Y. Brillet; Bobigny/FR
- B. Chronic obstructive pulmonary disease (COPD)**
N. Sverzellati; Parma/IT
- C. Cystic fibrosis and other bronchiectatic diseases**
M.U. Puderbach; Heidelberg/DE

Refresher Courses Scientific Sessions

Computer Applications

Thursday, March 7, 2013, 10:30–12:00, Room Z
**SS 105: IT infrastructure, learning support
and teleradiology**

Moderators: B. Gibaud; Rennes/FR
A. Simisker; Tartu/EE

Thursday, March 7, 2013, 14:00–15:30, Room Z
**SS 205: Quantitative image analysis
and optimisation**

Moderators: L. Faggioni; Pisa/IT
M. Fatehi; Tehran/IR

Thursday, March 7, 16:00–17:30, Room Q
**RC 305: New PACS architecture:
decoupling image management
from image navigation**

- **Chairman's introduction**
H.U. Lemke; Berlin/DE
- A. Image navigation and new PACS architecture**
J. Reponen; Raabe/FI
- B. Intraoperative imaging for surgeons**
A. Pietrabissa; Pavia/IT
- C. Dismantling PACS: separating image viewing from the
data storage and sharing**
B. Gibaud; Rennes/FR
- **Panel discussion:**
How should we manage our images today?

Saturday, March 9, 2013, 10:30–12:00, Room Z
SS 905: Computer-aided diagnosis

Moderators: T. Mang; Vienna/AT
D. Regge; Turin/IT

Monday, March 11, 08:30–10:00, Room Q
**RC 1605: Improving workflow efficiency
and quality**

- **Chairman's introduction**
D. Caramella; Pisa/IT
- A. Improving quality and efficiency of computerised order
entry through decision support**
P. Mildenerger; Mainz/DE
- B. Improving quality and efficiency of reporting by structure
and templates**
N. Dugar; Doncaster/UK
- C. Improving quality and efficiency of dose management
through exchange between modalities and registries**
E. Vaño; Madrid/ES
- **Panel discussion:**
Will novel IT tools really improve quality and efficiency in
daily radiological practice?

Refresher Courses Scientific Sessions

Molecular Imaging and Contrast Media

Thursday, March 7, 16:00–17:30, Room E1
RC 306: Molecular imaging in oncology

Moderator: O. Clément; Paris/FR

A. New PET-tracers for oncology

P.L. Choyke; Bethesda, MD/US

B. Potential of MRI for molecular imaging in oncology

E.A. Gallagher; Cambridge/UK

C. Emerging molecular imaging techniques

F.M.A. Kiessling; Aachen/DE

Friday, March 8, 2013, 14:00–15:30, Room Z
SS 606: MR/PET and PET/CT

Moderators: N.N.

P.R. Ros; Cleveland, OH/US

Sunday, March 10, 2013, 10:30–12:00, Room Z
SS 1306: New agents and protocols

Moderators: L. Grazioli; Brescia/IT

T.C. Lauenstein; Essen/DE

Monday, March 11, 2013, 10:30–12:00, Room Z
SS 1706: Molecular imaging in cancer and degenerative diseases

Moderators: J. Hakumäki; Kuopio/FI

E. Lopci; Rozzano/IT

Monday, March 11, 2013, 14:00–15:30, Room Z
SS 1806: Functional studies and safety

Moderators: E.M. Merkle; Basle/CH

N.R. Mollet; Turnhout/BE

Monday, March 11, 16:00–17:30, Room D2
RC 1906: How I optimise contrast media administration

Moderator: W. Semmler; Heidelberg/DE

A. CT

P. Leander; Malmö/SE

B. MRI

G.M. Bongartz; Basle/CH

C. PET/CT

X. Montet; Geneva/CH

Refresher Courses Scientific Sessions

Genitourinary

**Thursday, March 7, 2013, 10:30–12:00, Room G/H
SS 107: Prostate imaging**

Moderators: S. Morozov; Moscow/RU
J. Richenberg; Brighton/UK

**Thursday, March 7, 16:00–17:30, Room G/H
RC 307: Renal and adrenal tumours**

Moderator: B. Brkljacic; Zagreb/HR

A. Adrenal masses, a practical approach

G. Heinz-Peer; St. Pölten/AT

B. Staging renal cancer

R. Pozzi-Mucelli; Verona/IT

C. How to deal with small indeterminate renal masses

O. Hélénon; Paris/FR

**Friday, March 8, 2013, 10:30–12:00, Room G/H
SS 507: New frontiers in GU imaging**

Moderators: G. Hagen; Oslo/NO
C.M.A. Hoeks; Nijmegen/NL

**Friday, March 8, 2013, 14:00–15:30, Room A
SS 607: Female pelvis imaging**

Moderators: L.S. Fournier; Paris/FR
A.G. Rockall; London/UK

**Friday, March 8, 16:00–17:30, Room G/H
RC 707: Diagnosis and management of
GU tract trauma**

Moderator: A. Magnusson; Uppsala/SE

A. Imaging the kidney and ureter

M.-F. Bellin; Le Kremlin-Bicêtre/FR

B. Imaging the bladder and urethra

U.G. Mueller-Lisse; Munich/DE

C. Interventional radiology for GU trauma

B. Peynircioglu; Ankara/TR

**Sunday, March 10, 08:30–10:00, Room G/H
RC 1207: How I report**

Moderator: G.M. Villeirs; Gent/BE

A. Female pelvis MRI

A.G. Rockall; London/UK

B. Prostate MRI

J.J. Fütterer; Nijmegen/NL

C. CT urography

N.C. Cowan; Oxford/UK

Refresher Courses Scientific Sessions

Genitourinary

Sunday, March 10, 2013, 10:30–12:00, Room G/H
SS 1307: The bladder and below

Moderators: M. Baramia; Tbilisi/GE
R.H. Oyen; Leuven/BE

Sunday, March 10, 14:00–15:30, Room I/K
RC 1407: Contrast media safety: update

- **Chairman's introduction**
P. Reimer; Karlsruhe/DE
- A. Acute non-renal reactions to contrast media: new concepts**
O. Clément; Paris/FR
- B. Nephrogenic systemic fibrosis: from pathophysiology to recommendations**
H.S. Thomsen; Herlev/DK
- C. Contrast medium-induced nephropathy and new guidelines**
F. Stacul; Trieste/IT
- **Panel discussion:**
What is the most appropriate radiological approach to patients with falling eGFR and when should contrast media be administered and when should it not?

Monday, March 11, 2013, 10:30–12:00, Room G/H
SS 1707: Hints on haematuria and adrenals for all

Moderators: O. Nikolic; Novi Sad/RS
K. Sugimura; Kobe/JP

Monday, March 11, 2013, 14:00–15:30, Room G/H
SS 1807: Mixed modalities in GU imaging

Moderators: A.J. Beer; Munich/DE
I. Vivas; Pamplona/ES

Refresher Courses Scientific Sessions

Head and Neck

Thursday, March 7, 2013, 14:00–15:30, Room C

SS 208: Head and neck cancer: functional imaging and hybrid modalities

Moderators: N. Abolmaali; Dresden/DE
S. Steens; Nijmegen/NL

Friday, March 8, 2013, 14:00–15:30, Room L/M

SS 608: Technical innovations, TMJ disease and rare entities

Moderators: J. Frühwald-Pallamar; Vienna/AT
J. Widelec; Brussels/BE

Saturday, March 9, 16:00–17:30, Room D2

RC 1108: Skull base lesions: imaging studies and differential diagnosis

Moderator: L. Grzycka-Kowalczyk; Lublin/PL

A. Anterior cranial fossa with special emphasis on olfactory apparatus lesions

T.P.J. Duprez; Brussels/BE

B. Middle cranial fossa pathologies

A. Borges; Lisbon/PT

C. Posterior cranial fossa pathologies

H. Tanghe; Rotterdam/NL

Sunday, March 10, 2013, 10:30–12:00, Room L/M

SS 1308: Advanced imaging of the ear, orbit and glands

Moderators: R. Elias; Rotterdam/NL
B.F. Schuknecht; Zurich/CH

Sunday, March 10, 14:00–15:30, Room N/O

RC 1408: Laryngeal cancer and radiology

• **Chairman's introduction**

J.E. Kabala; Bristol/UK

A. Staging of laryngeal cancer: pearls and pitfalls

R. Maroldi; Brescia/IT

B. Evaluation after surgery and non-surgical treatment: expected findings

S. Bisdas; Tübingen/DE

C. Cancer recurrence: how to address clinical dilemmas

B. Verbist; Leiden/NL

• **Panel discussion:**

Diagnostic algorithms for diagnosis and follow-up of laryngeal cancer

Refresher Courses Scientific Sessions

Head and Neck

Sunday, March 10, 16:00–17:30, Room N/O

RC 1508: Performing and reporting head and neck examinations: how should I do it?

Moderator: K. Surlan Popovič; Ljubljana/SI

A. Sinonasal CT scans: technique and evaluation

H.B. Eggesbø; Oslo/NO

B. Temporal bone: CT and MRI

M.M. Lemmerling; Gent/BE

C. CT and MRI of the neck: how to address key clinical questions

D. Farina; Brescia/IT

Monday, March 11, 16:00–17:30, Room N/O

RC 1908: Temporal bone: imaging the most common symptoms and signs

Moderator: T. Beale; London/UK

A. Conductive hearing loss: what's behind it?

A. Trojanowska; Lublin/PL

B. Sensorineural hearing loss: a challenge for radiologists

J.W. Casselman; Bruges/BE

C. Tinnitus and vertigo: diagnostic algorithm

R.B.-J. de Bondt; Zwolle/NL

Refresher Courses Scientific Sessions

Interventional Radiology

Thursday, March 7, 2013, 10:30–12:00, Room D2
SS 109: Chemoembolisation and radioembolisation of liver tumours

Moderators: A. Denys; Lausanne/CH
 P. Paprottka; Munich/DE

Thursday, March 7, 2013, 14:00–15:30, Room D2
SS 209: Ablation and biopsy of the prostate and the kidney

Moderators: J.J. Fütterer; Nijmegen/NL
 J. Kettenbach; Berne/CH

Thursday, March 7, 16:00–17:30, Room N/0
RC 309: Percutaneous treatment of chronic back pain and sciatica

- **Chairman's introduction**
 A.D. Kelekis; Athens/GR
- A. Sacroiliac joint syndrome**
 N.N.
- B. Facet syndrome**
 M. Gallucci; LAquila/IT
- C. Intervertebral disc syndromes**
 A. Gangi; Strasbourg/FR
- **Panel discussion:**
 How can imaging methods separate candidates for percutaneous therapy and surgery?

Friday, March 8, 2013, 10:30–12:00, Room D2
SS 509: Neurovascular and spine interventions

Moderators: E.R. Gizewski; Innsbruck/AT
 L. Pierot; Reims/FR

Friday, March 8, 2013, 14:00–15:30, Room D2
SS 609a: Oncologic ablation and guided interventions

Moderators: P. Almeida; Coimbra/PT
 A. Basile; Catania/IT

Friday, March 8, 2013, 14:00–15:30, Room P
SS 609b: Gynaecological and obstetric interventions

Moderators: P.E. Andersen; Odense/DK
 R. Nijenhuis; Maastricht/NL

Friday, March 8, 16:00–17:30, Room N/0
RC 709: Expanding the role of interventional radiology in hepatocellular carcinoma

- **Chairman's introduction**
 V. Válek; Brno/CZ
- A. RF ablation**
 J.L. del Cura; Bilbao/ES
- B. Intra-arterial procedures**
 E. Orsi; Milan/IT
- C. Portal vein embolisation before surgery**
 A. Denys; Lausanne/CH
- **Panel discussion:**
 How to allow for more patients with HCC to be treated?

Saturday, March 9, 08:30–10:00, Room N/0
RC 809: What should every radiologist know about the endovascular treatment of abdominal aortic aneurysms?

- **Chairman's introduction**
 H. Rousseau; Toulouse/FR
- A. Pre-therapeutic radiological evaluation**
 J. Raupach; Hradec Kralove/CZ
- B. EVAR techniques and results**
 F. Fanelli; Rome/IT
- C. Imaging follow-up and treatment of complications**
 R. Morgan; London/UK
- **Panel discussion:**
 What are the best imaging methods for follow-up?

Refresher Courses Scientific Sessions

Interventional Radiology

**Saturday, March 9, 2013, 10:30–12:00, Room D2
SS 909: Thoracic interventions**

Moderators: J. Tacke; Passau/DE
K. Zelenak; Martin/SK

**Saturday, March 9, 16:00–17:30, Room N/O
RC 1109: Update on biliary interventions**

- **Chairman's introduction**
M. Krokidis; Cambridge/UK
- A. Fistula and benign stenosis**
M. Bezzi; Rome/IT
- B. Interventions after liver transplantation**
P. Goffette; Brussels/BE
- C. In tandem with endoscopy**
D.F. Martin; Manchester/UK
- **Panel discussion:**
Are there new possibilities in the area of biliary interventions?

**Sunday, March 10, 08:30–10:00, Room N/O
RC 1209: Gynaecological and obstetrical
haemorrhagic emergencies**

- **Chairman's introduction**
A.-M. Belli; London/UK
- A. Etiology and treatment of gynaecological benign and malignant causes of massive bleeding**
A. Keeling; Dublin/IE
- B. Can we prevent post-partum haemorrhage in high-risk patients?**
J.-P. Pelage; Caen/FR
- C. Treatment of post-partum haemorrhage**
M. Szczerbo-Trojanowska; Lublin/PL
- **Panel discussion:**
How to reduce the radiation doses of these methods?

**Sunday, March 10, 2013, 10:30–12:00, Room D2
SS 1309: Skeletal and endocrinologic
interventions**

Moderators: L. Crocetti; Pisa/IT
D.K. Tsetis; Iraklion/GR

**Monday, March 11, 2013, 10:30–12:00, Room D2
SS 1709: Abdominal interventions:
from TIPS to bile ducts**

Moderators: R.F. Dondelinger; Liège/BE
N.N.

**Monday, March 11, 2013, 14:00–15:30, Room D2
SS 1809: New approaches to aortic and
peripheral interventions**

Moderators: S. Kudrnova; Budapest/HU
R. Morgan; London/UK

Refresher Courses Scientific Sessions

Musculoskeletal

Thursday, March 7, 2013, 10:30–12:00, Room E1
SS 110: Shoulder and hand

Moderators: C. Schüller-Weidekamm; Vienna/AT
M. Shahabpour; Brussels/BE

Thursday, March 7, 2013, 14:00–15:30, Room E1
SS 210: Lower limb: tricks for improved imaging

Moderators: A. Klauser; Innsbruck/AT
L.M. Sconfienza; San Donato Milanese/IT

Friday, March 8, 2013, 10:30–12:00, Room E1
SS 510: Tendon, muscle and tissue composition

Moderators: J. Healy; London/UK
A. Mileto; Durham, NC/US

Friday, March 8, 2013, 14:00–15:30, Room E1
SS 610a: Musculoskeletal tumours

Moderators: S. James; Birmingham/UK
E. Quaia; Trieste/IT

Friday, March 8, 2013, 14:00–15:30, Room N/O
SS 610b: Cartilage: advanced imaging

Moderators: A. Karpenko; St. Petersburg/RU
P. Omoumi; Brussels/BE

Friday, March 8, 16:00–17:30, Room E1
RC 710: Peripheral nerve imaging: MRI and US

- **Chairman's introduction**
J. Renoux; Paris/FR
- A. Applied radiological anatomy and pathology of the brachial plexus**
S. Gerevini; Milan/IT
- B. Upper limb nerve entrapment**
D. Weishaupt; Zurich/CH
- C. Lower limb nerve entrapment**
C. Martinoli; Genoa/IT
- **Panel discussion:**
Which on-going technological advances in MRI and US could influence the way we image peripheral nerves in the future?

Saturday, March 9, 2013, 10:30–12:00, Room E1
SS 910: Spine: advancing the use of CT and MRI

Moderators: P.M. Cunningham; Navan/IE
J. Labuscagne; Bunbury, WA/AU

Saturday, March 9, 16:00–17:30, Room E1
RC 1110: The knee

- **Chairman's introduction**
F.M.H.M. Vanhoenacker; Antwerp/BE
- A. Patterns of injury**
P. Van Dyck; Antwerp/BE
- B. Inflammatory disease**
A. Cotten; Lille/FR
- C. Soft tissue tumours/tumour-like lesions**
J.C. Vilanova; Girona/ES
- **Panel discussion:**
What are the remaining clinical questions that imaging currently cannot answer and how can we answer them in the future?

Sunday, March 10, 08:30–10:00, Room E1
RC 1210: Overuse injuries in sport: a multimodality approach

- Moderator:** E. Llopis; Valencia/ES
- A. Overuse injuries in the footballer's ankle**
S.J. Eustace; Dublin/IE
 - B. Overuse injuries in the gymnast's spine**
M.C. De Jonge; Amsterdam/NL
 - C. Upper limb overuse injuries in golfers**
P.J. O'Connor; Leeds/UK

Refresher Courses Scientific Sessions

Musculoskeletal

Sunday, March 10, 2013, 10:30–12:00, Room E1
SS 1310: Arthritis and metabolic bone disease

Moderators: A.J. Grainger; Leeds/UK
A. Plagou; Athens/GR

Sunday, March 10, 14:00–15:30, Room E1
RC 1410: How I report

Moderator: M. Padrón; Madrid/ES

A. Soft tissue mass: US/MR

C. van Rijswijk; Leiden/NL

B. MR of vertebral body collapse

R. Lalam; Oswestry/UK

C. MR of the unstable shoulder

M. Zanetti; Zurich/CH

Monday, March 11, 2013, 10:30–12:00, Room E1
SS 1710: Hip: CT and MRI applications

Moderators: M.H. Maurer; Berlin/DE
A. Vieira; Porto/PT

Monday, March 11, 2013, 14:00–15:30, Room E1
SS 1810: Knee: new horizons

Moderators: M.P. Aparisi Gomez; Valencia/ES
A. Cotten; Lille/FR

Monday, March 11, 16:00–17:30, Room E1
RC 1910: Intra-articular imaging

• **Chairman's introduction**

A.H. Karantanas; Iraklion/GR

A. Standard MR techniques

C. Faletti; Turin/IT

B. CT arthrography

C.W.A. Pfirrmann; Zurich/CH

C. MR arthrography

J. Kramer; Linz/AT

• **Panel discussion:**

Which imaging technique for which clinical scenario?

Refresher Courses Scientific Sessions

Neuro

Thursday, March 7, 2013, 10:30–12:00, Room C
SS 111: From structure to function

Moderators: S.J. Bakke; Oslo/NO
E.L. Gasparetto; Rio de Janeiro/BR

Thursday, March 7, 2013, 14:00–15:30, Room G/H
SS 211: Infection and inflammation

Moderators: E. Marco de Lucas; Santander/ES
G. Schroth; Berne/CH

Friday, March 8, 08:30–10:00, Room G/H
**RC 411: The paediatric brain:
not just a small brain**

Moderator: C. Venstermans; Antwerp/BE

A. Neurocutaneous syndromes: more than neurofibromatosis

B. Ertl-Wagner; Munich/DE

B. Patterns of white matter disease in children

A. Rossi; Genoa/IT

C. Paediatric brain tumours

C. Hoffmann; Tel Hashomer/IL

Friday, March 8, 2013, 10:30–12:00, Room L/M
SS 511: Stroke-related arterial disease

Moderators: E. Avdagic; Sarajevo/BA
P. Barsi; Budapest/HU

Friday, March 8, 2013, 14:00–15:30, Room B
SS 611: Alzheimer's and Parkinson's

Moderators: B. Góraj; Nijmegen/NL
T. Meindl; Landshut/DE

Saturday, March 9, 2013, 10:30–12:00, Room C
SS 911: New insights into brain gliomas

Moderators: L.C. Tzarouchi; Ioannina/GR
P. Vilela; Almada/PT

Saturday, March 9, 16:00–17:30, Room G/H
**RC 1111: Brain tumours: advanced imaging
techniques in daily practice – do we
really need them?**

Moderator: Z. Merhemic; Sarajevo/BA

A. Diffusion-weighted imaging (DWI) and diffusion tensor imaging (DTI)

M. Law; Los Angeles, CA/US

B. Perfusion imaging

Y. Özsunar; Aydin/TR

C. Follow-up after treatment

P.C. Maly Sundgren; Lund/SE

Sunday, March 10, 08:30–10:00, Room E2
**RC 1211: Stroke: is the prognosis
getting any better?**

• **Chairman's introduction**

J.-P. Pruvo; Lille/FR

A. Initial imaging work-up: CT or MR?

P.M. Parizel; Antwerp/BE

B. Stroke: is there really any therapy?

V. Mendes Pereira; Geneva/CH

C. Stenting: does it prevent stroke?

P. Vilela; Almada/PT

• **Panel discussion:**

What is the future of stroke prevention and treatment?

Refresher Courses Scientific Sessions

Neuro

Sunday, March 10, 2013, 10:30–12:00, Room F1 SS 1311: Brain tumours: imaging and therapy

Moderators: X. Golay; London/UK
A. Zimny; Wroclaw/PL

Sunday, March 10, 16:00–17:30, Room G/H RC 1511: Epilepsy: a lack of knowledge can be dangerous

Moderator: M.A. Papathanasiou; Athens/GR

- A. Anatomy of the limbic system**
T.A. Yousry; London/UK
- B. Temporal lobe epilepsy**
I.N. Pronin; Moscow/RU
- C. fMRI in epilepsy**
N. Bargalló; Barcelona/ES

Monday, March 11, 08:30–10:00, Room G/H RC 1611: Spine: update on postoperative imaging and minimally invasive procedures

- **Chairman's introduction**
J. Van Goethem; Antwerp/BE
- A. Postoperative spine**
L. Van den Hauwe; Brasschaat/BE
- B. Indications for vertebroplasty**
A. Gangi; Strasbourg/FR
- C. Percutaneous treatment of spinal diseases**
M. Muto; Naples/IT
- **Panel discussion:**
Minimally invasive spinal procedures:
the radiologist's future role?

Monday, March 11, 2013, 10:30–12:00, Room C SS 1711: Brain ischaemia: perfusion and diffusion

Moderators: L. Oleaga Zufiria; Barcelona/ES
M. Vernooij; Rotterdam/NL

Monday, March 11, 2013, 14:00–15:30, Room B SS 1811a: Latest developments in neuroimaging

Moderators: S. Haller; Geneva/CH
E. Papadaki; Iraklion/GR

Monday, March 11, 2013, 14:00–15:30, Room C SS 1811b: Spinal imaging

Moderators: M. Buruian; Targu-Mures/RO
A. Cianfoni; Lugano/CH

Monday, March 11, 16:00–17:30, Room G/H RC 1911: Multiple sclerosis: 2013 update

Moderator: E.T. Tali; Ankara/TR

- A. Differential diagnosis of multiple T2-HI white matter lesions**
A. Rovira-Cañellas; Barcelona/ES
- B. New developments in the diagnosis of multiple sclerosis**
F. Barkhof; Amsterdam/NL
- C. Imaging of MS treatment-related complications**
M.M. Thurnher; Vienna/AT

Refresher Courses Scientific Sessions

Paediatric

Saturday, March 9, 08:30–10:00, Room Q RC 812: Imaging the paediatric spine

Moderator: C.J. Kellenberger; Zurich/CH

- A. Craniocervical junction abnormalities**
B. Ozgen Mocan; Ankara/TR
- B. Inflammation, infection and tumours: the role of imaging**
M.I. Argyropoulou; Ioannina/GR
- C. Imaging spinal trauma in childhood**
M. Maas; Amsterdam/NL

Saturday, March 9, 2013, 10:30–12:00, Room P SS 912: Paediatric body and bones

Moderators: K.J. Johnson; Birmingham/UK
L.-S. Ording-Müller; Tromsø/NO

Sunday, March 10, 08:30–10:00, Room Q RC 1212: Oncologic imaging: how to image, follow up and report

- **Chairman's introduction**
D. Roebuck; London/UK
- A. Renal and adrenal tumours in children**
A.M.J.B. Smets; Amsterdam/NL
- B. Paediatric liver malignancies**
D. Roebuck; London/UK
- C. Oncologic imaging in the paediatric brain**
G. Hahn; Dresden/DE
- **Panel discussion:**
How far should the radiologist go in suggesting tumour recurrence or post-treatment complications?

Sunday, March 10, 2013, 10:30–12:00, Room P SS 1312: Chest, heart and radiation awareness

Moderators: W. Hirsch; Leipzig/DE
P.D. Humphries; London/UK

Sunday, March 10, 14:00–15:30, Room Q RC 1412: Paediatric emergencies

Moderator: V. Donoghue; Dublin/IE

- A. The acute non-traumatic neurological patient: CT or MRI?**
E. Vázquez; Barcelona/ES
- B. Imaging of acute chest pain and/or distress in children**
C.E. de Lange; Oslo/NO
- C. The role of the interventional radiologist in paediatric trauma**
J.B. Karani; London/UK

Sunday, March 10, 16:00–17:30, Room Q RC 1512: Paediatric MSK radiology: what is important?

Moderator: M. Raissaki; Iraklion/GR

- A. Scoliosis: what the radiologist needs to know**
J.-F. Chateil; Bordeaux/FR
- B. Benign bone tumours and pseudotumours in children: the pitfalls**
K.J. Johnson; Birmingham/UK
- C. Congenital bone dysplasias**
A.C. Offiah; Sheffield/UK

Monday, March 11, 2013, 10:30–12:00, Room P SS 1712: Foetal and neonatal imaging

Moderators: N. De Graaf; Rotterdam/NL
H. Ringertz; Linköping/SE

Monday, March 11, 2013, 14:00–15:30, Room P SS 1812: Paediatric brain

Moderators: M.A. Lucic; Sremska Kamenica/RS
M. Stenzel; Jena/DE

Monday, March 11, 16:00–17:30, Room Q RC 1912: Normal variants in paediatric imaging: not to be confused with disease

Moderator: Ø.E. Olsen; London/UK

- A. Brain**
A. Rossi; Genoa/IT
- B. Chest and abdomen**
S.G.F. Robben; Maastricht/NL
- C. Musculoskeletal**
F. Saez; Barakaldo/ES

Refresher Courses Scientific Sessions

Physics in Radiology

Thursday, March 7, 2013, 10:30–12:00, Room L/M
SS 113: Multi modality imaging and MR safety

Moderators: O. Ciraj-Bjelac; Belgrade/RS
O. Speck; Magdeburg/DE

Thursday, March 7, 2013, 14:00–15:30, Room L/M
SS 213: Innovations in CT technology and data processing

Moderators: C. Leidecker; Forchheim/DE
R. Padovani; Udine/IT

Saturday, March 9, 16:00–17:30, Room L/M
RC 1113: Cone-beam imaging

Moderators: O. Ciraj-Bjelac; Belgrade/RS
A. Trianni; Udine/IT

- A. Fundamentals of cone-beam imaging**
M. Kachelrieß; Heidelberg/DE
- B. Medical applications of CB imaging**
M. Grass; Hamburg/DE
- C. 3D dentomaxillofacial imaging**
K. Horner; Manchester/UK

Sunday, March 10, 08:30–10:00, Room L/M
RC 1213: Risk assessment and risk communication

- **Chairmen's introduction**
M.M. Rehani; Vienna/AT
P. Vock; Berne/CH
- A. Radiation risks for patients and staff**
E. Vaño; Madrid/ES
- B. Risk in MRI**
R. Peeters; Leuven/BE
- C. Communication of risk to patients and public**
G. Gamhewage; Geneva/CH
- **Panel discussion:**
How to communicate risk to patients and the public?

Sunday, March 10, 14:00–15:30, Room L/M
RC 1413: Hybrid imaging systems

Moderators: D.G. Sutton; Dundee/UK
J. Votrubová; Prague/CZ

- A. Clinical SPECT/CT and PET/CT**
T. Beyer; Zurich/CH
- B. Clinical MR/PET**
G. Antoch; Düsseldorf/DE
- C. Preclinical hybrid imaging**
N. Belcari; Pisa/IT

Sunday, March 10, 16:00–17:30, Room L/M
RC 1513: Novel developments in CT and their impact on dose

Moderators: M. Prokop; Nijmegen/NL
V. Tsapaki; Athens/GR

- A. Patient dose assessment in CT**
P.C. Shrimpton; Didcot/UK
- B. New frontiers in CT: functional and spectral imaging**
N. Pelc; Stanford, CA/US
- C. New image reconstruction techniques**
J. Sijbers; Antwerp/BE

Monday, March 11, 2013, 10:30–12:00, Room L/M
SS 1713: Breast imaging and novel CT techniques

Moderators: N. Karssemeijer; Nijmegen/NL
M. Koutaloni; Colchester/UK

Monday, March 11, 2013, 14:00–15:30, Room L/M
SS 1813: Patient dose management and dose surveys

Moderators: H. Bosmans; Leuven/BE
W. Stiller; Heidelberg/DE

Refresher Courses Scientific Sessions

Radiographers

Thursday, March 7, 2013, 10:30–12:00, Room Q
SS 114: Importance of education in practice

Moderators: R. Ribeiro; Lisbon/PT
T. Roding; Haarlem/NL

Thursday, March 7, 2013, 14:00–15:30, Room Q
SS 214: Managing quality and dose in CT

Moderators: E. Agadakos; Athens/GR
A. Yule; Cardiff/UK

Friday, March 8, 2013, 10:30–12:00, Room Q
SS 514: The radiographer's role as health care team member

Moderators: V. Syrgiamiotis; Athens/GR
C. Vandulek; Kaposvár/HU

Friday, March 8, 16:00–17:30, Room P
RC 714: Clinical audit: from EURATOM to the clinical environment

Moderators: E.J. Adam; London/UK
D. Pronk-Larive; Middelburg/NL

- A. Clinical audit: from the EURATOM treaty to EU guidelines: clinical audit RP 159**
P. Wood; Helsinki/FI
- B. Implementation in practice: a comparison of different models**
S. Geers-van Gemeren; Utrecht/NL
- C. A perspective on the impact and benefits of clinical audit**
S. O'Connor; Dublin/IE

Saturday, March 9, 2013, 10:30–12:00, Room Q
SS 914: Dose optimisation as daily challenge

Moderators: P. Blackburn Andersen; Kolding/DK
A. Petakovic; Novo Mesto/SI

Saturday, March 9, 16:00–17:30, Room P
RC 1114: Hot topics in magnetic resonance imaging

Moderators: K. Haller; Wiener Neustadt/AT
L. Martí-Bonmatí; Valencia/ES

- A. New trends in MR safety**
P. Bauer; Vienna/AT
- B. MR spectroscopy: the role of radiographers in data optimisation**
J. McNulty; Dublin/IE
- C. Challenges and opportunities in paediatric MR**
V. Syrgiamiotis; Athens/GR

Sunday, March 10, 08:30–10:00, Room P
RC 1214: Dose optimisation in computed tomography

Moderators: G. Frija; Paris/FR
D. Pekarovic; Ljubljana/SI

- A. Innovations in dose optimisation**
S. Foley; Dublin/IE
- B. Developing patient specific examination protocols**
H. Precht; Odense/DK

Refresher Courses Scientific Sessions Radiographers

Sunday, March 10, 14:00–15:30, Room P

RC 1414: Towards advancing and developing the role of radiographers

- **Chairmen's introduction**
S. Mathers; Aberdeen/UK
J.-F. Meder; Paris/FR
- A. The current status: a clinical perspective**
C. McLaren; London/UK
- B. The importance of evidence-based practice for the future of advanced practice in radiography**
A. England; Liverpool/UK
- C. The view from the European level**
G. Paulo; Coimbra/PT
- **Panel discussion:**
How to use the EFRS guidance document on role development

Sunday, March 10, 16:00–17:30, Room P

RC 1514: Hybrid imaging technologies

Moderators: C.D. Claussen; Tübingen/DE
C. Malamateniou; London/UK

- A. Recent developments**
S. Rep; Ljubljana/SI
- B. Clinical applications**
T. Lindner; Ternitz/AT
- C. Trends in radiography education**
P. Hogg; Manchester/UK

Monday, March 11, 2013, 10:30–12:00, Room Q

SS 1714: Mammography

Moderators: S.J. Foley; Dublin/IE
P. Vahtramae; Pärnu/EE

Monday, March 11, 2013, 14:00–15:30, Room Q

SS 1814: Challenges of different imaging techniques

Moderators: H.H. Hjemly; Oslo/NO
J. McNulty; Dublin/IE

Refresher Courses Scientific Sessions

Vascular

Thursday, March 7, 2013, 10:30–12:00, Room N/O
SS 115: Carotid plaque evaluation

Moderators: M.A. Aschauer; Graz/AT
D. Filippiadis; Athens/GR

Thursday, March 7, 2013, 14:00–15:30, Room N/O
SS 215: Major vessel imaging

Moderators: W.R. Jaschke; Innsbruck/AT
O. Pellerin; Paris/FR

Thursday, March 7, 16:00–17:30, Room P
RC 315: Vascular imaging in ischaemic stroke

Moderator: J. Hendrikse; Utrecht/NL

A. Intracranial atherosclerotic disease of carotid arteries

T. Jargiello; Lublin/PL

B. Vertebrobasilar atherosclerotic disease

L. Valvassori; Milan/IT

C. Dissection and vasculitis of intracranial and extracranial arteries

H.R. Jäger; London/UK

Friday, March 8, 2013, 10:30–12:00, Room N/O
SS 515: Novel tools for blood flow evaluation

Moderators: J. Barkhausen; Lübeck/DE
F.G. Garaci; Rome/IT

Friday, March 8, 16:00–17:30, Room Z
RC 715: Dialysis fistula

Moderator: H. Deutschmann; Graz/AT

A. Preoperative mapping

L. Turmel-Rodrigues; Tours/FR

B. Screening for problems

D. Vorwerk; Ingolstadt/DE

C. Evaluation of malfunction

R. Uberoi; Oxford/UK

Saturday, March 9, 08:30–10:00, Room L/M
RC 815: How I report

Moderator: D. Bilecen; Basle/CH

A. CTA and MRA of supra-aortic arteries

J.H. Gillard; Cambridge/UK

B. CTA and MRA of thoracic and abdominal aorta

H.J. Michaely; Mannheim/DE

C. CTA and MRA of peripheral arteries

T. Leiner; Utrecht/NL

Monday, March 11, 2013, 14:00–15:30, Room N/O
SS 1815: Vascular research

Moderators: S. Kuribayashi; Tokyo/JP
A. Pellegrin; Trento/IT

Refresher Courses Scientific Sessions

Vascular

Monday, March 11, 16:00–17:30, Room P
RC 1915: Lower extremity venous insufficiency

- **Chairman's introduction**
D.J. West; Stoke-on-Trent/UK
- A. Venous anatomy and ultrasound**
H. Moschouris; Piraeus/GR
- B. Rare venous diseases of the lower extremities**
M. Greiner; Neuilly sur Seine/FR
- C. CT venography and MR venography**
G. O'Sullivan; Galway/IE
- **Panel discussion:**
Which imaging modality is best for planning endovascular management?

Refresher Courses Scientific Sessions

Oncologic Imaging

Thursday, March 7, 2013, 10:30–12:00, Room F1
SS 116: Perfusion CT and MRI: ready for clinical practice

Moderators: S. Delorme; Heidelberg/DE
 F.A. Gallagher; Cambridge/UK

Thursday, March 7, 2013, 14:00–15:30, Room F1
SS 216: New biomarkers for tumour quantification

Moderators: C.J. Herold; Vienna/AT
 N.N.

Friday, March 8, 08:30–10:00, Room C
RC 416: MR imaging for prostate cancer management: the essential guide for radiologists

- **Chairman's introduction**
 H.-P. Schlemmer; Heidelberg/DE
- A. Clinical challenges: how to treat prostate cancer**
 B.A. Hadaschik; Heidelberg/DE
- B. The radiologist's contribution: how to detect and characterise a tumour**
 A.R. Padhani; Northwood/UK
- C. The radiologist's influence on management. Staging prostate cancer: how it impacts on treatment selection**
 H. Hricak; New York, NY/US
- **Panel discussion:**
 Is MRI an integral part of the clinical routine?

Friday, March 8, 2013, 10:30–12:00, Room F1
SS 516: Cutting edge imaging in oncology: when and how?

Moderators: K. Coenegrachts; Bruges/BE
 E.J. Rummeny; Munich/DE

Saturday, March 9, 2013, 10:30–12:00, Room F1
SS 916: Whole-body imaging: how to do it

Moderators: T.F. Hany; Zurich/CH
 D. Lambregts; Maastricht/NL

Sunday, March 10, 2013, 10:30–12:00, Room A
SS 1316: Rectal cancer imaging: the next step

Moderators: L. Curvo-Semedo; Coimbra/PT
 C. Hoeffel; Reims/FR

Sunday, March 10, 14:00–15:30, Room E2
RC 1416: The essentials of lymph node imaging of solid tumours: what the radiologist needs to know

- **Chairman's introduction**
 R.G.H. Beets-Tan; Maastricht/NL
- A. The current criteria for nodal involvement on CT/MRI**
 W. Schima; Vienna/AT
- B. DWI MR: what does it contribute?**
 H.C. Thoeny; Berne/CH
- C. Nuclear medicine: PET and other nuclear medicine techniques**
 P.L. Choyke; Bethesda, MD/US
- **Panel discussion:**
 When and how could imaging make diagnostic biopsy unnecessary?

Refresher Courses Scientific Sessions Oncologic Imaging

Monday, March 11, 08:30–10:00, Room E2

RC 1616: Complications of cancer treatment and the detection of recurrences

- **Chairman's introduction**
M. Laniado; Dresden/DE
- A. Head and neck cancer**
L. Oleaga Zufiria; Barcelona/ES
- B. Liver and pancreatic cancer**
C. Catalano; Rome/IT
- C. Rectal cancer**
L.C.O. Blomqvist; Stockholm/SE
- **Panel discussion:**
How to differentiate between treatment sequelae and active disease

Monday, March 11, 2013, 10:30–12:00, Room F1

SS 1716: Response evaluation in oncology: beyond RECIST

Moderators: T. Denecke; Berlin/DE
M.I. Furmanek; Warsaw/PL

Monday, March 11, 16:00–17:30, Room E2

RC 1916: Gastro-entero-pancreatic neuro-endocrine tumours (GEP-NET): a multidisciplinary update

- **Chairman's introduction**
C. Matos; Brussels/BE
- A. Tumour biology, pathogenesis and classification**
B. Wiedenmann; Berlin/DE
- B. The current role of nuclear medicine techniques**
C. Deroose; Leuven/BE
- C. Anatomical imaging: transabdominal US, endoscopic US, MDCT and MRI. What is the most appropriate imaging approach?**
V. Vilgrain; Clichy/FR
- **Panel discussion:**
The future of hybrid imaging?



Refresher Courses Scientific Sessions

Emergency Radiology

Thursday, March 7, 2013, 10:30–12:00, Room P

SS 117: An update on emergency thoraco-abdominal imaging

Moderators: B. Feragalli; Chieti/IT
A. Huete; Santiago/CL

Friday, March 8, 08:30–10:00, Room D2

RC 417: ER: basic principles

Moderator: P. Valdés Solís; Marbella/ES

A. Logistics and organisation of an emergency radiology department

M. Körner; Munich/DE

B. Advanced trauma life support: basic knowledge for radiologists

D.R. Kool; Nijmegen/NL

C. Mechanism of injury and MDCT protocols: choosing the right protocol for the right patient

S. Voelckel; Innsbruck/AT

Saturday, March 9, 08:30–10:00, Room E1

RC 817: Polytrauma: redefining imaging issues for management priorities

• **Chairman's introduction: advanced imaging, logistics and management priorities in patients after polytrauma**

H. Alkadhi; Zurich/CH

A. Vascular trauma

G. Schueller; Bülach/CH

B. Chest and abdomen

M. Scaglione; Castel Volturno/IT

C. Extremities

U. Linsenmaier; Munich/DE

• **Panel discussion:**

How to speed up your diagnoses?

Sunday, March 10, 2013, 10:30–12:00, Room N/O

SS 1317: Technical issues and clinical results

Moderators: M. Brink; Nijmegen/NL
G. Schueller; Bülach/CH

Sunday, March 10, 16:00–17:30, Room E1

RC 1517: ER: comprehensive imaging of non-traumatic abdominal emergencies

• **Chairman's introduction: logistics and management of critical patients with abdominal complaints**

S. Wirth; Munich/DE

A. Imaging of the most frequent emergencies of the upper abdomen

C.J. Zech; Basle/CH

B. Imaging of the most frequent emergencies of the gastrointestinal tract

M. Zins; Paris/FR

C. Imaging of the most frequent emergencies of the genitourinary tract

L.E. Derchi; Genoa/IT

• **Panel discussion:**

How to speed up your diagnoses?



EFOMP Workshop

The workshop is organised by EFOMP (European Federation of Organisations for Medical Physics) in collaboration with the ESR to address the current and future technological requirements for radiology imaging equipment.

During the two 90-minute sessions, seven lectures will be presented.





EFOMP Workshop

New technology in diagnostic radiology: new frontiers in imaging of the lung

Organising Committee:

Chairman: P. Sharp; Aberdeen/UK

Members: A. Torresin; Milan/IT
W.J.M. van der Putten; Galway/IE
J. Vassileva; Sofia/BG

Saturday, March 9, 08:30–10:00, Room G/H

EF 1: Lung and chest imaging: new approaches

Moderators: P. Sharp; Aberdeen/UK
W.J.M. van der Putten; Galway/IE

- **Welcome address**
J.I. Bilbao; Pamplona/ES
P. Sharp; Aberdeen/UK
- **Radiologist's point of view:
clinical and technical requirements for imaging
of the lung**
H.-U. Kauczor; Heidelberg/DE
- **Respiratory motion correction in lung imaging**
J. Schnabel; Oxford/UK
- **Role of tomosynthesis in lung imaging**
M. Bâth; Gothenburg/SE

Saturday, March 9, 10:30–12:00, Room G/H

EF 2: Lung imaging: multidisciplinary scenario

Moderators: A. Torresin; Milan/IT
J. Vassileva; Sofia/BG

- **Pulmonary nodule detection using CAD**
A. Retico; Pisa/IT
- **Optimisation in lung imaging of children**
C. Owens; London/UK
- **Lung imaging: developments in role of PET**
M.-E. Meyer; Amiens/FR
- **Lung imaging: developments in role of MR**
J.M. Wild; Sheffield/UK





European Excellence in Education

Foundation Course (E³)

This basic teaching course, which takes place under the heading of E³ – European Excellence in Education, is designed for trainees and anyone wishing to refresh their knowledge. The motto of the programme is: ‘All you need to know in 18 easy lessons. This course answers your questions!’

The course is organised by a coordinator from the programme planning committee, with the topic and coordinator being chosen by the Congress President.

The programme will be concluded with a self-marking electronic examination, moderated by the course coordinator that will allow the participants to assess what they have learned.

Interactive Teaching Sessions (E³)

The ECR traditionally presents interactive teaching sessions dealing with specific topics of common clinical problems and imaging, establishing a two-way interaction between the presenters and the participants.

Each session is around 90 minutes long and is presented by two speakers. The sessions include a strong interactive element, with audience participation and self-assessment by means of an electronic voting system (keypads).

Places are allocated on a first-come, first-served basis.

Insights into Imaging

Education and strategies in European radiology



The clearest insights... for all to see!

Open Access – Indexed in PubMed/PubMedCentral
Radiological education without restrictions

www.i3-journal.org
Full articles at www.i3-journal.org/articles

SpringerOpen[®]

E³ – European Excellence in Education

Foundation Course: Neuroimaging

Friday, March 8, 08:30–10:00, Room E2

E³ 420: The orbit, the petrous bone and the sella

Moderator: B. De Foer; Antwerp/BE

A. Imaging of the orbit: the globe and conal lesions

P.C. Maly Sundgren; Lund/SE

B. The petrous bone

F. Veillon; Strasbourg/FR

C. Sella and parasellar pathology

R. Gasparotti; Brescia/IT

Friday, March 8, 10:30–12:00, Room E2

E³ 520c: Paediatric

Moderator: D. Prayer; Vienna/AT

A. Neonatal hypoxic-ischaemic brain injury

M.I. Argyropoulou; Ioannina/GR

B. Spine and spinal cord malformations

A. Rossi; Genoa/IT

C. Imaging of the foetal brain

C. Garel; Paris/FR

Friday, March 8, 14:00–15:30, Room E2

E³ 620: Trauma and vascularity

Moderator: A. Molyneux; Oxford/UK

A. CNS trauma

P.M. Parizel; Antwerp/BE

B. Cerebral ischaemia and infarction

L. Pierot; Reims/FR

C. Vascular malformations of the spinal cord

D.A. Rüfenacht; Zurich/CH

Friday, March 8, 16:00–17:30, Room E2

E³ 720b: Infection and inflammation

Moderator: A.D. Gouliamos; Athens/GR

A. Infection

E.T. Tali; Ankara/TR

B. Multiple sclerosis

F. Barkhof; Amsterdam/NL

C. Mimics of multiple sclerosis

V. Dousset; Bordeaux/FR

Saturday, March 9, 08:30–10:00, Room E2

E³ 820b: Metabolic and neurodegenerative disorders

Moderator: S. Lehericy; Paris/FR

A. Dementia

B. Gómez-Ansón; Barcelona/ES

B. Movement disorders

T.A. Yousry; London/UK

C. Metabolic disorders

J.F. Schneider; Basle/CH

Saturday, March 9, 10:30–12:00, Room E2

E³ 920b: Tumours and phacomatosis

Moderator: N. Girard; Marseille/FR

A. Brain tumours

M.M. Thurnher; Vienna/AT

B. Tumours of the spinal cord

J. Van Goethem; Antwerp/BE

C. Phacomatosis

M.A. Papathanasiou; Athens/GR

Saturday, March 9, 12:15–13:15, EPOS Area

Self assessment test

Moderator: M.I. Argyropoulou; Ioannina/GR

Interactive computer evaluation of course learning

Foundation Course on Neuroimaging:

All you need to know in 18 easy lessons

By David Zizka

Foundation Course: Neuroimaging

Friday, March 8,
08:30–10:00

E³ 420:

The orbit, the petrous
bone and the sella

Friday, March 8,
10:30–12:00

E³ 520c: Paediatric

Friday, March 8,
14:00–15:30

E³ 620:

Trauma and vascularity

Friday, March 8,
16:00–17:30

E³ 720b:

Infection and
inflammation

Saturday, March 9,
08:30–10:00

E³ 820b:

Metabolic and
neurodegenerative
disorders

Saturday, March 9,
10:30–12:00

E³ 920b:

Tumours and
phacomatosis

Saturday, March 9,
12:15–13:15

Self assessment test

Neuroimaging – which includes techniques that enable us to directly or indirectly image, visualise and measure aspects of brain anatomy and physiology in living humans – may be one of the most fascinating, and yet least explored fields in radiology today. It has not only become an essential discipline within medicine, but has also revolutionised other fields such as cognitive neuroscience and psychology, where it allows us to ask questions about the brain-behaviour relationship, inconceivable just a decade or two ago.

The ECR 2013 foundation course on neuroimaging, chaired by Prof. Maria Argyropoulou from the Medical School at the University of Ioannina in Greece, will be primarily aimed at educating, and young radiologists, especially, will be able to learn new things, and gain a clearer understanding of information they may have misunderstood.

“Additionally, hints and brief introductions will be given for the modern, more advanced and state-of-the-art techniques, which have appeared in the field lately. Experienced radiologists will have the chance to refresh their basic knowledge and get informed of the recent advances. We have all worked hard to prepare an interesting and rewarding session, following the success of previous ECR neuroimaging sessions,” said Prof. Argyropoulou, describing some aspects of the foundation course.

When asked about the basics of neuroimaging Prof. Argyropoulou explained that she would start with the two categories of neuroimaging – structural and functional imaging. Structural imaging deals with the structure and morphology of the brain. It mainly provides detailed static images of the anatomical features. On the other hand, functional imaging maps brain processes related to metabolism, blood flow, regional chemical composition and absorption. It provides dynamic or temporal brain maps, revealing physiological activities. One could say that structural imaging shows what the brain looks like, whereas functional imaging shows what the brain actually does or how it works. Both descriptions are helpful because they provide complementary information and in many cases they are closely related to the general biological principle of ‘structure determines function.’ Neuroimaging has also shown, in many cases of brain injury, how structural damage affects cognitive function and reorganises neuronal networks.

Neuroimaging has become significantly important in other fields of medicine such as neuro-interventional procedures. Advances in neuroimaging modalities such as digital subtraction angiography, transcranial and intravascular ultrasonography, interventional dynamic 64-slice computed tomography, (intravascular) magnetic resonance imaging, and molecular and cellular neuroimaging using microbubbles have helped to improve existing therapies and pioneer new



The foundation course on neuroimaging will be chaired by Prof. Maria Argyropoulou from the Medical School at the University of Ioannina in Greece.

ones. Neuroimaging guides needles and catheters, providing safe paths for these instruments through the body to the diseased areas, minimising physical trauma to patients, reducing infection rates and shortening recovery time and hospital stays.

Neuroimaging is seen as having great potential in the early detection of debilitating brain diseases, even before common clinical symptoms occur.

“Alzheimer’s disease is an ideal example of the potential of neuroimaging in the early detection of a common and devastating brain disease, before the occurrence of clinical symptoms,” explained Prof. Argyropoulou. The clinical diagnosis of Alzheimer’s disease is based on CSF markers, such as $A\beta$ 1-42, t-tau and p-tau. However, these markers are not related to disease severity or progression. A variety of structural and functional MRI studies, and functional PET studies have clearly shown anatomical, functional and molecular brain changes before significant cognitive impairment, during the presymptomatic and preclinical stages. Anatomical markers include hippocampal atrophy, ventricular volume, whole-brain atrophy and diffusion-MR markers in the medial temporal white matter (parahippocampus and posterior cingulum) and hippocampus. Functional markers have been produced mainly by resting-state fMRI and connectivity studies. In addition, β -amyloid deposits can be used as a molecular imaging marker as they are measured by ^{11}C -PiB PET uptake. All these early indications are extremely important for the fast and optimal treatment of the disease. They may also indicate disease progression, but this has not yet been proven conclusively. So far, there have been promising, but isolated research results. Hopefully, in the near future large scale multi-centre longitudinal studies such as the ‘Alzheimer’s Disease Neuroimaging Initiative’ will prove the clinical merit of these biomarkers and most importantly come up with standardised tools and procedures in order to provide us with reliable neuroimaging protocols and new validated diagnostic and prognostic criteria for the disease.

The connection between neuroimaging and psychology remains a contentious topic among experts. Supporters of neuroimaging believe that there is some ‘systematic’ mapping from psychological function to brain function, which can be detected using neuroimaging. They believe that neuroimaging data can constrain cognitive theories in ways that cannot be addressed by behavioural experiments alone, and therefore they can be used to distinguish between competing psychological theories. Opponents argue that neuroimaging provides little evidence as to where a cognitive process is performed and has little relevance to how it is performed. They argue that neuroimaging provides descriptions of where, but not how the brain functions, an important factor for psychology.

“I believe that the truth lies somewhere between these two opinions. With our current technology we can detect brain activity, but in spatial and temporal scales which do not allow us to fully comprehend the inner mechanisms that produce it. We have taken only the first, but important steps towards understanding the human brain. The burgeoning field of connectomics is based on a more realistic brain representation, where neuronal populations of complex networks of cortical and subcortical areas interact with each other by both excitatory and inhibitory mechanisms. It shows that neuroimaging, like any other scientific area, is constantly evolving and ultimately it will prove its merits, even to the more conservative cognitive psychologists,” suggested Prof. Argyropoulou, outlining a means of finding a balance between the different approaches.

The foundation course on neuroimaging will consist of 18 lectures, giving an overview of all relevant aspects and will conclude with a self-assessment test.

E³ – European Excellence in Education

Interactive Teaching Sessions

Thursday, March 7, 14:00–15:30, Room B E³ 220: Lung cancer

A. Detection

S. Diederich; Düsseldorf/DE

B. Follow-up

F. Gleeson; Oxford/UK



Saturday, March 9, 08:30–10:00, Room A E³ 820a: Pitfalls in heart imaging

A. CT

G. Bastarrika; Pamplona/ES

B. MRI

M. Francone; Rome/IT



Thursday, March 7, 16:00–17:30, Room B E³ 320: Malignant pancreatic tumours

A. Solid tumours

W. Schima; Vienna/AT

B. Cystic tumours

G. Morana; Treviso/IT



Saturday, March 9, 10:30–12:00, Room A E³ 920a: Tips and tricks in chest imaging

A. Plain radiography

J. Cáceres; Barcelona/ES

B. CT

J. Vilar; Valencia/ES



Friday, March 8, 10:30–12:00, Room A E³ 520a: Pitfalls in abdominal imaging

A. Liver

V. Vilgrain; Clichy/FR

B. Pancreas and bile ducts

R. Manfredi; Verona/IT



Saturday, March 9, 16:00–17:30, Room A E³ 1120: Breast cancer

A. Detection

C.S. Balleyguier; Villejuif/FR

B. Follow-up

G. Forrai; Budapest/HU



Friday, March 8, 10:30–12:00, Room C E³ 520b: Pitfalls in head and neck imaging

A. Pitfalls in neck imaging

F.A. Pameijer; Utrecht/NL

B. Pitfalls in maxillofacial and skull base imaging

R. Hermans; Leuven/BE



Sunday, March 10, 08:30–10:00, Room A E³ 1220: Pitfalls in brain imaging

A. CT

L. Van den Hauwe; Brasschaat/BE

B. MRI

M. Essig; Erlangen/DE



Friday, March 8, 16:00–17:30, Room A E³ 720a: Neurological emergencies

A. Non-traumatic

C. Ozdoba; Berne/CH

B. Traumatic

M. Stajgis; Poznan/PL



Sunday, March 10, 14:00–15:30, Room A E³ 1420: Common and uncommon errors in plain film and CT imaging of the chest: how to improve your performance

D. Tack; Baudour/BE

N. Howarth; Chêne-Bougeries/CH



 = Interactive session with electronic voting/self assessment

E³ – European Excellence in Education

Interactive Teaching Sessions

Sunday, March 10, 16:00–17:30, Room A E³ 1520: Thoracic emergencies

A. Vascular

E. Castañer; Sabadell/ES

B. Pulmonary

C.M. Schaefer-Prokop; Amersfoort/NL



Monday, March 11, 10:30–12:00, Room B E³ 1720a: Pitfalls in pelvic imaging

A. Pitfalls in MRI of the pelvis

E. Sala; New York, NY/US

B. Pitfalls in pelvic ultrasound

K. Kinkel; Chêne-Bougeries/CH



Monday, March 11, 08:30–10:00, Room A E³ 1620: Acute abdominal inflammatory disorders

A. Colitis and enterocolitis

D.J.M. Tolan; Leeds/UK

B. Liver and bile ducts

C.D. Becker; Geneva/CH



Monday, March 11, 10:30–12:00, Room A E³ 1720b: Musculoskeletal emergencies

A. Axial skeleton

E. Llopis; Valencia/ES

B. Peripheral skeleton

V.N. Cassar-Pullicino; Oswestry/UK



= Interactive session with electronic voting/self assessment

ESOR ASKLEPIOS Course on Imaging Biomarkers



Wednesday, March 6,
08:15–18:30

The second ESOR Course on Imaging Biomarkers is back due to popular demand and is again taking place in Vienna, on the eve of the European Congress of Radiology (ECR). The aim is to familiarise fourth and fifth year radiology residents and board certified radiologists with cutting-edge clinical imaging technology. The one-day course addresses the definition and development of biomarkers, the standardisation and validation of imaging biomarkers, and the field of parametrics. It will also cover diffusion-weighted and perfusion-weighted imaging biomarkers in research, and their introduction into clinical use, as well as measurements and biases in imaging biomarker evaluation. A unique group of European faculty members, well-known for their experience in novel imaging biomarkers, will offer top quality didactic lectures followed by clinical impact discussions in small groups.

Learning objectives:

- To understand the principles of biomarkers and the need to standardise image acquisition, processing and modelling
- To identify the different biomarkers that are used in research and clinical areas
- To recognise how diffusion-weighted and perfusion-weighted image acquisitions influence measurements
- To differentiate the biases that may influence results



Moderators: L. Martí-Bonmatí; Valencia/ES
C. Matos; Brussels/BE

08:15–08:45 Registration

08:45–09:00 Welcome and introduction

09:00–09:30 Biomarkers: definition and development

L. Martí-Bonmatí; Valencia/ES

09:30–10:00 Imaging biomarkers: standardisation and validation

B. Van Beers; Clichy/FR

10:00–10:30 Parametric imaging biomarkers in research/clinical use

S. Trattnig; Vienna/AT

10:30–10:50 Coffee break

10:50–13:00 Clinical impact discussion

13:00–14:00 Lunch break

14:00–14:30 Diffusion-weighted imaging biomarkers in research/clinical use

D.M. Koh; Sutton/UK

14:30–15:00 Perfusion-weighted imaging biomarkers in research/clinical use

A. Padhani; Northwood/UK

15:00–15:30 Measurements and biases in imaging biomarkers evaluation

J.-P. Vallée; Geneva/CH

15:30–15:50 Coffee break

15:50–18:00 Clinical impact discussion

18:00 Conclusions

18:15 Certificate of attendance



Accompanying
Sessions



Accompanying Sessions

Thursday, March 7 to Sunday, March 10

Novel technology that shapes radiology: EIBIR presents IMAGINE Workshop

Coordinator: M. de Bruijne; Rotterdam/NL

Thursday, March 7, 16:00–17:30, Room Z

**ESR Radiation Protection Session
Security scanners at airports: are they safe?**

Moderators: J. Damilakis; Iraklion/GR
P. Vock; Berne/CH

- **X-ray backscatter security scanners: principles, performance and potential health risks**
J. Damilakis; Iraklion/GR
- **Cumulative low-level x-ray radiation exposure: is it harmful?**
P. Vock; Berne/CH
- **Security scanners using non-ionising radiation: current status and trends for development**
M. Kemp; Cambridge/UK

Friday, March 8, 08:30–10:00, Room B

6th Post-Processing Face-Off Session

Coordinators: H.-C. Becker; Munich/DE
A. Graser; Munich/DE

Friday, March 8, 08:30–10:00, Room N/O

EIBIR/EORTC (European Organisation for Research and Treatment of Cancer) Symposium

A radiologist with a ruler in his hand is a dangerous person: seeking standardisation in multicentre imaging trials

Moderators: P. Brader; Vienna/AT
Y. Liu; Brussels/BE

- **Introduction:
Who, what, why, outcome at the end of the symposium**
P. Brader; Vienna/AT
Y. Liu; Brussels/BE
- **Setting up clinical trials with functional imaging end-points: trials and tribulations**
N. deSouza; London/UK
- **Challenges, problems on key imaging techniques**
B. van Beers; Paris/FR
- **Advanced MR neuroimaging in multicentre trials: experience from the EORTC Brain Tumour Group**
M. Smits; Rotterdam/NL
- **Presentation of LUNG study: from the beginning until today**
U. Nestle; Freiburg/DE
- **Discussion, Questions and Answers**

EIBIR at ECR 2013

The European Institute for Biomedical Imaging Research (EIBIR) will present its activities and projects, including Euro-BioImaging, evidence-based radiology, as well as an outlook on the European research funding scheme Horizon 2020, in a series of sessions open to all ECR delegates.

Please check the ECR 2013 online preliminary programme as well as www.eibir.org for updates.

Accompanying Sessions

Friday, March 8, 14:00–15:30, Room Q

ESOR Session

Fostering future researchers

Moderators: N. Gourtsoyiannis; Athens/GR
G.P. Krestin; Rotterdam/NL

During this session, the European School of Radiology (ESOR) will give participants an insight into the variety of its training programmes and opportunities. Crucial and evolving obstacles to research training in radiology will be put forward for discussion.

- **Introduction**
G.P. Krestin; Rotterdam/NL
- **ESOR in action 2013**
N. Gourtsoyiannis; Athens/GR
- **Research training for residents**
L. Martí-Bonmatí; Valencia/ES
- **PhD in residency programmes**
S. Trattinig; Vienna/AT
- **Preparing research trials**
R. Beets-Tan; Maastricht/NL
- **Awards**
During the session, scholars and fellows will be awarded certificates for successfully completing the 2012 ESOR Scholarship and Fellowship Programmes.

Saturday, March 9, 10:30–12:00, Room L/M

Standards and Audit Session

Assessment of radiologists' professional performance



Moderator: E.J. Adam; London/UK

- **Radiologists' performance: assessment using peer review**
G. Boland; Wellesley, MA/US
- **Radiologists' individual performance: use of standardised test images**
A.G. Gale; Loughborough/UK
- **Radiologists' performance: referrers' view**
J.M.L. Bosmans; Gent/BE

Saturday, March 9, 14:00–15:30, Room A

Image Interpretation Quiz: Radiology is global

Moderator: D. Vorwerk; Ingolstadt/DE

Sunday, March 10, 10:30–12:00, Room Q

Radiology Trainees Forum

RTF Highlighted Lectures

Moderators: D. Bulja; Sarajevo/BA
V.H. Koen; Harleem/NL

- **Emergency radiology management in patients with polytrauma**
U. Linsenmaier; Munich/DE
- **Imaging of non-traumatic intracranial haemorrhage**
Z. Merhem; Sarajevo/BA
- **Case-based learning in radiology**
P. Pokieser; Vienna/AT

Sunday, March 10, 13:00–14:00, Room A

Junior Image Interpretation Quiz: Golden Eye

Moderator: A. Alguersuari; Sabadell/ES
Co-Moderator: E. Belmonte; Barcelona/ES

Panellists:

G. Gherarducci; Pisa/IT
C. Sayer; Brighton/UK
C.M. Sommer; Heidelberg/DE
L. Tzarouchi; Ioannina/GR
A. Vanrossomme; Brussels/BE



= Interactive session with electronic voting/self assessment

Accompanying Sessions

Monday, March 11, 08:30–10:00, Room Z

Joint Session of the ESR and EFSUMB

*(European Federation of Societies for
Ultrasound in Medicine and Biology)*

**Advances in diagnostic ultrasound:
better results through cooperation**

Moderators: L.E. Derchi; Genoa/IT
F. Piscaglia; Bologna/IT

- **Introducing the EFSUMB:
the world's largest ultrasound society**
N. Gritzmann; Vienna/AT
- **ESR/EFSUMB collaboration:
a newly established platform for joint development of
ultrasound in radiology and clinical specialties**
L.E. Derchi; Genoa/IT
- **Image fusion and intervention**
T. Lorentzen; Herlev/DK
- **The EFSUMB non-liver CEUS guidelines**
F. Piscaglia; Bologna/IT
- **The EFSUMB/WFUMB liver-CEUS guidelines**
M. Claudon; Vandœuvre-les-Nancy/FR

MIR@ECR 2013

Saturday, March 9, 13:00–17:30, Room Q

After its great success at ECR 2012, MIR (Management in Radiology), a subcommittee of the ESR Professional Organisation Committee, will again coordinate a session on core managerial issues as well as supportive methods and techniques.

Session 1: Innovation management and the future of radiology and radiologists

Chairmen: Yves Menu; Paris/FR
Peter Mildenerger; Mainz/DE

13:00	Welcome by the chairs
13:10	Imaging innovation and the future practice of radiology Bruce Hillman; Charlottesville, VA/US
13:40	Resident training: preparing young radiologists for the future Birgit Ertl-Wagner; Munich/DE
13:45	Research, EIBIR, HTA Luis Donoso; Barcelona/ES
13:50	Health technology assessment: can we show that radiology is value for money? Jane Adam; London/UK
13:55	Leadership and personal development Yves Menu; Paris/FR
14:00	New imaging methods Moshe Graif; Tel Aviv/IL
14:05	RTF representative N.N.
14:10	Debate on innovation management and requirements of radiology

14:45–15:15 **Coffee Break**

Session 2: Radiology in modern times: challenges by telemedicine, eHealth, appropriateness and safety

Chairmen: Guy Frija; Paris/FR
Jan Schillebeeckx; Bonheiden/BE

15:15	The radiologist's perspective: report on the development of an ESR White Paper for Teleradiology Eric Ranschaert; s'Hertogenbosch/NL
15:35	The requirements of citizens and the role of patients using telemedicine Speaker from EC Sanco, t.b.a.
15:55	Imaging referral guidelines in Europe: impetus, innovations and initiatives Denis Remedios; Harrow/UK
16:15	Factors affecting safety of patients: workload, reporting speed, etc. Richard FitzGerald; Wolverhampton/UK
16:35	Evidence Based Radiology: The math of decision in radiology Utku Senol; Antalya/TR
16:55	Discussion
17:15	Closing remarks





Plenary Sessions

Thursday, March 7, 17:45–19:15, Room A

Opening Ceremony

Presentation of Honorary Members

Opening Lecture

Promises and facts of liver-directed gene therapy

Jesús Prieto; Pamplona/ES

Friday, March 8, 12:15–13:15, Room A

Gold Medal Awards

Josef Lissner Honorary Lecture

MR-guided focused ultrasound:
a new string to the radiologist's bow

Carlo Catalano; Rome/IT

Saturday, March 9, 12:15–12:45, Room A

Wilhelm Conrad Röntgen Honorary Lecture

Interventional oncology:
the era of molecular targeted therapy

Jean-François Geschwind; Baltimore, MD/US

Sunday, March 10, 12:15–12:45, Room A

Santiago Ramón y Cajal Honorary Lecture

Research and science:
from individuals to societies – the Ramón y Cajal background

Luis Martí-Bonmatí; Valencia/ES



EPOS™

Electronic Presentation Online System



ECR 2013 Abstract Submission
for electronic exhibits (EPOS™)
Open now – closes December 31, 2012
www.myESR.org/epos_submission

Browse through thousands
of electronic posters from
ECR 2003–2012 and other congresses
www.myESR.org/epos

TRADEMARK OF

ESR
European Society of Radiology

EPOS Discussions

To enhance interaction, discussions on hot topics in radiology have been arranged, where authors of the selected and best-scored posters in each field will discuss them with a moderator.

All discussions take place in the EPOS⁺ Area in Foyer A (2nd level) and ECR delegates are welcome to join, listen, and discuss with the experts. The discussion rounds will be:

Friday, March 8, 10:00–10:30

Imaging of the scrotum: why considering MR?

Moderator: Lorenzo E. Derchi; Genoa/IT

Friday, March 8, 12:30–13:00

Paediatric neuroimaging

Moderators: Andrea Rossi; Genoa/IT

Friday, March 8, 15:30–16:00

Plaque imaging and myocardial characterisation

Moderator: Valentin Sinitsyn; Moscow/RU

Saturday, March 9, 10:00–10:30

CT and MRI diagnosis of focal liver masses: when to use what?

Moderator: Pablo Ros; Cleveland,OH/US

Saturday, March 9, 15:30–16:00

Paediatric chest and heart: state of the art imaging of the young patient

Moderator: Rick R. van Rijn; Amsterdam/NL

Sunday, March 10, 12:30–13:00

**Vascular imaging: CT, MR – or something completely different?
Challenges in imaging peripheral artery occlusive disease**

Moderator: Christian Loewe; Vienna/AT

RISING STARS

Students, Residents in Radiology
and Radiographers in Training



European Society of Radiology

Free ECR Student Registration

Students and radiographers-in-training under the age of 30, without any academic degree, can register for free.

Student Sessions

The submitting authors of the best 20 abstracts will be invited to the ECR to present their work, with their accommodation and travel expenses paid by the European Society of Radiology.

Student Hands-On Workshops

Student workshops on ultrasound, for beginners and advanced participants. Practical training made easy.

Three Basic Sessions

Renowned professors from all over Europe give basic lectures on neuroradiology, cardiac imaging and interventional radiology.

Find more information on myESR.org/RisingStars and become a RisingStar on Facebook: facebook.com/ESRRisingStars



Rising Stars at ECR

Basic Sessions

Special focus sessions suitable for students, residents, radiographers and radiographers-in-training

Friday, March 8, 8:30–10:00 Basic Session on Cardiac Radiology

F. Francone; Rome/IT
A. Madureira; Porto/PT
U.J. Schoepf; Charleston, SC/US

Friday, March 8, 10:30–12:00 Basic Session on Neuroradiology

N.N.
N.N.
N.N.

Sunday, March 10, 08:30–10:00 Basic Session on Interventional Radiology

B. Ganai; Newcastle/UK
M. van den Bosch; Utrecht/NL
N.N.

Student Sessions

Students will present their work

Friday, March 8, 14:00–15:30 Rising Stars Student Session 1

Friday, March 8, 16:00–17:30 Rising Stars Student Session 2

Saturday, March 9, 8:30–10:00 Rising Stars Student Session 3

Radiographers-in-training will present their work

Saturday, March 9, 10:30–12:00 Rising Stars Student Session 4

Sunday, March 10, 14:00–15:30 Final Rising Stars Student Session

The best student presenter will receive an award from the ESR.

Hands-on workshops for students

After last year's success, hands-on workshops exclusively for students will again be held at ECR 2013.

An expert team of tutors will lead the students through the workshops, which will include six different workstations to give every participant the chance to familiarise themselves with the wide range of possibilities with ultrasound.

- Workshop 1: Friday, March 8, 10:30–12:30
- Workshop 2: Friday, March 8, 14:00–16:00
- Workshop 3: Saturday, March 9, 16:00–18:00
- Workshop Advanced, Sunday, March 10, 15:00–17:00

Online registration starts in January and will be announced on the website and in the Rising Stars newsletter.





Update Your Skills (Practical Courses)

The practical courses are the most practical teaching sessions available at the ECR. The workshops provide interactive demonstrations and opportunities for hands-on experience, usually preceded by a 90-minute lecture programme. Held in smaller groups than most other courses, these sessions enable participants to pick up practical experience of certain equipment and procedures, with expert guidance. Depending on the topic, workstations, technical equipment and life models are provided.

The 'Update Your Skills (Practical Courses)' are an extremely valuable way to consolidate theoretical knowledge and discover some practical pointers.

They are usually repeated three to four times over three consecutive days. The number of participants is restricted to a manageable amount to encourage successful learning and to enable discussion of individual requests. Participants need to register in advance and have to pay a fee of €50.



Patients

A Step Closer

a total solution helps to shorten distance between patient diagnosis and treatment.

Medical Imaging Center

Diagnosis



MagSense 360

0.36 Tesla Permanent Magnetic Resonance Imaging System, innovative InScan technology is a breakthrough in OPEN MRI

DigiEye Series

DigiEye 560 U-arm and DigiEye 760 Ceiling Suspending Series, fulfill all kinds of customer requirements

Cloud in-Sight

Mindray AnyCare Remote Diagnose System connects you and Mindray cloud service center, provides you with value-added services and you can see the scanning procedure in anywhere.

Update Your Skills (Practical Courses)

How to biopsy with US guidance

Coordinator: G. Mostbeck; Vienna/AT
Speakers: J.-M. Correas; Paris/FR
 G. Mostbeck; Vienna/AT
 W. Pokieser; Vienna/AT
 L. Solbiati; Busto Arsizio/IT
Instructors: F. Deschamps; Villejuif/FR
 H. Kopf; Vienna/AT
 G. Mauri; Busto Arsizio/IT
 W. Pokieser; Vienna/AT
 H. Schuster; Vienna/AT

Registration:

The number of participants for each course is restricted to 25 (75 in total). Participants need to register in advance for the practical courses (www.myESR.org) as of August 31, 2012, and must pay a fee of €50. Important details, including the schedule for the subscribed courses, are indicated on the confirmation/invoice. Attendance at the lecture session (Room Z) is mandatory to participate in the pre-registered practical training courses.

Schedule:

Saturday, March 9

SK 826	08:30-10:00	Introductory Lectures
SK 926	10:30-12:00	Practical Training Course
SK 1026	14:00-15:30	Practical Training Course

Sunday, March 10

SK 1326	10:30-12:00	Practical Training Course
---------	-------------	---------------------------

Image-Guided Tumour Ablation: How to do it

Coordinators: D.J. Breen; Southampton/UK,
 M.H. Fuchsjäger; Graz/AT
Speakers: **Liver Ablation**
 D.J. Breen; Southampton/UK
 L. Crocetti; Pisa/IT
 T. Helmberger; Munich/DE
 P.L. Pereira; Heilbronn/DE
Breast Ablation
 B. Brkljacic; Zagreb/HR
 E. Cossu; Rome/IT
 M.H. Fuchsjäger; Graz/AT

Instructors **Liver Ablation**

D. Alcorn; Glasgow/UK, P. Almeida; Coimbra/PT,
 E.M. Anderson; Oxford/UK, R. Bale;
 Innsbruck/AT, D.J. Breen; Southampton/UK,
 X. Buy; Strasbourg/FR, R. Illing; London/UK,
 J. Tacke; Passau/DE

Breast Ablation

E. Bonanno; Rome/IT, E. Cossu; Rome/IT,
 M.H. Fuchsjäger; Graz/AT, G. Ivanac; Zagreb/HR,
 A. Malich; Nordhausen/DE

Registration:

The number of participants for each course is restricted to 20. Participants need to register in advance for the practical courses (www.myESR.org) as of August 31, 2012, and must pay a fee of €50. Important details, including the schedule for the subscribed courses, are indicated on the confirmation/invoice. Attendance at the lecture sessions (Room Z) on Friday morning is mandatory to participate in the pre-registered practical training courses.

Schedule:

Friday, March 8

SK 427	08:30–10:00	Introductory lectures (liver ablation)
SK 527	10:30–12:00	Introductory lectures (breast ablation)
SK 627	14:00–15:30	Liver ablation
SK 727	16:00–17:30	Breast ablation

Saturday, March 9

SK 927	10:30–12:00	Liver ablation
SK 1027	14:00–15:30	Breast ablation
SK 1127	16:00–17:30	Liver ablation

Sunday, March 10

SK 1327	10:30–12:00	Breast ablation
SK 1427	14:00–15:30	Liver ablation
SK 1527	16:00–17:30	Breast ablation





Satellite *Symposia*

Industrial Satellite Symposia are organised by various international companies. These sessions are a chance to get an industry perspective on various scientific subjects, including technical updates, emerging trends and future innovations. The symposia vary in length from one hour to 90 minutes, with the number of speakers also differing between companies and subjects. In some of the Lunch Satellite Symposia, lunchboxes will be provided.

Attendance at Satellite Symposia will be certified, on condition that the relevant evaluation form is completed and returned to the organising company.

Places are allocated on a first-come, first-served basis.

Satellite Symposia organised by

Bayer HealthCare, Bracco, GE Healthcare,
GE Healthcare Nycomed, Guerbet, Hologic,
Philips Healthcare, Samsung, Siemens Healthcare,
SuperSonic Imagine, Toshiba



SIEMENS



A91MR-9117-A1-7600 | © 01.2012, Siemens AG

www.siemens.com/spectra

MAGNETOM Spectra

It's the key to 3T.

A system that offers unprecedented access to premium level magnetic resonance imaging?

The answer is MAGNETOM Spectra. It's the key to a new scope of image and healthcare quality for patients. It's the key to a new level of usability and diagnostic

confidence for physicians. And, it's the key to a new realm of business opportunities for radiologists.

If access is what you are looking for, then MAGNETOM Spectra is your key to 3T. www.siemens.com/spectra

Answers for life.

Satellite Symposia

Thursday, March 7, 10:30–11:30, Studio 2013 Satellite Symposium organised by Siemens Healthcare

Advanced multimodality breast image reading

Moderator: T. Hartley; Erlangen/DE

- **Place of digital breast tomosynthesis in diagnostic investigation of breast lesions: old and new paradigms**
C. Van Ongeval; Leuven/BE
- **Place of breast MRI in diagnostic investigation of breast lesions**
E. Wenkel; Erlangen/DE
- **Panel discussion**

Thursday, March 7, 12:30–13:30, Room G/H Satellite Symposium organised by SuperSonic Imagine

The benefits UltraFast™ imaging brings to ultrasound

Moderator: J. Souquet; Aix-en-Provence/FR

- **Advantages and limitations of ShearWave™ elastography for imaging prostate cancer and guiding biopsy**
P.S. Zoumpoulis; Athens/GR
- **Benefits of UltraFast™ Doppler in the clinical workflow**
G. Ivanac; Zagreb/HR
- **Experiences with the Aixplorer and ShearWave™ elastography for the staging of liver fibroses**
V. Vilgrain; Clichy/FR
- **Advances in breast imaging with ShearWave™ elastography**
F.K.W. Schäfer; Kiel/DE

Thursday, March 7, 12:30–13:30, Room I/K Satellite Symposium organised by Bayer HealthCare

New insight in breast cancer imaging

Moderator: J. Camps Herrero; Valencia/ES

- **Breast MRI for screening breast cancer, why, who and when?**
L. Umutlu; Essen/DE
- **Overtreatment due to breast MRI – a threat, a myth, or both?**
K. Kuhl; Aachen/DE
- **MIPA study: study design, goals, rollout**
F. Sardanelli; Milan/IT

Thursday, March 7, 12:00–13:30, Studio 2013 Satellite Symposium organised by Siemens Healthcare

Challenges in breast imaging

Moderator: J. Barkhausen; Lübeck/DE

- **3D automated breast ultrasound: accuracy and diagnostic potentials**
M.J.C.M. Rutten; s'Hertogenbosch/NL
- **High image quality with lower dose mammography**
D. Uhlenbrock; Dortmund/DE
- **Breast imaging from a pathologist's perspective**
A. Hartmann; Erlangen/DE
- **MR breast in clinical routine**
W.A. Kaiser; Jena/DE
- **Panel discussion**

Thursday, March 7, 14:00–15:30, Studio 2013 Satellite Symposium organised by Siemens Healthcare

Chances with digital breast tomosynthesis (DBT)

Moderator: T.H. Helbich; Vienna/AT

- **Physical challenges with digital breast tomosynthesis**
H. Bosmans; Leuven/BE
- **Experiences with digital breast tomosynthesis in screening**
S. Zachrisson; Malmö/SE
- **Value of tomosynthesis for the assessment of screen-detected abnormalities**
S.H. Heywang-Köbrunner; Munich/DE
- **Clinical experiences with digital breast tomosynthesis in follow up diagnostics**
F. Taşkın; Aydın/TR
- **The future of breast tomosynthesis**
T.H. Helbich; Vienna/AT
- **Panel discussion**

Friday, March 8, 12:30–13:30, Room D1 Satellite Symposium organised by Bayer HealthCare

Programme to be announced

Bracco. The Contrast Imaging Specialists.

Solutions for **Your** Practice and **Your** Patients

Don't miss the Bracco symposia at ECR:
Stay tuned...more to come!



Portfolio



Science



Services



- Bracco is focused on contrast agents and contrast delivery systems, providing a wide portfolio of products and services for your practice and your patients

- Our offering can be tailored to fit the unique needs of your practice in CT, Cardiac Cath, Ultrasound, MRI and Interventional/Diagnostic Radiology

Committed to Science,
Committed to You.™

www.braccoimaging.com



LIFE FROM INSIDE

Satellite Symposia

Friday, March 8, 12:30–13:30, Room G/H Satellite Symposium organised by Bracco

Programme to be announced

Friday, March 8, 12:30–13:30, Room I/K Satellite Symposium organised by GE Healthcare

Evidence of avant-garde MR

Moderator: D. Pickuth; Saarbrücken/DE

- **Sharing GE MR vision and future**
R. Hausmann; Waukesha, WI/US
- **Getting closer to metallic implants**
M. Padrón; Madrid/ES
- **Streamlining workflow through integrated reviewing and post-processing**
C. Dromain; Villejuif/FR

Friday, March 8, 12:30–13:30, Room L/M Satellite Symposium organised by Siemens Healthcare

Pioneering futures in ultrasound

Moderator: P.S. Sidhu; London/UK

- **Strain imaging in the breast – with a focus on the new VTIQ technology**
C.S. Balleyguier; Villejuif/FR
- **Ultrasound study of the pancreas with CPS (CEUS) and ARFI (elastography): improving the diagnosis of pancreatic tumours**
M. D'Onofrio; Verona/IT
- **Image fusion: is this something we need?**
A. Nilsson; Uppsala/SE

Saturday, March 9, 12:30–13:30, Room D1 Satellite Symposium jointly organised by Siemens Healthcare and Bayer HealthCare

Synergies in CT for better patient care: cutting edge CT and optimised contrast media application

- **Protocol optimisation in cutting edge CT**
A.H. Mahnken; Aachen/DE

Saturday, March 9, 12:30–13:30, Room E1 Satellite Symposium organised by Bracco

Personalised CT imaging: a patient centric approach

Moderator: M. Prokop; Nijmegen/NL

- **Tailoring CT exams: when and how?**
C. Loewe; Vienna/AT
- **How to balance radiation dose and diagnostic yield?**
H.-C. Becker; Munich/DE
- **What if the patient is at risk?**
M.-F. Bellin; Le Kremlin-Bicêtre/FR

Saturday, March 9, 12:30–13:30, Room E2 Satellite Symposium organised by Siemens Healthcare

Leading. With MAGNETOM.

- Welcome
- Leading. With MAGNETOM.
- **Leading in efficiency: productivity up, costs down**
- **Leading in excellence: image quality meets advanced applications**
- **Leading in research: where no MRI has gone before**
- **Leading in patient care: the relevance of MRI in advancing human health**

Guerbet's men and women **are committed** to offering health professionals **contrast agents**, medical devices and **innovative** solutions indispensable to diagnostic and interventional imaging **to improve patients' prognosis and quality of life.**

Passionate about our business, we strive day in, day out to combine **performance, quality and sustainable development.**



Guerbet | 
Contrast for Life

Satellite Symposia

Saturday, March 9, 12:30–13:30, Room F2 Satellite Symposium organised by GE Healthcare

Developing innovative breast care solutions to improve clinical confidence

Moderator: R.C. Sigal; Velizy/FR

- **Case clarification with digital breast tomosynthesis versus mammography special views**
A. Stork; Düsseldorf/DE
- **Contrast enhanced spectral mammography versus breast MRI: clinical experience**
E.M. Fallenberg; Berlin/DE
- **New frontiers of advanced breast ultrasound**
A. Munding; Osnabrück/DE
- **Role of MR DWI in breast cancer: correlation with histopathology**
V. Martinez de Vega; Madrid/ES

Saturday, March 9, 12:30–13:30, Room G/H Satellite Symposium organised by Guerbet

Combining high tolerance with high diagnostic performance in contrast enhanced MRI

Moderator: S.O. Schönberg; Mannheim/DE

- **Introduction**
S.O. Schönberg; Mannheim/DE
- **Tolerance of MR contrast agent in at risk patients**
G. Deray; Paris/FR
- **Optimal gadolinium concentration with high diagnostic accuracy**
M. Lell; Erlangen/DE
- **MRI follow-up after kidney cancer cryoablation**
E. de Kerviler; Paris/FR
- **Questions and conclusion**
S.O. Schönberg; Mannheim/DE

Saturday, March 9, 12:30–13:30, Room I/K Satellite Symposium organised by Philips Healthcare

Programme to be announced

Saturday, March 9, 12:30–13:30, Room L/M Satellite Symposium organised by Philips Healthcare

Single-shot spectral mammography in clinical use

- **Breast density measurement with MicroDose mammography spectral imaging in clinical practice and study results**
- **Lesion evaluation with MicroDose mammography spectral imaging in clinical practice**
- **Extensive clinical research program on lesion evaluation with MicroDose mammography spectral imaging**
- **Questions and answers**

Saturday, March 9, 14:00–15:30, Room C Satellite Symposium organised by Hologic

Programme to be announced

Saturday, March 9, 14:00–15:30, Room E1 Satellite Symposium organised by Toshiba

Clinical advances in multimodality applications – new perspectives in perfusion and fusion imaging

Moderator: B. Hamm; Berlin/DE

- **The impact of smart fusion on the diagnostic outcome**
T. Fischer; Berlin/DE
- **CEUS of the kidney: from new technology to patient management improvement**
J.-M. Correas; Paris/FR
- **Liver and pancreatic perfusion using Aquilion ONE vision**
J. Hermans; Nijmegen/NL



Imaging 2.0 – Transforming care, together.

At Philips, we recognize that radiology is the cornerstone of diagnosis and treatment. And that clinical integration and collaboration are key to more personal care, better patient outcomes, and lower costs. Imaging 2.0 signals our endless quest to raise the bar on clinical excellence – by working with you to develop innovations that enable you to collaborate freely, diagnose confidently, and care passionately. Together, we will continue to spark a revolution in imaging science with advanced technologies designed to deliver greater collaboration and integration, increased patient focus, and improved economic value. Learn more at www.philips.com/imaging2.0

PHILIPS

Satellite Symposia

Saturday, March 9, 14:00–15:30, Room F2 Satellite Symposium organised by Toshiba

Multimodal imaging for neuro applications

Moderator: P.A. Brouwer; Leiden/NL

- **Neuro applications using Aquilion ONE**
P.A. Brouwer; Leiden/NL
- **Advanced neuroimaging at 3T with a 32ch head coil**
T. Okada; Kyoto/JP
- **Neurological interventions using Toshiba Infinix**
H. Fransen; Gent/BE

Saturday, March 9, 14:00–15:30, Room L/M Satellite Symposium organised by GE Healthcare Nycomed

CT and MR diagnostic capabilities and safety:
new tendency

Moderators: V.N. Kornienko; Moscow/RU
I.E. Tyurin; Moscow/RU

- **Low-dose and low-iodine CT coronary angiography**
V.E. Sinityn; Moscow/RU
- **MRI safety – actual issues**
E. Mershina; Moscow/RU
- **Brain – heart – axis**
R. Rienmüller; Graz/AT
- **Russian radiology best practice – clinical experience sharing**
A. Lukianchenko; Moscow/RU
- **GE Healthcare innovative solutions for modern healthcare**
V.I. Grischenko; Moscow/RU

Sunday, March 10, 12:30–13:30, Room C Satellite Symposium organised by GE Healthcare

Patient care and image quality: at the forefront of CT
innovations and contrast media

Moderator: V.E. Sinityn; Moscow/RU

- **Iodinated contrast media in CT:
defining the key properties**
N.N.
- **Optimising image quality and patient care in cardiac CT**
D. Andreini; Milan/IT
- **Spectral imaging: clinical breakthrough in oncology**
P. Ardies; Malle/BE

Sunday, March 10, 12:30–13:30, Room G/H Satellite Symposium organised by Samsung

Programme to be announced

Sunday, March 10, 12:30–13:30, Room L/M Satellite Symposium organised by Philips Healthcare

Programme to be announced

Sunday, March 10, 12:30–13:30, Room N/O Satellite Symposium organised by Bracco

Cost-effectiveness and improvement of patient
management with contrast enhanced ultrasound (CEUS)

Moderator: G.H. Mostbeck; Vienna/AT

- **Implementation of CEUS in the daily practice of the
imaging center**
M. Wüstner; Trier/DE
- **CEUS in interventional radiology: clinical outcomes and
impact on patient management**
E.M. Jung; Regensburg/DE
- **Clinical and cost effectiveness of CEUS for liver imaging:
the NICE diagnostics guidance**
T. Hoare; Newcastle Upon Tyne/UK

Industry Hands-On Workshops

Intensive practical sessions organised directly by a particular company or commercial vendor. Classes are conducted on their own state-of-the-art workstations with expert technical support provided by company staff. Participants have the opportunity to learn from experts about using computers and medical devices in the field of radiology and gain first-hand knowledge. Industry Hands-on Workshops are fully CME accredited.

As a registered attendee for the ECR, participation is free of charge.

**Industry Hands-on Workshops
organised by**

Hologic, Siemens Healthcare



zero-footprint



massively scalable

Zero-footprint web viewer for DICOM and Non-DICOM data

iNtuitionEMV is a versatile full-spectrum multi-modality medical viewer which delivers zero-footprint, browser-based, vendor-neutral access to images and other patient data throughout the enterprise. By leveraging TeraRecon's award-winning technology and extensive enterprise image management expertise, the full spectrum of tools are available from a single server.

- **Zero-Footprint**
- **Vendor Neutral**
- **Massively Scalable**
- **Platform and Browser Neutral**
- **VMWare Ready**



Key features include:

- Auto-query/retrieve of prior studies from the archive.
- Bandwidth analyzer for optional compression.
- The ability to download and anonymize directly from the local client.
- Capability to render 40,000 images with only 1U of server hardware.



Industry Hands-On Workshops

Thursday, March 7 to Sunday, March 10

Industry Hands-On Workshops organised by Siemens Healthcare

Clinical experts will demonstrate how to better use and further benefit from our solutions for advanced multimodality reading. A special focus will be placed on the imaging software *syngo.via*. Benefit from experts' experience and receive an update on state-of-the-art techniques in computed tomography, magnetic resonance, molecular imaging and breast imaging. As a registered attendee for ECR 2013 these workshops are free of charge.

Thursday, March 7:

- 14:00–15:30: **MRI breast reading and reporting**
W.A. Kaiser; Jena/DE
- 16:00–17:30: **Digital breast tomosynthesis**
J. Barkhausen; Lübeck/DE

Friday, March 8:

- 10:00–11:30: **CT Colonography**
T. Mang; Vienna/AT
- 12:00–13:30: **Digital breast tomosynthesis**
J. Barkhausen; Lübeck/DE
- 14:00–15:30: **Advanced orthopaedic hip and knee MRI**
R. Sutter; Zurich/CH
- 16:00–17:30: **CT oncology**
A. Graser; Munich/DE

Saturday, March 9:

- 10:00–11:30: **Multimodal prostate MRI**
M. Röthke; Heidelberg/DE
- 12:00–13:30: **MRI and CT for imaging acute stroke**
P. Schramm; Göttingen/DE
- 14:00–15:30: **Advanced reading in PET-CT**
C. von Gall; Erlangen/DE
- 16:00–17:30: **Digital breast tomosynthesis**
J. Barkhausen; Lübeck/DE

Sunday, March 10:

- 10:00–11:30: **CT Dual Energy**
M. Kerl; Frankfurt/DE
- 12:00–13:30: **Advanced reading in PET-CT**
C. von Gall; Erlangen/DE
- 14:00–15:30: **CT cardiac**
R. Bauer; Frankfurt/DE
- 16:00–17:30: **MRI breast reading and reporting**
W.A. Kaiser; Jena/DE

Industry Hands-On Workshops organised by Hologic

Programme to be announced

Prigara

George S. Bisset III



Houston, TX/United States
Honorary Member

George Simpson Bisset III is chief of paediatric radiology at Texas Children's Hospital and Edward B. Singleton Professor of Radiology at Baylor College of Medicine. Bisset studied as an undergraduate at the University of Tennessee, before later receiving his medical degree from the University of South Florida, College of Medicine. He completed his residency in radiology and paediatrics at the University of Cincinnati Medical Center and the Cincinnati Children's Hospital Medical Center.

Bisset has served on the Radiological Society of North America's Board of Directors since 2004 and is the immediate past president of the RSNA. He has published more than 125 peer-reviewed articles, as well as a number of book chapters. At ECR 2013, he will be awarded **Honorary Membership** of the European Society of Radiology.

Tarek A. El-Diasty



Mansoura, Egypt
Honorary Member

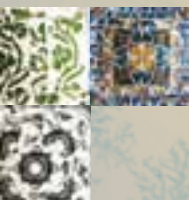
Tarek El-Diasty is professor of radiology and chairman of the radiology department at the Urology and Nephrology Centre, Mansoura University, Egypt. He received his medical degree from the Mansoura Faculty of Medicine in 1979 and completed his internship and residency at the same institution. He then received his PhD in 1990. El-Diasty's work has focused on the field of uro-radiology and the introduction of uro-interventional procedures into Egyptian healthcare. His research has concentrated on the imaging of urinary bladder cancer, renal transplantation and interventional uro-radiology. He has authored more than 100 peer-reviewed articles and six book chapters. He is involved in strengthening international cooperation and was chairman of the 13th Symposium of the European Society of Urogenital Radiology, which took place in Cairo, Egypt in 2006. At ECR 2013 he will be awarded **Honorary Membership** of the European Society of Radiology.

Gary M. Glazer†



Stanford, CA/United States
Honorary Member

Gary M. Glazer was the Emma Pfeiffer Merner Professor of the Medical Sciences and chairman of the department of radiology at the Stanford University School of Medicine, California, U.S. Glazer contributed greatly to the advancement of imaging, especially in the field of oncology. He received his degree in medicine from Case Western University, Cleveland, Ohio in 1976 before completing his residency at the University of California, San Francisco. Over the course of his career Glazer published more than 155 peer-reviewed scientific articles and three books. He received Gold Medals from both the Radiological Society of North America and the Association of University Radiologists. As chairman of the department of radiology at Stanford, Glazer was responsible for building one of the most innovative radiology centres in the United States. Gary Glazer passed away in October 2011 after a long battle with prostate cancer. At ECR 2013, the European Society of Radiology will posthumously award Glazer **Honorary Membership**.



Starries

to be honoured at ECR 2013

José Cáceres



Barcelona, Spain
Gold Medallist

José Cáceres is professor emeritus of radiology at H.G.U. Vall d'Hebron Universidad Autonoma, Barcelona, Spain. He also served as head of diagnostic radiology at the same institution prior to his retirement in 2010. Cáceres studied medicine at the University of Seville and graduated in 1965. He then travelled to the United States and completed his residency and a fellowship at the University of Cincinnati. He was later appointed assistant professor of radiology at the University of Kentucky. In 1971, Cáceres returned to Spain and worked in Madrid, Valladolid and Barcelona. He has published extensively and is a member of many scientific societies. He is also an active and long-time member of the European Society of Radiology and at ECR 2013 he will receive the society's **Gold Medal**.

Johannes Lammer



Vienna, Austria
Gold Medallist

Johannes Lammer is vice-chairman of the department of radiology and director of interventional radiology at the Medical University of Vienna, Austria. He earned his medical degree at the University of Vienna Medical School and completed his residency at Karl Franzens University Graz, Austria. He has held visiting fellowships at several American institutions including the University Hospital of Pennsylvania, Philadelphia; MD Anderson Cancer Center, University of Texas; and the University of California in San Francisco, U.S. Lammer's scientific interests include CT/MR angiography of coronary and peripheral arteries; endovascular treatment of peripheral arteries, aortic aneurysms and dissections, carotid arteries; interventional treatment of HCC and liver metastases and biliary interventions. At ECR 2013 he will receive the **Gold Medal** of the European Society of Radiology.

Maximilian F. Reiser



Munich, Germany
Gold Medallist

Maximilian F. Reiser is professor of radiology and chairman of the department of clinical radiology at Ludwig Maximilians University of Munich, where he is also dean of the medical faculty. Reiser received his medical degree from the same institution he now heads and completed his residency at the diagnostic radiology department of the Technical University of Munich. He has previously served as president of the European Society of Radiology (2010–11), the German Radiological Society (2005–07) and the European Society of Musculoskeletal Radiology (1995–96). At ECR 2013 will receive the **Gold Medal** of the European Society of Radiology.

Promise

Jesús Prieto

Pamplona, Spain
Opening Lecturer



Jesús Prieto is professor of medicine and director of the department of hepatology and gene therapy at the Centre for Applied Medical Research at the University of Navarra, Spain. He also serves as a consultant internist at the University of Navarra Clinic. He is a pioneer of gene therapy in Spain and he contributed towards unravelling the pathogenesis of liver biliary cirrhosis. He also identified cardiotrophin-1 as a molecule endowed with potent hepatoprotective properties which constitutes a natural defence of the liver against apoptosis and holds considerable promise for the treatment of patients with acute severe liver damage. Prieto has authored over 300 journal articles, which have appeared in publications such as *The New England Journal of Medicine*, *Journal of Experimental Medicine*, and the *Journal of Clinical Investigation* to name just a few. At ECR 2013 he will deliver the **Opening Lecture 'Promises and facts of liver-directed gene therapy.'**



italaries

to be honoured at ECR 2013

Carlo Catalano



Rome, Italy
Honorary Lecturer

Carlo Catalano is professor of radiology and head of the department of diagnostic radiology at the Sapienza University of Rome Hospital. He received his medical degree from the Sapienza University of Rome and later completed his residency at the University of L'Aquila. He has authored or co-authored six books and more than 170 scientific papers. His research interests include cardiovascular imaging, interventional radiology, CT imaging and MR imaging. He has delivered more than 150 lectures at international and national conferences and at ECR 2013 he will deliver the **Josef Lissner Honorary Lecture** entitled, 'MR-guided focused ultrasound: a new string to the radiologist's bow'



Jean-François Geschwind

Baltimore, MD/United States
Honorary Lecturer

Jeff Geschwind is director of cardiovascular and interventional radiology research at the Johns Hopkins University School of Medicine. Geschwind, a native of France, received his medical degree from the Boston University School of Medicine in 1991. He then completed his residency in diagnostic radiology at the University of California, San Francisco in 1996. He completed his training in cardiovascular and interventional radiology at Johns Hopkins and became assistant professor in 1998. Geschwind's research has focused on hepatic cancer and other malignancies and he is responsible for the creation of a dedicated centre for oncologic interventions at Johns Hopkins. He has authored or co-authored more than 250 scientific articles and abstracts on interventional oncology. At ECR 2013 he will deliver the **Wilhelm Conrad Röntgen Honorary Lecture** entitled, 'Interventional oncology: the era of molecular targeted therapy.'



Luis Martí-Bonmatí

Valencia, Spain
Honorary Lecturer

Luis Martí-Bonmatí is head of the MRI, CT and abdominal section of Doctor Peset University Hospital, Valencia and chief of radiology at Quirón Hospital, Valencia, Spain. His research interests include MR and CT of the liver, clinical applications of MRI, contrast agents, and image processing. He has authored 198 scientific articles listed in Pubmed and 52 book chapters. He has served as president of the European Society of Magnetic Resonance in Medicine and Biology, and the Spanish Radiological Society. He is currently chairman of the European Society of Radiology Research Committee. At ECR 2013 he will deliver the **Santiago Ramón y Cajal Honorary Lecture** entitled, 'Research and science: from individuals to societies – the Ramón y Cajal background.'



ESR Executive Council

(March 2012 – March 2013)

Gabriel P. Krestin, Rotterdam/NL	President
Guy Frija, Paris/FR	1st Vice-President
Lorenzo Bonomo, Rome/IT	2nd Vice-President
András Palkó, Szeged/HU	Past-President
José I. Bilbao, Pamplona/ES	Congress Committee Chairman
Valentin Sinitsyn, Moscow/RU	1st Vice-Chairman of the Congress Committee
Bernd Hamm, Berlin/DE	2nd Vice-Chairman of the Congress Committee
Nicholas Gourtsoyiannis, Athens/GR	ESOR Committee Chairman
Paul M. Parizel, Antwerp/BE	Publications Committee Chairman
Luis Martí-Bonmatí, Valencia/ES	Research Committee Chairman
Birgit Ertl-Wagner, Munich/DE	Education Committee Chairperson
Yves Menu, Paris/FR	Professional Organisation Committee Chairman
Luis Donoso, Barcelona/ES	National Societies Committee Chairman
Jim A. Reekers, Amsterdam/NL	Subspecialties and Allied Sciences Committee Chairman
Boris Brkljačić, Zagreb/HR	Finance and Internal Affairs Committee Chairman
Lorenzo E. Derchi, Genoa/IT	Communication and External Affairs Committee Chairman
Lorenzo Bonomo, Rome/IT	Strategic Review Committee Chairman
András Palkó, Szeged/HU	Nominations and Awards Committee Chairman
Peter Baierl, Vienna/AT	Executive Director



ECR 2013 Committees

CONGRESS COMMITTEE

Chairperson

(Congress President)

J.I. Bilbao; Pamplona/ES

1st Vice-Chairperson

(1st Congress Vice-President)

V. Sinitsyn; Moscow/RU

2nd Vice-Chairperson

(2nd Congress Vice-President)

B. Hamm; Berlin/DE

Ordinary Members

F. Caseiro-Alves; Coimbra/PT

K. Åhlström Riklund; Umea/SE

V. Vilgrain; Clichy/FR

M.I. Argyropoulou; Ioannina/GR

ESR President

G.P. Krestin; Rotterdam/NL

ESR Executive Director

P. Baierl; Vienna/AT

Ex-officio Members:

Chairperson of the Finance and Internal Affairs Committee

B. Brkljačić; Zagreb/HR

Chairperson of the Publications Committee

P. M. Parizel; Antwerp/BE

PROGRAMME PLANNING COMMITTEE

Postgraduate Educational Programme

Chairman:

B. Hamm; Berlin/DE

Members:

V.N. Cassar-Pullicino; Oswestry/UK

E. de Kerviler; Paris/FR

M.H. Fuchsjaeger; Graz/AT

H.-U. Kauczor; Heidelberg/DE

P.C. Maly Sundgren; Lund/SE

A. Rossi; Genoa/IT

S.A. Taylor; London/UK

A. Trojanowska; Lublin/PL

A. van der Lugt; Rotterdam/NL

Scientific Papers

Chairman:

F. Caseiro-Alves; Coimbra/PT

Members:

G. Forrai; Budapest/HU

M. Raissaki; Iraklion/GR

D. Tack; Baudour/BE

Scientific Exhibition (EPOS™)

Chairman:

K. Åhlström Riklund; Umea/SE

Members:

C. Ayuso; Barcelona/ES

E.J.R. van Beek; Edinburgh/UK

Categorical Courses

T. de Baère; Villejuif/FR

L.E. Derchi; Genoa/IT

C. Loewe; Vienna/AT

E³ – European Excellence in Education

Interactive Teaching Sessions

J. Vilar; Valencia/ES

Foundation Course

M.I. Argyropoulou; Ioannina/GR

e-Learning

D. Caramella; Pisa/IT

P. Pokieser; Vienna/AT

Cases of the Day

J.C. Vilanova; Girona/ES

Physics Programme

W.J.M. van der Putten; Galway/IE

Image Interpretation Quiz

D. Vorwerk; Ingolstadt/DE

Junior Image Interpretation Quiz

A. Alguersuari; Sabadell/ES

Evaluation

D. Weishaupt; Zurich/CH

Publications Committee Chairman (until March 2012)

A.K. Dixon; Cambridge/UK

ESR Subspecialties Committee Chairman

J.A. Reekers; Amsterdam/NL

ESR Education Committee Chairman (until March 2012)

É. Breatnach; Dublin/IE

ESR Professional Organisation Committee Chairman

Y. Menu; Paris/FR

ECR 2013 Committees

SCIENTIFIC SUBCOMMITTEES

Abdominal and Gastrointestinal

The ESR would like to thank ESGAR for their cooperation on this subcommittee

Chairmen:

B.J. Op de Beeck; Antwerp/BE
S. Romano; Naples/IT

Members:

D. Akata; Ankara/TR
C. Ayuso; Barcelona/ES
G. Brancatelli; Palermo/IT
D.J. Breen; Southampton/UK
D. Cano; Pamplona/ES
V. Cappendijk; 's Hertogenbosch/NL
L. Curvo-Semedo; Coimbra/PT
E. Danse; Brussels/BE
V.J. Goh; London/UK
S. Gourtsoyanni; London/UK
L. Guimaraes; Porto/PT
M. Hellström; Gothenburg/SE
C. Hoeffel; Reims/FR
G.G. Karmazanovsky; Moscow/RU
S. Leschka; St. Gallen/CH
O. Lucidarme; Paris/FR
M.M. Maher; Cork/IE
A. Maier; Vienna/AT
T. Mang; Vienna/AT
S. Phoa; Amsterdam/NL
S. Schmidt; Lausanne/CH
S. Stojanovic; Novi Sad/RS
C. Stroszczyński; Regensburg/DE
J. Votrubová; Prague/CZ

Breast

The ESR would like to thank EUSOBI for their cooperation on this subcommittee

Chairman:

H.M. Dobson; Glasgow/UK

Members:

C.S. Balleuguier; Villejuif/FR
P.A.T. Baltzer; Jena/DE
I. Leconte; Brussels/BE
M. Lesaru; Bucharest/RO
R.M. Mann; Nijmegen/NL
F. Pediconi; Rome/IT
K. Pinker-Domenig; Vienna/AT
M. Torres-Tabanera; Madrid/ES

Cardiac

The ESR would like to thank the ESCR for their cooperation on this subcommittee

Chairman:

M. Gardarsdottir; Reykjavik/IS

Members:

G. Bastarrika; Pamplona/ES
F. Cademartiri; Monastier di Treviso/IT
B. Graca; Coimbra/PT
K. Gruszczynska; Katowice/PL
D. Hahn; Würzburg/DE
S. Katsiloulis; Athens/GR
E. Mershina; Moscow/RU
C. Peebles; Southampton/UK
P.K. Vanhoenacker; Aalst/BE
R. Vliegthart; Groningen/NL
J. Vymazal; Prague/CZ
F. Wolf; Vienna/AT

Chest

The ESR would like to thank ESTI for their cooperation on this subcommittee

Chairman:

B. Ghaye; Brussels/BE

Members:

J. Biederer; Kiel/DE
E. Castañer; Sabadell/ES
R. Cesar; Ljubljana/SI
J.D. Dodd; Dublin/IE
N. Karabulut; Denizli/TR
A.P. Parkar; Bergen/NO
H. Prosch; Vienna/AT
M.-P. Revel; Paris/FR
E. Rizzo; Genolier/CH
N. Sverzellati; Parma/IT
E.J.R. van Beek; Edinburgh/UK
J.E. Wildberger; Maastricht/NL

Computer Applications

The ESR would like to thank EuroPACS for their cooperation on this subcommittee

Chairman:

E. Neri; Pisa/IT

Members:

U.W. Engelmann; Dossenheim/DE
B. Gibaud; Rennes/FR
M. Onu; Bucharest/RO
P. Sögner; Feldkirch/AT
Z. Tarján; Budapest/HU

Molecular Imaging and Contrast Media

Chairman:

N. Grenier; Bordeaux/FR

Members:

I. Carrió; Barcelona/ES
C.C. Cyran; Munich/DE
B. Elmståhl; Malmö/SE
F.A. Gallagher; Cambridge/UK
T. Leiner; Utrecht/NL
X. Montet; Geneva/CH
F. Stacul; Trieste/IT
M. Wozniak; Lublin/PL

Genitourinary

The ESR would like to thank ESUR for their cooperation on this subcommittee

Chairman:

V. Logager; Copenhagen/DK

Members:

M.-F. Bellin; Le Kremlin-Bicêtre/FR
D. Beyersdorff; Berlin/DE
F.M. Danza; Rome/IT
A. Dimopoulou; Uppsala/SE
G. Ivanac; Zagreb/HR
P. Leonardou; Athens/GR
D. Negru; Iasi/RO
M.M. Otero-García; Vigo/ES
E. Sala; Cambridge/UK
H.C. Thoeny; Berne/CH
A.T. Turgut; Ankara/TR
D. Yakar; Nijmegen/NL

Head and Neck

The ESR would like to thank the ESHNR for their cooperation on this subcommittee

Chairman:

S. Bisdas; Tübingen/DE

Members:

N. Gritzmann; Vienna/AT
P. Halimi; Paris/FR
C.Z. Karaman; Aydin/TR
R. Kohler; Geneva/CH
R. Ljumanovic; Amsterdam/NL
J. Olliff; Birmingham/UK
S. Petrovic; Nis/RS
L. Preda; Milan/IT

ECR 2013 Committees

Interventional Radiology

The ESR would like to thank CIRSE for their cooperation on this subcommittee

Chairman:

A. Krajina; Hradec Králové/CZ

Members:

V. Bérczi; Budapest/HU
C. Binkert; Winterthur/CH
T.J. Cleveland; Sheffield/UK
J. Luis del Cura; Bilbao/ES
L. Lonn; Copenhagen/DK
F. Orsi; Milan/IT
H. Rousseau; Toulouse/FR
M. Schoder; Vienna/AT
J. Tacke; Passau/DE
V. Vidjak; Zagreb/HR
P. Vilares Morgado; Porto/PT
K. Zelenak; Martin/SK

Musculoskeletal

The ESR would like to thank the ESSR for their cooperation on this subcommittee

Chairman:

A.J. Grainger; Leeds/UK

Members:

N. Boutry; Lille/FR
M. Court-Payen; Copenhagen/DK
P.M. Cunningham; Navan/IE
C. Glaser; Munich/DE
A. Klauser; Innsbruck/AT
M. Maas; Amsterdam/NL
A. Oktay; Izmir/TR
A. Plagou; Athens/GR
J. Raposo; Lisbon/PT
L.M. Sconfienza; San Donato Milanese/IT
P. Van Dyck; Antwerp/BE
J.C. Vilanova; Girona/ES

Neuro

The ESR would like to thank the ESNR for their cooperation on this subcommittee

Chairman:

J. Van Goethem; Antwerp/BE

Members:

N. Bargalló; Barcelona/ES
F. Barkhof; Amsterdam/NL
M. Bekiesinska-Figatowska; Warsaw/PL
B. Ertl-Wagner; Munich/DE
Z. Merhemic; Sarajevo/BA
M. Muto; Naples/IT
Y. Özsunar; Aydın/TR
M.A. Papathanasiou; Athens/GR
I.N. Pronin; Moscow/RU
J.-P. Pruvo; Lille/FR
M.M. Thurnher; Vienna/AT
T.A. Yousry; London/UK

Paediatric

The ESR would like to thank the ESPR for their cooperation on this subcommittee

Chairman:

R.R. van Rijn; Amsterdam/NL

Members:

G. del Pozo; Madrid/ES
C. Fonda; Florence/IT
C. Garel; Paris/FR
M. Haliloglu; Ankara/TR
W. Hirsch; Leipzig/DE
P.D. Humphries; London/UK
L.-S. Ording-Müller; Tromsø/NO
M. Raissaki; Iraklion/GR

Physics in Radiology

The ESR would like to thank EFOMP for their cooperation on this subcommittee

Chairman:

J.N. Vassileva; Sofia/BG

Members:

T. Beyer; Zurich/CH
D. Bor; Ankara/TR
O. Ciraj-Bjelac; Belgrade/RS
H. Jarvinen; Helsinki/FI
R. Padovani; Udine/IT
K. Pedersen; Østerås/NO
V. Tsapaki; Athens/GR

Radiographers

The ESR would like to thank the EFRS and the ISRRT for their cooperation on this subcommittee

Chairmen:

D. Pekarovic; Ljubljana/SI
V. Vilgrain; Clichy/FR

Members:

E. Agadakos; Athens/GR
K. Haller; Wiener Neustadt/AT
C. Malamateniou; London/UK
J. McNulty; Dublin/IE
G. Paulo; Coimbra/PT
P. Vahtramae; Pärnu/EE

Vascular

The ESR would like to thank CIRSE for their cooperation on this subcommittee

Chairman:

K. Malagari; Athens/GR

Members:

J.-P. Beregi; Nîmes/FR
L. Crocetti; Pisa/IT
E. Esteban; Alzira/ES
K.A. Hausegger; Klagenfurt/AT
T. Jargiello; Lublin/PL
A. Keeling; Dublin/IE
S. Müller-Hülsbeck; Flensburg/DE
R. Uberoi; Oxford/UK

Oncologic Imaging

Chairman:

R.G.H. Beets-Tan; Maastricht/NL

Members:

M. Bellomi; Milan/IT
P. Brader; Vienna/AT
F. Caseiro-Alves; Coimbra/PT
L. Martí-Bonmatí; Valencia/ES
C. Matos; Brussels/BE
A.G. Rockall; London/UK
H.-P. Schlemmer; Heidelberg/DE
M.R. Torkzad; Stockholm/SE

Emergency Radiology

Chairman:

U. Linsenmaier; Munich/DE

Members:

I. Arkhipova; Moscow/RU
O. Chan; London/UK
D.R. Kool; Nijmegen/NL
S. Koskinen; Helsinki/FI
P.-A. Poletti; Geneva/CH
G. Schueller; Bülach/CH
M. Stajgis; Poznan/PL
M. Zins; Paris/FR

ECR 2013

Topic Coordinators

Categorical Courses

**CLICK (Clinical Lessons for Imaging Core Knowledge):
Never without Arteries**
C. Loewe; Vienna/AT

**Oncologic Imaging: Follow-up of Systemic and Local
Therapies**
T. de Baère; Villejuif/FR

Urogenital Imaging
L.E. Derchi; Genoa/IT

Mini Courses

Organs from A to Z: Heart
K. Nikolaou; Munich/DE

Controversies in Breast Imaging
F. Sardanelli; Milan/IT

The Beauty of Basic Knowledge: Head and Neck
A. Borges; Lisbon/PT

The Beauty of Basic Knowledge: Musculoskeletal Imaging
K. Wörtler; Munich/DE

**Joint Course of ESR and RSNA
(Radiological Society of North America):
Essentials in oncologic imaging:
what radiologists need to know**
R.L. Baron; Chicago, IL/US
C.J. Herold; Vienna/AT
H. Hricak; New York, NY/US
Y. Menu; Paris/FR
D.M. Panicek; New York, NY/US
M.F. Reiser; Munich/DE

Multidisciplinary Sessions

Managing Patients with Cancer
J.I. Bilbao; Pamplona/ES
B. Hamm; Berlin/DE
B. Sangro; Pamplona/ES
V. Vilgrain; Clichy/FR

E³ – European Excellence in Education

Foundation Course: Neuroimaging
M.I. Argyropoulou; Ioannina/GR

Interactive Teaching Sessions
J. Vilar; Valencia/ES

Update Your Skills (Practical Courses)

How to Biopsy with US Guidance
G. Mostbeck; Vienna/AT

Image-Guided Tumour Ablation: How to do it
D.J. Breen; Southampton/UK
M.H. Fuchsjäger; Graz/AT

6th Post-Processing Face-Off Session

H.-C. Becker; Munich/DE
A. Graser; Munich/DE

*See you in
Vienna*

*Nos veremos en
Viena*

European Congress of Radiology

ECR 2013

Vienna

March 7–11

**Register now for the
most innovative meeting in imaging**
myESR.org/registration2013

**Poster Abstract Submission for EPOS™
open until December 31, 2012**
myESR.org/epos_submission

myESR.org