Vienna welcomes you!
**Table of Contents**

### General Information
- 4 Welcome by the ECR 2010 Congress President
- 6 Polish Focus
- 13 Your Timeline to ECR 2010
- 14 Timetable
- 16 ESR Executive Council
- 76 ESR Dignitaries
- 80 ESR 2010 Committees
- 84 ECR 2010 Topic Coordinators

### Scientific Highlights
- 20 NH 7: Biomarkers require further studies and standardisation
- 24 SA 6: State of the Art session tackles the challenge of adrenal abnormalities
- 28 SF 3c: All you need to know about paediatric non-traumatic emergencies
- 34 PC 14: Communicating more to avoid litigation
- 38 CC 17: Rupture plus acute pain equals rapid response
- 44 MC 19: All about the liver

### Scientific Programme
- 19 ESR meets Poland, Argentina, Saudi Arabia & Neurologists
- 23 New Horizons Sessions
- 27 State of the Art Symposia
- 30 Special Focus Sessions
- 36 Professional Challenges Sessions
  - Multidisciplinary Sessions
  - Managing Patients with Cancer
- 40 Radiology of the Spine in 2010
- 41 Radiology in Abdominal Emergencies
- 42 Imaging in Lung Diseases
- 43 Organs from A to Z: Liver
- 43 Extremity Joint MRI
- 46 Refresher Courses:
  - Abdominal and Gastrointestinal
  - Breast
  - Cardiac
  - Chest
  - Computer Applications
  - Molecular Imaging and Contrast Media
  - Genitourinary
- 52 Head and Neck
- 53 Interventional Radiology
- 55 Musculoskeletal
- 56 Neuro
- 57 Pediatric
- 58 Physics in Radiology
- 59 Radiographers
- 60 Vascular
- 61 EFOMP Workshop
- 62 E² – European Excellence in Education:
- 63 Interactive Teaching Sessions
- 65 ESOR Session
- 65 Radiology Trainees Forum – Highlighted Lectures
- 65 ESR Audit Session
- 65 Image Interpretation Quizzes
- 65 3rd Workstation Face-Off Session
- 65 Hospital Management Symposium
- 65 Joint Session of ESR and EC: eHealth
- 66 Satellite Symposia
- 71 Industry Hands-on Workshops

### Hands-on Workshops:
- 72 Post-Processing of CT and MRI in Stroke Patients
- 73 Cardiac CT Post-Processing and Analysis
- 74 Musculoskeletal US: Hand and Wrist, Foot and Ankle

---

**Photo Credits:**

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

- 02 © Julius Silver
- 06 © wikipedia.org
- 07 © istockphoto.com
- 08 © istockphoto.com
- 10 © istockphoto.com
- 20 © Julius Silver
- 35 © Julius Silver
- 60 © Nina Ober
Dear Colleagues

Nowadays the European Congress of Radiology is a global event with participants from every continent, who share a passion for radiology and enjoy scientific, professional and social exchange. Their contributions to the carefully designed educational and scientific programme make the ECR the most comprehensive meeting in diagnostic imaging with substantial influence on the development of radiology. It is a unique forum that allows us to achieve now the knowledge and skills necessary to fulfil tomorrow’s requirements, therefore helping our specialty to play a key role in the advancement of 21st century medical sciences and healthcare.

Due to the rapid evolution of radiology, our discipline benefits from a huge number of fantastic novelties, both in technical and clinical applications. The ECR is responding to these developments and in 2010 will offer a broad spectrum of educational and professional activities presented by world-renowned radiologists, scientists and educators. The Programme Planning Committee and the brilliant ESR Office have been hard at work over the last two years composing the building blocks of the interesting and exciting congress programme.

One of the charms of the ECR is that every year you will discover some innovations in the programme. In 2010 a new type of organ-oriented course will be launched, starting with ‘Liver from A to Z’, and a second innovation will be the introduction of Multidisciplinary Sessions, which will start with ‘Managing Patients with Cancer’. During these latter sessions four topics – prostate, ovary, colon and lung cancer – will be discussed by surgeons, oncologists and radiologists, reflecting the well recognised fact that a multidisciplinary approach to radiology is essential for the future success of our specialty.

The educational activities at ECR 2010 will cover most aspects of radiology, providing complete and systemic knowledge updates, especially in the important and dynamically evolving fields of our specialty. There will be Categorical Courses on abdominal emergencies, imaging of lung diseases and radiology of the spine, plus a wide range of interactive teaching sessions that will draw the attention of not only radiologists in training but also many experienced professionals. Among the scientific highlights in the field of new technologies there will be New Horizons sessions on MRI in lung diseases, hybrid and functional imaging.

Another attractive feature of the congress will be the Professional Challenges Sessions, the aim of which is to provide a platform for the discussion of pro-
fessional issues relevant to all of us. Featured discussions on the future of our specialty, radiation protection, and radiology and law should attract particular interest.

The ‘ESR meets …’ sessions – the international highlights of the scientific programme – have always been a great success. One of the priorities of our society is to further strengthen partnerships with radiologists from other continents, and in 2010 eminent radiologists from Argentina and Saudi Arabia will present particularly interesting aspects of radiology from their countries. In accordance with the well-established tradition of inviting the President’s country, ECR 2010 will also welcome my homeland – Poland.

With great pleasure I would like to welcome all neurologists to our congress. We are keen to enhance good relationships with our clinical colleagues, which is significant for the further development of radiology. The ‘ESR meets Neurology’ session on ischemic stroke will provide an important contribution to the scientific programme that we all anticipate will be extremely fruitful.

As always, a large-scale technical exhibition will parallel the scientific part of the congress. Innovative, cutting-edge radiological equipment and accessories offering new and fascinating imaging options will be presented.

Looking at the ECR 2010 poster you may be curious about the presence of the face of Fryderyk Chopin, the greatly admired, world famous Polish composer and pianist. 2010 is the ‘Year of Chopin’, when the world will celebrate the 200th anniversary of his birth. Medicine is not only a pure and applied science but also an art. Radiology is certainly a combination of art and technology, and therefore the motto of ECR 2010, ‘Virtuosity in Radiology’, is fully justified. Being devoted to our specialty we all wish to achieve virtuosity in our discipline.

I would like to invite you most heartily to ECR 2010.

I look forward to seeing you in Vienna where we will enjoy not only an excellent scientific congress but also splendid social events.

Małgorzata Szczepan-Trojanowska
ECR 2010 Congress President
Cooperation with tradition

As the homeland of ECR President Prof. Małgorzata Szczepankiewicz and as one of this year’s ‘ECR Meets’ countries, Poland will take on a particular significance at ECR 2010. With one of Poland’s most revered artists, Fryderyk Chopin, adorning the ECR 2010 poster and a range of Polish-themed activities planned for the ECR social programme, the country’s influence will be clearly noticeable, but a Polish presence in Vienna is nothing new. In honour of Austro-Polish relations, here we take a look at some of the connections between the home of ECR and that of its current president.

Vienna, once the hub of a large and influential empire, has shared extremely varied relationships with a great number of countries, many of whom have left indelible impressions on the modern Austrian capital, and Poland is certainly no exception. The most notable of connections between the two is the Battle of Vienna in 1683, during which the Polish kingdom made an invaluable contribution to the history of Vienna. The Ottoman Empire had long had ambitions to take Vienna – having tried to capture it once in 1529 – and in 1683 the Ottoman army once more besieged the city. After two months of pressure from its attackers, Vienna was eventually relieved by a force of 80,000 men from the Holy League, under the leadership of the King of Poland, Jan III Sobieski and including around 37,000 Polish troops. The ensuing victory for the Holy League featured the largest cavalry charge in history, with 20,000 Austrian-German and Polish cavalry involved, and ultimately marked the turning point in the 300-year struggle between the Ottoman and Holy Roman Empires.

Sobieski is a name still visible in Vienna today, with the street Sobieskigasse named in his honour, but the streets and buildings of Vienna also bear testament to centuries of other Polish visitors. A total of 19 street names, 17 plaques, four sites, and three busts remember Polish contributions to Vienna, from artists to war heroes. Kolschitzkygasse commemorates another Polish hero of the Battle of Vienna, but one who is also responsible for a vital aspect of modern Viennese culture. Jerzy Franciszek Kulczycki used the coffee he was given as a reward for his services to open the city’s first coffee shop, beginning a tradition that has shaped the character of modern Vienna. Fryderyk Chopin himself, the virtuoso who emblems this year’s ECR, spent time in Vienna in the early 1830s, living at Kohlmarkt 9 where there is now a plaque commemorating his residence. As well as coffee and music, the Poles can even claim to have provided royal stock to the Habsburg empire. Cymburgis of Mazovia, as the mother of Emperor Frederick III, is the common ancestor of all later Habsburgs, since this line has survived all others.
Placek Swiateczny
Note: Christmas Bread. This recipe could be used as part of a 12-course meal known in Polish as Wigilia, or on its own. Wigilia is eaten after sundown on Christmas Eve.

5 Eggs, 2 ½ cups all-purpose flour, 2 cups icing sugar, 2 teaspoons baking powder, ¾ cup walnuts or pecans (finely chopped), ½ cup raisins, 4 oz orange peel (finely chopped), ½ teaspoon salt, 1 cup butter, 1 tablespoon lemon peel, grated, 1 teaspoon vanilla, 3 tablespoons vodka or brandy

1. Preheat oven to 175°C.
2. Beat eggs with sugar using an electric mixer for 5 minutes at high speed.
3. Mix chopped nuts, raisins and orange peel with 2 tablespoons of flour.
4. Mix remaining flour with baking powder and salt.
5. Cream together the butter, lemon peel and vanilla extract until fluffy.
6. Beat in vodka, then add egg mixture gradually, beating constantly.
7. Add the flour mixture and beat for 5 minutes.
8. Fold fruit-nut mixture into the batter.
9. Turn into a greased and floured 9x5x3-inch pan or a 1 ½ quart ring mould.
10. Bake at 175°C for 1 hour.
11. Cool cake in pan on wire rack for ten minutes, then turn cake out onto rack and cool completely.
12. Wrap in plastic wrap and set aside to mellow for a couple of days.
The Grave of Countess Potocka
In Spring of love and life, My Polish Rose,
You faded and forgot the joy of youth;
Bright butterfly, it brushed you, then left ruth
Of bitter memory that stings and glows.
O Stars! that seek a path my northland knows,
How dare you now on Poland shine forsooth,
When she who loved you and lent you her youth
Sleeps where beneath the wind the long grass blows?
Alone, My Polish Rose, I die, like you.
Beside your grave a while pray let me rest
With other wanderers at some grief’s behest.
The tongue of Poland by your grave rings true.
High-hearted, now a young boy past it goes,
Of you it is he sings, My Polish Rose.

Adam Mickiewicz (1798 – 1855)
I wrote stone
I wrote house
I wrote town

I shattered the stone
I demolished the house
I obliterated the town

the page traces the struggles between creation and annihilation

Ryszard Kapuściński (1932 – 2007)
Chopin & Vienna

In July 1829 the 19-year-old Fryderyk Chopin made his first visit to Vienna, where he impressed audiences with two brilliant performances at the Kärntnertortheater. Accompanied by an orchestra, he played Variations, op. 2 on a Mozart theme and the Rondo à la Krakowiak, op. 14, as well as performing improvisations. He enjoyed tremendous public acclaim, and the critics hailed him as a genius of the piano, lavishing his compositions with high praise.

In November 1830 Chopin returned to Vienna. Originally planned as a short stay on his way to Italy, it turned out to be an eight-month-sojourn, and on June 11, 1831, Chopin played the newly composed Concerto in E minor at the Kärntnertortheater. The time he spent in Vienna provided him with dramatic emotional experiences that clearly inspired his creative imagination, probably accelerating the emergence of a distinct, individual style, quite different from that of his previous music. The works that resulted from this period exhibited a new force and passion, including the sketch of the Scherzo in B minor and, more significantly, the powerful Etudes from op. 10.
Happy 200th anniversary to a true piano prodigy!
Diagnostic Ultrasound System

Digital Radiography System

Mindray is listed on the NYSE under the symbol "MR"

Mindray Building, Keji 12th Road South, High-tech Industrial Park, Shenzhen 518057, P.R. China
Tel: +86 755 2658 2888  2658 2492  Fax: +86 755 26582680
E-mail: intl-market@mindray.com  www.mindray.com
Your Timeline to ECR 2010

from October 1: Online Registration Open
Middle Fee from November 11 to December 31, 2009
Late Fee from January 1, 2010 onwards

from October 1: Travel & Accommodation Service Open

November 1: Participate from Home Registration Open

November: Notification of Abstract Acceptance

December 1: Online Submission of Accepted Exhibits to EPOS™ Open

March 4–8: ECR 2010: NEW! Thursday to Monday

Congress Venue
Austria Center Vienna
Bruno Kreisky Platz 1
1220 Vienna, Austria

Congress Language
English

CME Accreditation
Each ECR delegate receives 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). ECR 2010 is expected to be designated for a maximum of 27 hours of European external CME credits by the UEMS/EACCME.

Facts & Figures
18,200 Participants
97 Countries
270 Scientific and Educational Sessions
1,800 Accepted Proffered Papers and Exhibits
Fully Electronic Scientific Exhibition
Industrial Exhibition
  approx. 285 exhibitors
  26,000 m²

Scientific and Educational Programme
3 Honorary Lectures
1 Opening Lecture
4 ESR meets Sessions
2 Image Interpretation Quizzes
4 New Horizons Sessions
3 State of the Art Symposia
15 Special Focus Sessions
5 Professional Challenges Sessions
3 Categorical Courses (18 Sessions)
2 Mini Courses (6 Sessions)
75 Refresher Courses
1 Foundation Course: Head and Neck Radiology (6 Sessions)
14 Interactive Teaching Sessions
1 e-Learning Centre with Self Assessment Tests
1 ESOR Session
1 RTF – Radiology Trainees Forum: Highlighted Lectures' Session
3 Hands-on Workshops
1 EFOMP Workshop
1 Hospital Management Symposium
1 Workstation Face-Off Session
22 Satellite Symposia
  Industry Hands-on Workshops
<table>
<thead>
<tr>
<th>Time</th>
<th>Thursday, March 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:30</td>
<td>State of the Art Symposium SA 3</td>
</tr>
<tr>
<td>09:00</td>
<td>Scientific Sessions</td>
</tr>
<tr>
<td>09:30</td>
<td>ESR meets Poland</td>
</tr>
<tr>
<td>10:00</td>
<td>ESR meets Poland</td>
</tr>
<tr>
<td>10:30</td>
<td>ESR meets Poland</td>
</tr>
<tr>
<td>11:00</td>
<td>ESR meets Poland</td>
</tr>
<tr>
<td>11:30</td>
<td>ESR meets Poland</td>
</tr>
<tr>
<td>12:00</td>
<td>ESR meets Poland</td>
</tr>
<tr>
<td>12:15</td>
<td>Wilhelme Conrad Röntgen Lecture</td>
</tr>
<tr>
<td>13:00</td>
<td>Scientific Sessions</td>
</tr>
<tr>
<td>13:30</td>
<td>Scientific Sessions</td>
</tr>
<tr>
<td>14:00</td>
<td>Scientific Sessions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Friday, March 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:30</td>
<td>New Horizons Session NH 7</td>
</tr>
<tr>
<td>09:00</td>
<td>Scientific Sessions</td>
</tr>
<tr>
<td>09:30</td>
<td>Scientific Sessions</td>
</tr>
<tr>
<td>10:00</td>
<td>Scientific Sessions</td>
</tr>
<tr>
<td>10:30</td>
<td>Scientific Sessions</td>
</tr>
<tr>
<td>11:00</td>
<td>Scientific Sessions</td>
</tr>
<tr>
<td>11:30</td>
<td>Scientific Sessions</td>
</tr>
<tr>
<td>12:00</td>
<td>Scientific Sessions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Saturday, March 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:30</td>
<td>ESR meets Neurologists</td>
</tr>
<tr>
<td>09:00</td>
<td>New Horizons Session NH 8</td>
</tr>
<tr>
<td>09:30</td>
<td>Scientific Sessions</td>
</tr>
<tr>
<td>10:00</td>
<td>Scientific Sessions</td>
</tr>
<tr>
<td>10:30</td>
<td>Scientific Sessions</td>
</tr>
<tr>
<td>11:00</td>
<td>Scientific Sessions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Sunday, March 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:30</td>
<td>Special Focus Sessions SF 16a, SF 16b, SF 16c</td>
</tr>
<tr>
<td>09:00</td>
<td>Scientific Sessions</td>
</tr>
<tr>
<td>09:30</td>
<td>Scientific Sessions</td>
</tr>
<tr>
<td>10:00</td>
<td>Scientific Sessions</td>
</tr>
<tr>
<td>10:30</td>
<td>Scientific Sessions</td>
</tr>
<tr>
<td>11:00</td>
<td>Scientific Sessions</td>
</tr>
<tr>
<td>11:30</td>
<td>Scientific Sessions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Monday, March 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:30</td>
<td>Opening Ceremony</td>
</tr>
<tr>
<td>09:00</td>
<td>Scientific Sessions</td>
</tr>
<tr>
<td>09:30</td>
<td>Scientific Sessions</td>
</tr>
<tr>
<td>10:00</td>
<td>Scientific Sessions</td>
</tr>
<tr>
<td>10:30</td>
<td>Scientific Sessions</td>
</tr>
<tr>
<td>11:00</td>
<td>Scientific Sessions</td>
</tr>
<tr>
<td>11:30</td>
<td>Scientific Sessions</td>
</tr>
<tr>
<td>12:00</td>
<td>Scientific Sessions</td>
</tr>
</tbody>
</table>
ESR meets ...  
Short portraits of the ECR 2010 guest countries

As in previous years, ESR has invited three guest countries to make perfect use of the ECR’s acclaimed international forum to present themselves as mirrored in their latest scientific achievements. The presidents of the respective national societies introduce these societies in the following short portraits.

ESR meets Argentina

The Sociedad Argentina de Radiología (SAR) was founded on May 14, 1917, in the Institute of Physiotherapy of the Hospital de Clínicas, in Buenos Aires, under the name of the Medical Society of Radio and Electrology.

There are approximately 3,500 radiologists in Argentina, of which 60% are men and 40% are women. The number of women studying medicine in Argentina has been increasing in recent years, and this has also been the case in radiology. Although we expect this trend to continue in the future, the SAR is concerned that the current total number of training positions is inadequate to produce the number of radiologists required.

The SAR has managed to achieve important scientific goals for our community in the last 10 years. For 55 years we have held the Congreso Argentino de Radiología, the country’s most important radiological event, in which more than 2,500 radiology professionals take part. Since 1937 we have published our journal Revista Argentina de Radiología, which has been published four times per year since 1986 and is considered one of the best publications in Latin America.

The major challenge of the Sociedad Argentina de Radiología is to ensure that all of our colleagues in Argentina have access to resources, congresses, and scholastic activities. We want to bridge the long distances in Argentina and reach them at their workplaces to provide them with courses and activities that can be of benefit to everyone. We are working on this, and have a new programme starting in 2010 that will go towards achieving this aim. At present, we are running the postgraduate course in diagnostic imaging through our virtual campus, including the examination. Thanks to this technology, the course can be taken by residents throughout the entire country. By this method, we are trying to provide young radiologists with access to knowledge in a more agile, efficient and pleasant way. This course constitutes the theoretical part of the Superior Course of Specialists in Diagnostic Imaging of the University of Buenos Aires, and also forms part of many residency programmes, including the exams.

At present we have many active and effective cooperation agreements with other radiological societies from both Latin America (Mexico and Venezuela) and Europe (France, Spain, Italy and Great Britain). Through these agreements we exchange professors for our meetings, and promote specialisation and professional integration through scholarships and internships among the radiological communities. Many young Argentinean radiologists have visited top European radiological departments, and received training in modern imaging modalities. Of particular note is the ESR’s programme of grants for young Latin American radiologists to attend the ECR.

Aside from the general challenge of stimulating professional development, individual radiology departments in Argentina face certain other problems. Our country is going through a significant social crisis; the National Public Health Plan is poor; there are delays in the completion of studies; medical equipment is quite old; and these problems not only affect diagnostic imaging but also all fields of medicine. In private medicine, they are able to offer better services and the medical equipment is of high quality.

However, being the first Latin-American country to be invited to participate in the ESR meets programme allows us to raise the profile of Argentinean radiology both scientifically and professionally. Argentina is a country built by immigrants, mainly from Europe, so historically we have always had our eyes on Europe. In fact, all of the pioneers of Argentinean radiology were descendants of Europeans immigrants. And we still have the same in mind: if you look at the figures of Argentinean participation at previous ECRs you will find that we are the Latin American country with the highest number of abstract submissions. Also, we participated in the Historical Exhibition during ECR 2003 (displaying the history of the hospitals of the European communities in Buenos Aires) and in the writing of the document The European Association of Radiology 1962–2007: A Vision Realised. This participation will strengthen our links with the European radiological community, and is a motivation for all our colleagues to show to the world what we can achieve. The fact that one of our Past Presidents, Prof. Dr. Ricardo García Mónaco, was appointed an Honorary Member of the ESR in 2005 is further proof of the close relationship between the SAR and the ESR.

Prof. Alfredo E. Buzzi
Presidente, Sociedad Argentina de Radiología
The Polish Medical Radiological Society was established in 1925 and today consists of around 1,850 working radiologists (excluding residents) with over 60% of them being women.

This is mostly because radiology has been considered attractive for women (especially those with children) due to the shortened working day for radiologists in Poland (5 hours). We expect the number of radiologists to grow constantly over the next twenty years due to an increase in equipment and thus new positions for radiologists. In fact at present we are dealing with a shortage of radiologists. I think we need at least 50 new specialists per year (optimally about 100, taking retirement into account). Aside from this shortfall in the workforce, the challenges to Polish radiology are similar to many other countries; the risk of losing some fields of work to clinical specialties, and the difficulties in attracting the best specialists from academic centres, because the salaries (and often equipment) are better in private centres.

We currently have quite a good system of postgraduate education. There is a special system of accreditation for radiological departments, which are allowed to educate residents to specialise in radiology. The Society organises the biannual Polish School of Radiology, an annual School of MRI and the School of Multidetector CT. There are also a lot of regional and national courses in subspecialties of radiology, e.g. neuroradiology, oncological radiology, interventional radiology, musculoskeletal radiology, head and neck radiology etc. We also organise many European courses in Poland, such as European School of Radiology and Erasmus MRI Courses. A lot of Polish radiologists and residents in radiology attend educational events during the ECR in Vienna or ESOR courses in different countries and this is strongly supported by the board of the Polish Medical Radiological Society.

We hope the ESR meets Poland session will provide us with an opportunity to present the development of radiology in Poland and also the new generation of Polish academic radiologists we consider ‘rising stars’.

Prof. Dr. Marek Sasiadek
2009 Vice-President, Polish Medical Radiological Society
The Radiological Society of Saudi Arabia (RSSA) is a young society, having been established in January 2004, and is now in only its 6th year. About 400 radiologists work in Saudi Arabia, one third of whom are Saudi nationals, with the rest being expatriates from different regions, including North America, Europe, North Africa, and the Indian subcontinent. The RSSA also serves radiographers, whose number is triple that of radiologists. As the field of radiology is evolving and the recognition of its importance is becoming a fact in all physicians’ minds, it is expected that the number of physicians seeking radiology certification will increase. In our local training programme this has been noticed over the past five years with equal numbers of applicants among men and women. At the moment the ratio of women to men is almost 1:6.

As in the rest of the world, radiology in Saudi Arabia is met with the following main challenges: high medical demand and a shortage of qualified radiologists; a need for high quality RIS/PACS systems at a national level; a need for reliable national and international teleradiology systems; and a need for education of physicians to improve the appropriate radiological investigation referral pattern. Certain endemic diseases are present in Saudi Arabia such as tuberculosis and brucellosis. Similarly, due to various genetic and social factors, other diseases such as diabetes mellitus and sickle cell anaemia are prevalent.

A Formal Postgraduate Radiology Residency Program was established locally more than 10 years ago (before the inception of the RSSA). It is a strong, structured, four-year programme that combines North American and European educational styles and is becoming recognised by many international radiological authorities such as The Royal College of Physicians & Surgeons of Canada. Similarly, some local institutes are offering specialised fellowship training in various radiological subspecialties, although these are not yet internationally recognised. The main benefit of taking part in the ESR meets programme is the international exposure to the international radiology community in order to introduce our level of standards of practice to the rest of the world and initiate scientific communications and collaboration.

Assoc.Prof. Dr. Sattam Saud Lingawi
President, Radiological Society of Saudi Arabia
### Friday, March 5, 10:30–12:00
**ESR meets Poland**

#### EM 1  Emergency radiology: The new frontiers, the old barriers

**Presiding:** C.J. Herold; Vienna/AT  
M. Sasiadek; Wroclaw/PL  
M. Szczerbo-Trojanowska; Lublin/PL

- **Introduction**  
M. Sasiadek; Wroclaw/PL

- **Modern emergency stroke imaging**  
K. Sklinda; Warsaw/PL

- **Cardiac emergency imaging:**  
Crossing frontiers, meeting barriers  
K. Gruszczynska; Katowice/PL

- **Dissection of descending aorta:**  
Diagnosis and management of aortic or end-organ complications  
K. Milczarek; Warsaw/PL

- **What you see is what you diagnose:**  
Staging the severity of acute pulmonary embolism with computed tomography pulmonary angiography  
G. Staskiewicz; Lublin/PL

- **Panel discussion**

### Saturday, March 6, 10:30–12:00
**ESR meets Argentina**

#### EM 3  Argentine radiology: Past, present and future

**Presiding:** A.E. Buzzi; Buenos Aires/AR  
C.J. Herold; Vienna/AT  
M. Szczerbo-Trojanowska; Lublin/PL

- **Introduction**  
A.E. Buzzi; Buenos Aires/AR

- **Pneumo esophageal MDCT:** Its role in cancer presurgical characterisation and staging  
M. Ulla; Buenos Aires/AR

- **Cystic echinococcosis:**  
Our experience in Patagonia  
S. Moguillansky; Cipolletti Rio Negro/AR

- **Radioanatomy of the lower uterine arterial anastomoses**  
R.D. Garcia Monaco; Buenos Aires/AR

- **High-resolution MRI in rectal cancer**  
A. Dieguez; Buenos Aires/AR

- **Panel discussion**

### Monday, March 8, 12:15–13:45
**ESR meets Saudi Arabia**

#### EM 4  Saudi radiology

**Presiding:** C.J. Herold; Vienna/AT  
S.S. Lingawi; Jeddah/SA  
M. Szczerbo-Trojanowska; Lublin/PL

- **Introduction**  
S.S. Lingawi; Jeddah/SA

- **Peculiar musculoskeletal infections and infestations**  
M.E. Abd El Bagi; Riyadh/SA

- **Brucellosis in Saudi Arabia from head to toe**  
N.A. Al-Nakshbandi; Riyadh/SA

- **Role of imaging in discovery and characterisation of genetic diseases**  
I.A. Alorainy; Riyadh/SA

- **Role of nuclear medicine and functional imaging in non Hodgkin’s lymphoma (NHL) in Saudi Arabia**  
S. Al-Sebaie; Dhahran/SA

- **Panel discussion**
Biomarkers require further studies and standardisation

By Frances Rylands-Monk

It is widely accepted that imaging biomarkers are useful tools in the early assessment of patient response to treatment, but consensus has yet to be attained for their application in routine clinical practice. Outlining the potential of quantitative imaging, speakers at a New Horizons session during ECR 2010 will describe the current situation and how radiologists will need to embrace hybrid systems as imaging’s role develops in response assessment.

New targeted treatments have emerged that, for example, induce tumour necrosis, but anatomical imaging biomarkers may no longer be sufficient for accurate assessment of treatment response, according to experts. A tumour mass may still be visible using anatomical markers while PET reveals that it is no longer metabolically active, or MRI shows that the diffusion coefficient changes due to a loss of cell membrane integrity early after treatment, thus indicating whether cells are still viable or have been destroyed.

New treatments need to be assessed using techniques such as PET-CT or diffusion and perfusion MRI to chart changes at the cellular and molecular level. This has started to revolutionise the speed at which treatment can be tailored to individual needs. The inclusion of functional imaging biomarkers in standard care potentially offers doctors the chance to radically improve disease management, and may also provide a boost for hospital budgets.

"Anti-angiogenetic treatments are expensive. Because not all patients respond to these, it is important to tell at the earliest possible juncture if the treatment is working to avoid wasting money and to move the patient to a more effective treatment," said Prof. Bernard Van Beers, professor of radiology at Beaujon Hospital, University of Paris-Diderot, France.

Van Beers also cites a growing need for imaging biomarkers to be used in drug trials. With up to 90% of studies stopped before phase III due to safety or efficacy issues, the pharmaceutical industry needs to know as early as possible whether a drug should be withdrawn from trials or taken further.

"Imaging biomarkers used in phase I–III trials can provide timely information and can significantly optimise drug development programmes," he noted.

So far, however, there is no consensus on which imaging biomarkers should be used in specific diseases or how to analyse biomarker imaging. Nor is there agreement on when it should be applied, with opinions ranging from the first few days after the end of treatment to the first month.

Van Beers believes that more standardisation is needed during consensus conferences and that more validation studies requiring large patient cohorts should be performed.
“Each disease needs large-scale trials to validate methods. The problem is that technology evolves fast, matched by constant improvements in imaging techniques. Studies may be outdated by the time they’re finished and therefore need to be started and completed as quickly as possible,” he explained.

Underlying this lack of standardisation in clinical application is a seeming lack of guidance for biomarker development. Specific imaging biomarker development guidance is even rarer.

“Largely missing is a rationale and step-by-step process that enables imaging biomarker discovery and development,” said session moderator Dr. Anwar Padhani, consultant radiologist and head of imaging research at Mount Vernon Cancer Centre, Northwood, U.K.

“Cancer UK recognised that there was an issue about clear guidance, and earlier in May 2009 launched several frameworks for biomarker development, identifying funding streams if the frameworks were followed,” he added. “The National Cancer Institute in the U.S. has produced its own frameworks.”

Saturday, March 6, 08:30–10:00
NH 7 Biomarkers: New word, new world, new work?
More Powerful than ever

Powerful, Friendly and Compact Ultrasound System

The ProSound a7 is a diagnostic ultrasound system that contradicts the thought that high-performance systems are large. It inherits the proven technologies and functions of Aloka's high-end system, yet offers outstanding mobility thanks to being the smallest size in its class. The system is easily transported to deliver high performance throughout the hospital.

The Broadband Harmonics realizes high sensitivity that is comparable to fundamental imaging even with Harmonic Echo imaging. Directional eFLOW features enhanced spatial resolution for greater detail of blood flow information.
**New Horizons Sessions**

**Friday, March 5, 16:00-17:30**

**NH 6**  
**Functional imaging in CT: Optional or built-in?**

- **Chairman’s introduction**  
  H. Alkadhi; Zurich/CH
- **What functional CT requires:**  
  Speed, coverage, and many slices  
  P. Rogalla; Toronto, ON/CA
- **Multi-energy: An approach to functional imaging with CT**  
  P. Stolzmann; Zurich/CH
- **Functional cardiac imaging: The blessing of high spatial and temporal resolution**  
  C. Catalano; Rome/IT
- **Can CT perfusion monitor tumor therapy response?**  
  V.J. Goh; Northwood/UK
- **Panel discussion:**  
  Functional imaging with CT: Ready for prime time?

**Saturday, March 6, 08:30-10:00**

**NH 7**  
**Biomarkers: New word, new world, new work?**

- **Chairman’s introduction**  
  A.R. Padhani; Northwood/UK
- **Biomarkers: What are they?**  
  B. Van Beers; Clichy/FR
- **MRI biomarkers: Ready in abdomen?**  
  D.J. Lomas; Cambridge/UK
- **PET cancer biomarkers at the starting line**  
  E.O. Aboagye; London/UK
- **Biomarkers: An illustrated framework for development**  
  A.R. Padhani; Northwood/UK
- **Panel discussion:**  
  How should we implement biomarkers in clinical practice?

**Sunday, March 7, 08:30-10:00**

**NH 11**  
**MRI of the lungs: Light at the end of the tunnel?**

- **Chairman’s introduction**  
  H.-U. Kauczor; Heidelberg/DE
- **Challenges for MRI of the lung**  
  J.M. Wild; Sheffield/UK
- **MRI of neoplastic and inflammatory lung disease**  
  J. Biederer; Kiel/DE
- **MRI of pulmonary vascular disease**  
  S. Ley; Heidelberg/DE
- **MRI of ventilation and gas exchange in airway disease**  
  F. Molinari; Rome/IT
- **Panel discussion:**  
  MRI of the lung: Can it beat CT?

**Sunday, March 7, 16:00-17:30**

**NH 14**  
**Hybrid imaging: The radiologic/nuclear sandwich**

- **Chairman’s introduction**  
  T.F. Hany; Zurich/CH
- **PET/CT: Lessons learned from a decade**  
  G. Antoch; Essen/DE
- **New tracers in hybrid imaging**  
  S. Fanti; Bologna/IT
- **Hybrid imaging in 10 years**  
  T. Beyer; Zurich/CH
- **Panel discussion:**  
  Will all imaging become hybrid?
State of the art session tackles the challenge of adrenal abnormalities

By Paula Gould

The adrenal glands may be small in size, but they can still generate giant-sized diagnostic dilemmas. Most adrenal masses cause no health problems, but a small proportion may signal underlying hormonal disease or malignancy. However, an abnormal or unexpected finding does not necessarily mean the patient needs treatment, as speakers at ECR 2010 will explain. Radiologists can expect to leave the state of the art session with a complete set of algorithms for characterising adrenal abnormalities.

‘Adrenals: small glands, big problems.’ The first half of this session’s title effectively sums up radiologists’ take on adrenal pathology. More and more abdominal imaging examinations are revealing adrenal masses as incidental findings. Should these ‘incidentalomas’ be subject to further investigation or removed to prevent the spread of a ‘silent’ disease, or are they harmless abnormalities? Adrenal masses revealed on imaging that had been expected pose yet another diagnostic dilemma. Can you be sure that the lesion observed is linked to the pathology under investigation? Is that really a sign of metastatic spread or a coincidental benign adenoma?

Fortunately for delegates attending session SA6 at ECR 2010, the full session title ends with the words: ‘… and practical solutions.’ Radiologists can certainly expect to hear exactly why the adrenal glands pose an almost daily diagnostic challenge. But they should also leave the conference room with a full account of how different imaging modalities can help clarify what is found.

The main tools and techniques used to image the adrenal glands will be presented by Prof. Marie-France Bellin, chief of radiology at the Bicêtre Hospital in Paris. Radiologists are most likely to encounter adrenal pathology on CT at first. The CT images may provide all the information needed to characterise the lesion, but if not, then MRI is most likely to be the next step, she noted. Oncology patients may be referred for a PET/CT scan in institutions that have access to this modality.

Bellin will also set out the key imaging landmarks of healthy adrenal glands. An appreciation of ‘normal’ adrenal anatomy will allow radiologists to be sure that the lesion they have seen really does originate in the adrenal glands and not in the kidney or surrounding organs. Anatomical landmarks can additionally be of use when identifying the cause of hyper-functioning adrenal disease. Observation of enlarged lymph nodes may help differentiate adrenal hyperplasia from adenoma.

Imaging features from CT and MRI will be presented and correlated with histologic features of benign and malignant lesions, providing a guide to differential diagnosis. Signs to consider include the lesion’s size, whether the mass is heterogeneous or homogeneous, hypovascular or hyper-vascular, and whether it contains fat. Another question to ask of lipid-containing lesions is whether the fat is intracellular or macroscopic, Bellin said.

Delegates will also be introduced to the clinical and radiological features of some of the most common diseases associated with renal insufficiency, including tuberculosis and histoplasmosis.

“CT especially plays an important role in confirming the diagnosis,” she said. “Key questions include: Is the abnormality unilateral or bilateral? Is there a haemorrhagic component?”

The dilemma facing many radiologists on an almost daily basis will then be discussed explicitly: When are abnormal adrenal findings problematic, and which masses should not concern physicians? Dr. Gertraud Heinz-Peer, associate professor of radiology at the Medical University of Vienna, and Dr. Ulrich Mueller-Lisse, associate professor of radiology at the University of Munich, will address the two halves of this thorny subject.

Most adrenal masses observed by radiologists will be incidentalomas, according to the session’s moderator, Prof. Yves Menu, chairman of the radiology department at Saint Antoine Hospital, Paris. The discovery of these clinically silent lesions is growing, owing to the improved performance and increased use of cross-sectional imaging modalities, and the aging population.
Most incidentalomas turn out to be benign adenomas. This diagnosis is highly likely if the Hounsfield density of the mass on unenhanced CT is less than 10 HU. Another test is to look at the washout pattern after contrast administration. If the density has decreased by more than 50% within 10 minutes, then the lesion is probably not an adenoma.

This information is not always available though, he explained. Contrast-enhanced CT may be performed without a prior unenhanced scan. In addition, by the time an adrenal mass is spotted on contrast-enhanced images, it may be too late to study washout characteristics. MRI is an option at this stage. If the lesion shows a drop in signal in opposed phase sequences, this indicates intracellular fat content, a significant feature of adenomas.

Firm identification of a benign adenoma is not necessarily the end of the story either. Between 5% and 10% of non-functioning, adrenal adenomas will become hormonally active within the next 12 months. Consensus has yet to be reached on how these masses should be monitored, Menu said.

The session will conclude with a discussion about two clinical cases that neither the speakers nor the audience will have seen previously. This type of practical, problem-solving exercise was tested at the end of a session at ECR 2009 and proved to be extremely popular with delegates, Menu said. The cases will illustrate common clinical situations that radiologists are likely to face in their daily practice.

"I have chosen cases where there may be a disagreement on the way to do the imaging work-up because there is disagreement in real life," he said. "Some institutions do not have the same access to MRI or PET/CT. The question is: Do we agree on the need for follow-up?"

Figures 1A, 1B: A: Left adrenal mass is discovered in a patient during CT staging of lung cancer. The lesion shows no specific features, making it difficult to differentiate this incidentaloma from a metastasis. One option for further work-up would be PET/CT. However, the patient had a CT scan five months previously that showed a normal adrenal gland (B). This provides the clue that the mass is a metastasis. (Provided by Y. Menu)

Figure 2: CT shows large mass in left adrenal gland with fat density. This is typical of a myelolipoma. (Provided by Y. Menu)

Figure 3: Adrenal incidentaloma. MRI reveals a rather large lesion with sharp contours. Intensity is low on this opposed phase image, indicating intracellular fat content. This is characteristic of adenoma. (Provided by Y. Menu)
State of the Art Symposia

Friday, March 5, 08:30–10:00
SA 3  Multiple sclerosis update
• Chairman’s introduction
  A. Rovira-Cañellas; Barcelona/ES
• MRI and histopathological studies
  F. Barkhof; Amsterdam/NL
• Update on MRI diagnostic criteria
  T.A. Yousry; London/UK
• MRI as a biomarker
  M. Filippi; Milan/IT
• Panel discussion:
  How should we use MRI in the diagnosis and monitoring of multiple sclerosis?

Friday, March 5, 16:00–17:30
SA 6  Adrenals: Small glands, big problems … and practical solutions
• Chairman’s introduction:
  Five good reasons for the radiologist to image the adrenals
  Y. Menu; Paris/FR
• What is normal, what is abnormal?
  M.-F. Bellin; Le Kremlin-Bicêtre/FR
• What is abnormal and not a problem?
  G. Heinz-Peer; Vienna/AT
• What is abnormal and a problem, and what are the solutions?
  U.G. Mueller-Lisse; Munich/DE
• Epilogue:
  The practical role of the radiologist facing adrenal masses

Sunday, March 7, 14:00–15:30
SA 13  Lymph node imaging: Imaging is back!
• Chairman’s introduction:
  Can US, CT and MRI challenge PET/CT?
  J.O. Barentsz; Nijmegen/NL
• How and where to use US for nodal diagnosis
  L. Solbiati; Busto Arsizio/IT
• Abdominal and pelvic nodes: Is morphological assessment using CT and MR useful?
  D.-M. Koh; Sutton/UK
• Nodal staging: MR and beyond?
  J.O. Barentsz; Nijmegen/NL
• Panel discussion:
  Choosing the right modality:
  Clinical cases
All you need to know about paediatric non-traumatic emergencies

By Mélisande Rouger

In an ideal world, most paediatric non-traumatic emergencies would be dealt with by a dedicated paediatric hospital, where the personnel are familiar with the nature of the emergency and able to make the correct diagnosis after considering appropriate differential diagnoses. But what about the young patients managed in general hospitals by radiologists who may have limited experience with children’s conditions, or may even feel uncomfortable when dealing with children?

Paediatric non-traumatic emergencies, which represent a large proportion of all paediatric cases, are very specific cases and necessitate treatment from staff who have relevant training. A dedicated session at ECR 2010 will address this situation by presenting participants with the most common causes of non-traumatic emergencies in children, and show them the role they can play in these situations.

At Heraklion General Hospital, paediatric non-traumatic emergencies account for about 150 to 200 cases monthly, and they may come from the whole island of Crete, whose population is 600,000 inhabitants, plus a substantial visiting population during the summer. “This ratio is indicative of how frequent a radiologist is asked to manage a sick child on an emergency basis,” stressed Professor Maria Raissaki, a paediatric radiologist working at the University Hospital of Heraklion, who will chair the ECR session.

Paediatric non-traumatic emergencies can be divided into four main categories, requiring imaging of the brain, chest, abdomen and musculoskeletal system.

Children, like adults, may suffer strokes or brain haemorrhages. These clinically alarming situations are not rare in young patients, especially if they have a predisposition in their history, such as blood clot abnormalities.

Infections such as septicaemia might also lead to stroke, and it is crucial to treat these infections as emergencies. If not, the patient runs the risk of infarction or ischaemia in the brain.

Aspirated foreign bodies, for instance a small coin or a peanut stuck in the trachea or bronchus, are potentially lethal. These children may present with a choking episode; however these patients may sometimes present with less alarming symptoms, like recurrent respiratory tract infections. The radiologist should be familiar with the indirect radiological signs of an aspirated foreign body rather than trying to see the foreign body itself while imaging the patient, Raissaki explained.

Abdominal emergencies may prove dangerous when resulting in bowel ischaemia, peritonitis and the patient’s demise. Presenting symptoms may be alarming to begin with, such as acute abdominal pain. However the differential diagnosis may include surgical and medical causes of abdominal pain that may or may not require surgery, and the radiologist can offer significant help in clinically equivocal cases.

On the other hand, a very quiet, sleepy child presenting with lethargy may suffer from intussusception, a condition when part of the bowel telescopes into another part of the bowel. This situation may lead to bowel infarction and peritonitis if left untreated. Radiologists should know how to immediately make the diagnosis and treat the patient.

Paediatric radiologists are often required to actively exclude volvulus, another potentially lethal situation. But general radiologists might see only one or two cases every two to three years.

Dr. Charlotte De Lange, from The National Hospital in Oslo, Norway, will show in her lecture how thoracic emergencies always require a rapid diagnosis to establish a medical or surgical intervention plan, and how radiological imaging most often plays a key role.

Abdominal emergencies may prove dangerous when resulting in bowel ischaemia, peritonitis and the patient’s demise. Presenting symptoms may be alarming to begin with, such as acute abdominal pain. However the differential diagnosis may include surgical and medical causes of abdominal pain that may or may not require surgery, and the radiologist can offer significant help in clinically equivocal cases.

Children suffering from a lung, oesophagus or thoracic wall abnormality may present with breathing difficulties, feeding or swallowing problems, or less specific general symptoms like fever, sepsis or chest pain.

Dr. Catherine Garel, a paediatric radiologist at the Robert Debré Hospital in Paris, France, will show in her lecture how important it is to appreciate alarming symptoms requiring urgent investigation, and to differentiate true emergencies, for which cerebral imaging may directly impact on therapeutic management, from ‘delayed’ emergencies related to parental and/or medical anxiety.

Aspirated foreign bodies, for instance a small coin or a peanut stuck in the trachea or bronchus, are potentially lethal. These children may present with a choking episode; however these patients may sometimes present with less alarming symptoms, like recurrent respiratory tract infections. The radiologist should be familiar with the indirect radiological signs of an aspirated foreign body rather than trying to see the foreign body itself while imaging the patient, Raissaki explained.

Dr. Simon G.F. Robben from the University Hospital Maastricht, the Netherlands, will discuss during his lecture the most com-
mon and devastating paediatric abdominal emergencies, and will demonstrate the consequences of any delay in diagnosis.

Finally, musculoskeletal emergencies are very important to diagnose and treat immediately since their effects in a growing skeleton can be devastating.

Septic arthritis, one type of musculoskeletal infection, can destroy the joint if not treated immediately and adequately. As a consequence, the patient might end up limping, or needing multiple surgeries. Imaging may be sufficient to diagnose this condition and to determine which part of the bone or joint has been infected while on some occasions sepsis needs to be excluded by either clinical or interventional procedures.

Other musculoskeletal emergencies include slipped capital femoral epiphysis and malignancy, and they must be diagnosed and treated with equal diligence.

Dr. Karl J. Johnson from Birmingham Children’s Hospital, U.K., will discuss and analyse these problems during his lecture, and will also recommend imaging algorithms.

It is important to have a proper understanding of these different situations and attending the session could help participants to gain knowledge of common problems and rarities, Dr. Raissaki believes.

"As a radiologist you might have to deal with stressed clinicians, who might rely on you for the correct diagnosis or who might want to consult you about the appropriateness of a test in a particular case, so you must know how to react and enhance the chain of healthcare. This session will not only be about familiarising participants with the images but also about making them understand the nature of the emergency, to be more knowledgeable and reactive in certain cases and know which condition may cause certain symptoms," she said.

Finally, caring for children also means caring for their stressed parents. Good communication and an ability to cope with emotional pressure are skills that radiologists should also acquire in paediatric medicine.

**Friday, March 5, 08:30–10:00**
**SF 3c**  Pediatric non-traumatic emergencies: What we must know!

---

**Figure 1:**
Infant with a history of a choking episode 15 days ago, presented with fever. There is a consolidation behind the heart on the right (*), a pleural effusion extending into the tissue (arrowheads) and significant thinning of the lung vascular markings (arrow) indicative of focal air trapping. During bronchoscopy, multiple pieces of peanuts were removed. (Provided by M. Raissaki)

**Figure 2:**
Ultrasonogram of the left knee, sagittal view. There is fluid (*) in the suprapatellar bursa over the femur (arrows) and the patella (P). (Provided by M. Raissaki)
Special Focus Sessions

Thursday, March 4, 16:00–17:30
SF 2  Optimal imaging of muscle pathology

- Chairman’s introduction
  C. Martinoli; Genoa/IT
- Advanced techniques in MRI and functional imaging of muscle, dynamic ultrasound and contrast agents
  M.-A. Weber; Heidelberg/DE
- Sports-related muscle injuries: Temporal changes and when to return to play
  D. Connell; Stanmore/UK
- Ischemic and inflammatory conditions: What we can see and what is important for the clinician
  A. Cotten; Lille/Fr
- Muscle tumors, non-neoplastic masses and mimickers: How to differentiate
  K. Wörtler; Munich/DE
- Panel discussion:
  An outlook to the future: Muscle imaging between morphology and function

Friday, March 5, 08:30–10:00
SF 3a  Diffusion-weighted imaging of the abdomen: A new tool for oncologic imaging?

- Chairman’s introduction
  F. Caseiro-Alves; Coimbra/PT
- Diffusion imaging: From theory to protocol development
  D.-M. Koh; Sutton/UK
- Focal liver lesions: What can we expect?
  M. Lewin; Paris/Fr
- Pancreatic neoplasms: Is DWI helpful?
  C. Matos; Brussels/BE
- Pelvic cancers and lymph node imaging: The PET competitor?
  S. Gourtsoyianni; Iraklion/GR
- Panel discussion:
  Is DWI ready for routine use in oncological practice?

SF 3b  Imaging the polytrauma patient

- Chairman’s introduction
  A. Palkó; Szeged/HU
- Who, when and where: The role of the radiologist in the trauma team
  G. Schueller; Vienna/AT
- Front line sonography
  E. Danse; Brussels/BE
- MDCT as the single best solution
  U. Linsenmaier; Munich/DE
- The growing importance of interventional radiology
  T. Jargiello; Lublin/PL
- Panel discussion:
  Imaging in polytrauma: How can we help most?

SF 3c  Pediatric non-traumatic emergencies: What we must know!

- Chairman’s introduction
  M. Raissaki; Iraklion/GR
- Neurological emergencies
  C. Garel; Paris/Fr
- Thoracic emergencies
  C.E. de Lange; Oslo/NO
- Abdominal emergencies
  S.G.F. Robben; Maastricht/NL
- Musculoskeletal emergencies
  K.J. Johnson; Birmingham/UK
- Panel discussion:
  How to manage the stressed pediatrician

Friday, March 5, 08:30–10:00
SF 3d  Fetal body MRI

- Chairman’s introduction
  M. Bekiesinska-Figatowska; Warsaw/PL
- MRI of the thorax
  P. Eliáš; Hradec Králové/CZ
- MRI of the abdomen
  T.A.G.M. Huisman; Baltimore, MD/US
- MRI of the skeleton
  D. Prayer; Vienna/AT
- Panel discussion:
  Superspecialised examination or a task of the general radiologist?
Special Focus Sessions

Friday, March 5, 16:00-17:30
SF 6  Imaging of cardiomyopathies

- Chairman’s introduction
  V.E. Sinitsyn; Moscow/RU
- Imaging of cardiomyopathies: What is important for the cardiologist?
  J. Schulz-Menger; Berlin/DE
- MRI and MDCT in dilated cardiomyopathy
  J. Bogaert; Leuven/BE
- MRI and MDCT in hypertrophic cardiomyopathy
  M. Gutberlet; Leipzig/DE
- Uncharted waters: Unclassified and rare cardiomyopathies
  J.D. Dodd; Dublin/IE
- Panel discussion:
  Imaging of cardiomyopathies: A wake-up call for the general radiologist

Saturday, March 6, 08:30–10:00
SF 7a  Cardiac CT: Imaging beyond the coronaries

- Chairman’s introduction
  K. Nikolaou; Munich/DE
- Myocardial and valvular function
  T.R.C. Johnson; Munich/DE
- Myocardial viability and perfusion
  J.-F. Paul; Le Plessis Robinson/FR
- Congenital heart disease
  S. Leschka; Zurich/CH

Saturday, March 6, 08:30–10:00
SF 7b  Present and future direction of ultrasound

- Chairman’s introduction
  L.E. Derchi; Genoa/IT
- Clinical applications of US contrast media:
  Present guidelines
  M. Clauudon; Vandoeuvre-les-Nancy/FR
- Elastography: Clinical tool or toy?
  G. Rizzatto; Gorizia/IT
- Volume US in clinical practice for the radiologist
  S.T. Elliott; Newcastle upon Tyne/UK
- Panel discussion:
  Will ultrasound remain only the stethoscope of the clinician?

Saturday, March 6, 16:00-17:30
SF 10a  New insights in breast imaging

- Chairman’s introduction
  E. Azavedo; Stockholm/SE
- Tomosynthesis in breast imaging: Tomorrow’s mammography?
  K.C. Young; Guildford/UK
- Advances in breast ultrasound
  T.J. Popiela; Krakow/PL
- Breast specific gamma imaging: A novel, physiologic approach to breast cancer diagnosis
  R.F. Brem; Washington, DC/US
- Panel discussion:
  How should we integrate modern technology into our clinical diagnostic routines

Saturday, March 6, 16:00-17:30
SF 10b  Breast cancer: How to evaluate response to treatment

- Chairman’s introduction
  T.H. Helbich; Vienna/AT
- From genes to surgical outcome
  M. Gnant; Vienna/AT
- Mammography and ultrasound
  S. Delorme; Heidelberg/DE
- MRI and more
  F. Sardanelli; Milan/IT
- PET, PET/CT and more
  B. Sharma; Sutton/UK
- Panel discussion:
  Can we still trust oncologists’ fingers?

Sunday, March 7, 16:00-17:30
SF 14  Imaging in ENT emergencies

- Chairman’s introduction
  B. Verbist; Leiden/NL
- Emergencies of the sinonasal cavities and the anterior skull base
  J.W. Casselman; Bruges/BE
- Emergencies of the ear
  F. Veillon; Strasbourg/FR
- Emergencies of the neck
  M. Becker; Geneva/CH
- Panel discussion:
  Good reasons for performing CT and MRI in emergencies

= Interactive session with electronic voting/self assessment
### Special Focus Sessions

**Monday, March 8, 08:30–10:00**

**SF 15a  Acute aortic syndrome**

- Chairman’s introduction  
  J. Lammer; Vienna/AT  
- Technique, advantages and limitations of  
  CTA and MRA  
  V. Bérczi; Budapest/HU  
- Key imaging findings that allow distinction among the various aortic pathologies  
  F. Fanelli; Rome/IT  
- Endovascular management of acute type B dissection  
  H. Rousseau; Toulouse/FR  
- Endovascular management of thoracic aortic rupture  
  R. Morgan; London/UK  
- Panel discussion:  
  When is it time for the diagnostic radiologist to call the interventionalist or surgeon urgently?

**SF 15b  Diffusion-weighted imaging of the CNS beyond stroke**

- Chairman’s introduction  
  S. Sunaert; Leuven/BE  
- DWI in focal non-ischemic brain lesions  
  M. Law; Los Angeles, CA/US  
- DWI in diffuse non-ischemic brain and spine pathology  
  M. Mascalchi; Florence/IT  
- DWI: Use of advanced diffusion markers in non-infarct lesions  
  W. Van Hecke; Antwerp/BE  
- Panel discussion:  
  DWI: A window on histology and physiopathology?

**SF 15c  Vascular ultrasound imaging: When and how**

- Chairman’s introduction  
  B. Brkljačić; Zagreb/HR  
- Not only imaging: A window on physiology  
  C. Deane; London/UK  
- Carotid stenosis and vulnerable plaque  
  D. Gaitini; Haifa/IL  
- Planning and follow-up of endovascular procedures  
  Z. Morvay; Szeged/HU  
- DVT diagnosis and mimics  
  G. Ivanac; Zagreb/HR  
- Panel discussion:  
  Why is vascular US underutilised in radiology departments?

**Monday, March 8, 16:00–17:30**

**SF 18  Renal cancer: Old problems, new solutions**

- Chairman’s introduction  
  A. Magnusson; Uppsala/SE  
- MDCT of renal cancer  
  A. Cieszanowski; Warsaw/PL  
- US and MRI  
  N. Grenier; Bordeaux/FR  
- Tumor ablation  
  A. Adam; London/UK  
- Panel discussion:  
  1. How should we image and stage the patient with suspected renal cancer?  
  2. Is tumor ablation here to stay?
Communicating more to avoid litigation

By Mélisande Rouger

Cases brought before Court against physicians have been on the rise for the past ten years, and radiologists have not been spared by this growing trend. Gaining awareness of this phenomena and increasing communication with both patients and fellow clinicians can help radiologists avoid troublesome litigation. This is what the experts invited to take part in the Professional Challenges session 'Radiology and the Law' will explain at ECR 2010.

Long gone is the time when radiologists were sitting in a dark room at the bottom of a hospital reading x-rays all day, explained Dr. Éamonn Breatnach, radiologist at the Mater Misericordiae University Hospital, Dublin, who will chair the debates.

"Radiology has utterly changed and it has now become a full clinical speciality. And one of the areas that we need to be aware of with increasing clinical and direct patient contact is our obligations to communicate issues both with patients and fellow clinicians," he said.

The result of the expansion of workload due to the increasing amount of information now available in imaging examinations, and the heightened diagnostic accuracy and specificity of modern imaging is a very high expectation of accurate, comprehensive and clinically informed reporting. This expectation has to an extent been driven by radiologists themselves. Radiologists are increasingly likely to be held legally responsible for any inaccuracy or ‘miss’. Additionally, because of the increased amount of information in modern imaging, mistakes can be expected more frequently than when radiological images were less sophisticated. The fact that radiology reports are written down and not verbally communicated as occurs in other specialities makes radiology very vulnerable to review and retrospective blame when the clinical outcome is deemed poor by patients.

Litigation has been increasing in the U.S. and Western Europe, but Eastern European radiologists should also prepare themselves, as the trend could spread in time.

Misreads are more likely to occur when the image in question is being examined for a specific clinical indication and an incidental unrelated abnormality is present and ‘missed’. For instance, if a radiologist is performing a CT scan for back pain and happens to miss an incidental kidney tumour on that CT scan, this may have major implications for the patient. But what are the implications for the radiologist?

Not only is it difficult to establish international norms for misreading incidental findings, but also for misreads in general. “There is a very poor evidence base for what constitutes an acceptable ‘miss’ rate for radiological examinations. This will vary with the technique in question and the reporting rate, reporting environment, clinical information given etc.,” Breatnach said.

Litigation on the basis of a ‘miss’ is far more frequent than that relating to medical misadventure during an interventional procedure. Good communication with a patient and properly achieved informed consent will lower the risk of litigation from this source.

Complaints based on the lack of patient’s informed consent constitute an increasing risk for all physicians, Dr. Günther Loibner, a Viennese lawyer specialising in tort law, will explain at ECR.

“Cases in which patients claim that they have not been fully informed of the standard risks tied to one particular treatment are becoming more and more frequent,” he said.

Interventional radiologists should write down a protocol that details all the various possible consequences of a procedure, and this should be done with a witness and an interpreter when necessary, to make sure that the patient understands everything.

It may be burdensome because it requires a lot of organisation on the part of the physician, but it has been shown that detailing the information is not sufficient, one has to personally explain all the risks, consequences and alternative methods to the treatment, Loibner said.

For conventional imaging, it means that radiologists should understand that under certain circumstances they may have a legal duty to communicate acute, possibly life-threatening radiological abnormalities directly to patients themselves,
according to Dr. Leonard Berlin, Professor of Radiology at Rush University Medical College in Chicago, Illinois, who will expand on this point during the session. “Traditionally, radiologists believed that once they dictated an imaging report into the patient’s record, their responsibility ended,” explains Dr. Berlin. “However, with increasing frequency, American Courts have held that the communication of an abnormal radiological finding is just as important as the finding itself. Once the radiologist becomes aware through interpretation of a radiological study that a patient has a serious abnormality that could endanger the patient’s health, the patient must absolutely be informed of the finding,” continues Dr. Berlin. “Usually it’s the patient’s personal physician who explains the findings to the patient, but if that physician fails to inform the patient and diagnosis of the disease is delayed, resulting in severe injury to or death of the patient, the Courts will not only hold the referring physician liable, but now more and more often, the radiologist as well.” While Berlin acknowledges that the standard of care does not yet mandate radiologists to communicate radiological findings directly to all patients, nevertheless he encourages radiologists to consider doing so routinely, and definitely doing so when the referring physician is not available.

In any event, radiologists should make sure that important findings are communicated to the referring clinician. “Radiologists must remember that they have the responsibility to get the finding, if it is a significant and unexpected finding, to the referring doctor. In the past, reports have been known to get lost/ be misplaced and this is happening increasingly frequently. It is apparently not so obvious to all radiologists, and that’s why we will use the session to highlight how important communication is,” Breatnach concluded.
Professional Challenges
Sessions

Friday, March 5, 08:30–10:00
PC 3  Teaching: Art, habit or science?

- Chairman's introduction:
  Teaching and education – help yourself:
  Requirements for the future of radiology
  J.E. Wildberger; Maastricht/NL
- Clinical teaching: Avoid the yawn
  R. Greif; Berne/CH
- Clinical teaching: The young doctor's perspective
  C. Nyhsen; Sunderland/UK
- e-Learning: Concept for the future?
  R. Fowler; Leeds/UK
- Quality and outcome for teaching in radiology
  S. Kolkman; Amsterdam/NL
- Teach the teacher
  M. Hofer; Düsseldorf/DE
- Panel discussion: Teaching and education in radiology: Well-prepared for the future?

Saturday, March 6, 16:00–17:30
PC 10  Joint Session of ESR and EANM: PET/CT in oncologic imaging

- Chairman's introduction
  E. Breatnach; Dublin/IE
  A. Chiti; Milan/IT
- New probes to increase specificity and sensitivity of PET/CT in oncology
  W. Weber; Freiburg/DE
- The added value of contrast-enhanced PET/CT
  T.F. Hany; Zurich/CH
- Causes and imaging features of false positives/false negatives on PET/CT in oncologic imaging
  C. Smith; Dublin/IE
- New tracers in oncologic PET/CT
  H. Schoder; New York, NY/US
- Panel discussion

Sunday, March 7, 14:00–15:30
PC 13  The radiologist of the future: Challenges and changes

- Chairman's introduction
  P.A. Grenier; Paris/FR
- How to train the radiologists of the 21st century
  I.W. McCall; Oswestry/UK
- Molecular imaging and therapy:
  Turf battle to lose or to win
  G.P. Krestin; Rotterdam/NL
- Marketing in radiology: Evil or guardian angel
  M. Goyen; Hamburg/DE
- Panel discussion:
  Can we be optimistic? ... Yes we can!

Sunday, March 7, 16:00–17:30
PC 14  Radiology and the law

- Chairman's introduction
  E. Breatnach; Dublin/IE
- Radiologic communications:
  Dilemmas and pitfalls
  L. Berlin; Skokie, IL/US
- Medical negligence: The lawyer's perspective
  G. Loibner; Vienna/AT
- European legislation big brother:
  What the practitioner should know to avoid being sued and what to do if you are
  R. FitzGerald; Wolverhampton/UK
- Panel discussion: Illustrative cases on:
  1. Medico-legal consequences of poor radiology communication.
  2. What is an 'acceptable' error rate for radiologists?
  3. Panel advice on how to reduce one's medico-legal vulnerability.

Monday, March 8, 16:00–17:30
PC 18  Radiation protection

- Chairman's introduction
  E. Vaño; Madrid/ES
- New European Directive on basic safety standards
  E. Vaño; Madrid/ES
- EMAN – The European Medical ALARA Network
  P. Vock; Berne/CH
- Radiation protection training and practice: Bridging the gap
  M.M. Rehani; Vienna/AT
- Panel discussion:
  What do radiologists need to know about the new recommendations of the ICRP and the new European Directive?
Multidisciplinary Sessions
Managing Patients with Cancer

Thursday, March 4, 16:00–17:30
MS 221 Carcinoma of the uterus and cervix

• Chairman’s introduction
  R.H. Reznek; London/UK
• What the surgeon needs to know
  C. Pomel; Villejuif/FR
• What the clinical oncologist needs to know
  P.R. Blake; London/UK
• Imaging in carcinoma of the uterus and cervix
  R.H. Reznek; London/UK
• Panel discussion and case presentation

Friday, March 5, 08:30–10:00
MS 321 Prostate gland

• Chairman’s introduction
  U.G. Mueller-Lisse; Munich/DE
• What the surgeon needs to know
  M. Seitz; Munich/DE
• What the oncologist needs to know
  C. Belka; Munich/DE
• Imaging in prostate cancer
  U.G. Mueller-Lisse; Munich/DE
• Panel discussion and case presentation

Saturday, March 6, 08:30–10:00
MS 721 Lung cancer

• Chairman’s introduction
  J. Cáceres; Barcelona/ES
• What the surgeon needs to know
  W. Weder; Zurich/CH
• What the oncologist needs to know
  R. Pirker; Vienna/AT
• Imaging in lung cancer
  J. Cáceres; Barcelona/ES
• Panel discussion and case presentation

Monday, March 8, 16:00–17:30
MS 1821 Colorectal cancer

• Chairman’s introduction
  R.G.H. Beets-Tan; Maastricht/NL
• What the surgeon needs to know
  G.L. Beets; Maastricht/NL
• What the radiation oncologist needs to know
  V. Valentini; Rome/IT
• Imaging in colorectal cancer
  R.G.H. Beets-Tan; Maastricht/NL
• Panel discussion and case presentation
It could be standing room only during categorical course CC17 at ECR 2010. The new five-part course on abdominal emergencies will focus on clinical scenarios that any radiologist may have to confront in the emergency room. An international panel of experts will lay out the best options for diagnosing and managing these patients, and discuss areas of dissent. Delegates are advised to arrive early to get a seat.

“Any time we talk about emergencies, we get full rooms,” said Prof. Andrea Laghi, professor of radiology at the ‘Sapienza’ University of Rome. “In our hospital we have dedicated equipment and an emergency radiology team, but this is not the case at general or small district hospitals, where you may be covering emergency imaging one day or one night per week. This is why we need such a course: to train people who do not see so many emergencies and show them how to approach these cases.”

Knowing which modality to use when is a common theme and one that will underpin many of the sessions. Debates over CT versus ultrasound and x-ray versus CT are common in emergency abdominal radiology. The pros and cons of alternative imaging strategies will be presented for a variety of clinical scenarios, for example, suspected appendicitis in a female teenager, possible abdominal hernia in an elderly patient, and likely haemorrhage following abdominal trauma.

Multidetector CT (MDCT) is particular helpful when the patient’s symptoms are unspecific, according to Laghi, who will be speaking in a session dedicated to intestinal rupture.

“When you approach a patient in the emergency room, there is nothing written on them that says: ‘I have a hole in the guts’. But if you use MDCT, you will find that perforation,” Laghi said.

MDCT is not always needed, though. If the patient has an open perforation with a lot of free air, then the diagnosis can probably be made immediately with plain radiography. The patient can then go straight to surgery rather than waiting for a confirmatory CT scan. In cases of diverticulitis, on the other hand, where the perforation is covered and the air is confined to the mesentery, then MDCT will provide additional diagnostic information that will help guide subsequent patient management.

The role of ultrasound in visualising intestinal perforations has been largely taken over by MDCT, but ultrasound can still be of value in certain cases and prevent the overuse of CT, according to Dr. Julien Puylaert, radiologist at MCH Westeinde Hospital in The Hague, the Netherlands. Patients presenting at the MCH Westeinde Hospital with acute abdominal pain will typically have an ultrasound scan before proceeding to MDCT. The cause of pain is diagnosed on ultrasound in 75% of cases.

The hands-on nature of ultrasound means that radiologists can obtain important clinical information on the nature and site of the abdominal pain, so the scan is helpful in all patients, including the 25% who are referred on for MDCT, Puylaert said.

“The radiologist who performs the ultrasound also does the CT scan. We never make an exception to this rule. That radiologist makes one report for both modalities. We never separate the two,” he said.

The course will also introduce attendees to emerging interventional strategies for treating acute ischaemic disease. Bowel ischaemia can advance slowly and does not always require emergency treatment. However, in cases of aortic dissection or embolic occlusion in one of the major
mesenteric arteries, urgent action may be needed to prevent the whole bowel from becoming necrotic.

“Mesenteric ischaemia is probably something you see every second week in a large hospital, but the right way to diagnose it and treat it is not so well known,” said Prof. Dr. Johannes Lammer, director of cardiovascular and interventional radiology at the Medical University Vienna. “It is not a ‘headline topic’, like stroke, for example, but it is still very important.”

The only treatment option for patients with acute ischaemic mesenteric disease used to be bypass surgery, but this is no longer the case, he pointed out. Endovascular techniques can be used to open up stenosed arteries and to repair aortic dissections.

At least two of the three arteries supplying the bowel must be occluded before intervention is considered. Patients with acute abdominal pain but only one stenosed vessel are not generally referred for angioplasty or stent placement. In these cases, the ischaemic pain is unlikely to be the main source of the patient’s discomfort and the true reason for the pain should be sought.

“When diagnostic radiologists look at the CT scan and see an obstruction in the coeliac trunk, or in the superior or inferior mesenteric arteries, they need to know how important it is to recommend treatment and what options are available,” Lammer said.

**Categorical Course**

**Radiology in Abdominal Emergencies**

---

**Figure:**

A number of emerging interventional strategies for treating acute ischaemic disease will be covered at ECR 2010.

A: CT of arteriosclerotic visceral artery stenoses.

B: Balloon angioplasty of stenosis.

C: Control angiogram after PTA and stent placement in coeliac and superior mesenteric artery.

(Provided by J. Lammer)
**Categorical Courses**

**Radiology of the Spine in 2010**

**Thursday, March 4, 16:00–17:30**
**CC 216** Back to basics: Protocols for the spine

- Moderator: I. Cravo; Lisbon/PT
  - A. The role of the plain films
    J.-L. Drapé; Paris/FR
  - B. CT protocols for the spine
    B. Tins; Oswestry/UK
  - C. MR protocols for the spine
    J. Hodler; Zurich/CH

**Friday, March 5, 08:30–10:00**
**CC 316** Common spinal ‘problems’

- Moderator: I.M. Björkman-Burtscher; Lund/SE
  - A. ‘Myelopathy’:
    Easy way to the correct diagnosis
    M.M. Thurnher; Vienna/AT
  - B. Congenital anomalies made ‘easy’
    A. Rossi; Genoa/IT
  - C. Extradural spinal tumors
    P.C. Maly Sundgren; Lund/SE

**Friday, March 5, 16:00–17:30**
**CC 616** Discs: Old problems and new solutions

- Moderator: A.D. Gouliamos; Athens/GR
  - A. Spinal stenosis: How do you measure it?
    M. Gallucci; L’Aquila/IT
  - B. Degenerative disc disease
    L. van den Hauwe; Brasschaat/BE
  - C. Minimally invasive therapies for discogenic disease
    M. Muto; Naples/IT

**Saturday, March 6, 08:30–10:00**
**CC 716** Spinal cord: Difficult but devastating diagnoses

- Moderator: D. Balériaux; Brussels/BE
  - A. Demyelinating diseases of the spinal cord
    A. Rovira-Cañellas; Barcelona/ES
  - B. Spinal cord tumors
    C. Mueller-Mang; Vienna/AT
  - C. Vascular disorders of the spinal cord
    T. Krings; Toronto, ON/CA

**Saturday, March 6, 16:00–17:30**
**CC 1016** Bones: What you should know!

- Moderator: V. Hadjidekov; Sofia/BG
  - A. Primary and secondary tumors of the bony spine
    J.W.M. Van Goethem; Antwerp/BE
  - B. Traumatic bone injury
    M. Stajgis; Poznan/PL
  - C. Spinal infections: More common than expected?
    E.T. Tali; Ankara/TR

**Sunday, March 7, 08:30–10:00**
**CC 1116** Advanced imaging techniques in the spine

- Moderator: M. Leonardi; Bologna/IT
  - A. Benign vs malignant fracture in the spine
    A. Baur-Melnyk; Munich/DE
  - B. Imaging in low back pain
    A. Stäbler; Munich/DE
  - C. 3T spinal imaging
    M. Law; Los Angeles, CA/US

**Monday, March 8, 16:00–17:30**
**CC 1816** Spinal intervention: A new level of success

- Moderator: M. Serrallonga; Barcelona/ES
  - A. Image-guided pain management
    B.A. Johnson; Minneapolis, MN/US
  - B. Cement augmentation:
    Patient and treatment selection
    G.H. Zoarski; Baltimore, MD/US
  - C. Spinal interventions beyond vertebroplasty
    A. Gangi; Strasbourg/FR
Saturday, March 6, 16:00-17:30
CC 1017 Missing perfusion: Abdominal ischemic disease

Moderator: N. Gourtsoyiannis; Iraklion/GR
A. Mesenteric angiography: Diagnostic and therapeutic approach
   J. Lammer; Vienna/AT
B. The black bowel
   P. Rogalla; Toronto, ON/CA
C. Clinical management: What you need to know
   D.E. Malone; Dublin/IE

Sunday, March 7, 08:30-10:00
CC 1117 The hole in the guts

Moderator: S. Puri; New Delhi/IN
A. Wasting time with plain radiography?
   M. Laniado; Dresden/DE
B. Defining the role of US
   J.B.C.M. Puylaert; The Hague/NL
C. In search of the hole: CT
   A. Laghi; Latina/IT

Sunday, March 7, 16:00-17:30
CC 1417 Inflammation and oedema

Moderator: J.-M. Bruel; Montpellier/FR
A. The three musketeers: Appendicitis, diverticulitis, colitis
   J. Stoker; Amsterdam/NL
B. Liver and biliary tree
   J.A. Soto; Boston, MA/US
C. Pancreatitis: Common and critical
   P.R. Ros; Cleveland, OH/US

Monday, March 8, 08:30-10:00
CC 1517 The acute abdomen

Moderator: S.O. Schönberg; Mannheim/DE
A. The wrong twist: Mesenteric and omental torsion
   M. Macari; New York, NY/US
B. Abdominal hernias
   G. Brancatelli; Palermo/IT
C. Acute stages in neoplastic diseases
   J.A. Guthrie; Leeds/UK

Monday, March 8, 16:00-17:30
CC 1817 When time matters

Moderator: R.A. Novelline; Boston, MA/US
A. Emergency room: When radiologists can save lives
   O. Chan; London/UK
B. Rupture of solid organs
   J. Cazejust; Paris/FR
C. Intestinal haemorrhage
   N. Elmas; Izmir/TR
Categorical Courses
Imaging in Lung Diseases

Thursday, March 4, 16:00-17:30
CC 218 COPD: A disorder of the respiratory and cardiovascular systems
Moderator: E.E.J.G. Coche; Brussels/BE
A. New facets of an old disease
A.A. Bankier; Boston, MA/US
B. Morphology and function with CT:
M. Rémy-Jardin; Lille/FR
C. Functional MRI
H.-U. Kauczor; Heidelberg/DE

Friday, March 5, 08:30-10:00
CC 318 Cardiothoracic CT: One-stop-shop procedure?
Moderator: P. Herzog; Munich/DE
A. How to assess cardiac function from a chest CT angiographic examination
G.W. Gladish; Houston, TX/US
B. Impact in the management of acute pulmonary embolism
I. Hartmann; Rotterdam/NL
C. Clinical usefulness in chronic thoracic diseases
G. Bastarrika; Pamplona/ES

Saturday, March 6, 16:00-17:30
CC 1018 Beyond morphological analysis of lung tumors
Moderator: C. Beigelman; Paris/FR
A. New therapeutic horizons:
E.F. Patz, Jr.; Durham, NC/US
B. Tumoral angiogenesis with CT
N. Tacelli; Lille/FR
C. Nuclear imaging
N. Howarth; Chêne-Bougeries/CH

Sunday, March 7, 14:00-15:30
CC 1318 Lung perfusion imaging: CT or MR?
Moderator: A.R. Larici; Rome/IT
A. Technological basis for lung perfusion with CT
B. Ghaye; Liège/BE
B. Clinical experience with CT
F. Pontana; Lille/FR
C. MR perfusion imaging
S. Ley; Heidelberg/DE

Sunday, March 7, 16:00-17:30
CC 1418 Is volumetric CT the only way of scanning lung diseases?
Moderator: J. Rémy; Lille/FR
A. Radiation dose and chest CT imaging
D. Tack; Baudour/BE
B. Optimisation of volumetric CT protocols
M. Prokop; Utrecht/NL
C. Alternatives to volumetric CT
S.R. Desai; London/UK

Monday, March 8, 08:30-10:00
CC 1518 New interactions between radiologists and endoscopists
Moderator: M. Boijsen; Gothenburg/SE
A. Imaging of lymph nodes:
F.J.F. Herth; Heidelberg/DE
C. Mueller-Mang; Vienna/AT
B. Direct nodal sampling by echoendoscopy:
E.J.F. Herth; Heidelberg/DE
C. Image-guided endoscopy and biopsy of lung nodules
C.-H. Marquette; Nice/FR
**Mini Courses**

**Organs from A to Z: Liver**

**Sunday, March 7, 08:30-10:00**
**MC 1119 Anatomy and techniques**

- **Moderator:** S.C. Efremidis; Ioannina/GR
  - A. Essentials of liver anatomy and multimodality display
    - W. Schima; Vienna/AT
  - B. The correct protocols for CT and MR
    - E. Llopis; Valencia/ES
  - C. Imaging the function and structure in clinical practice
    - Y. Menu; Paris/FR

**Sunday, March 7, 14:00-15:30**
**MC 1319 Diffuse liver diseases**

- **Moderator:** A. Besim; Ankara/TR
  - A. Assessment of diffuse liver disease (including cirrhosis)
    - L. Martí-Bonmatí; Valencia/ES
  - B. Infectious diseases of the liver
    - O. Akhan; Ankara/TR
  - C. Vascular diseases of the liver:
    - Detection and role of transplantation
      - V. Vilgrain; Clichy/FR

**Monday, March 8, 08:30-10:00**
**MC 1519 Primary liver tumors**

- **Moderator:** B.I. Choi; Seoul/KR
  - A. Benign liver tumors
    - F. Caseiro-Alves; Coimbra/PT
  - B. Imaging of hepatocellular carcinoma
    - C. Bartolozzi; Pisa/IT
  - C. Other primary malignant liver tumors
    - R. Manfredi; Verona/IT

**Monday, March 8, 16:00-17:30**
**MC 1819 Liver tumors and management**

- **Moderator:** P.L. Pereira; Heilbronn/DE
  - A. Liver metastases
    - A. Palkó; Szeged/HU
  - B. Staging of liver tumors and treatment planning: When and how to treat
    - A.R. Gillams; London/UK
  - C. Evaluation of tumor response to treatment
    - T.K. Helmberger; Munich/DE

---

**Mini Courses**

**Extremity Joint MRI**

**Saturday, March 6, 16:00-17:30**
**MC 1025 Lower extremity: Anatomy, variants and pitfalls**

- **Moderator:** M. Shahabpour; Brussels/BE
  - A. Hip
    - E. Llopis; Valencia/ES
  - B. Knee
    - B. Vande Berg; Brussels/BE
  - C. Foot and ankle
    - N. Saupe; Zurich/CH

**Sunday, March 7, 14:00-15:30**
**MC 1325 Upper extremity: Anatomy, variants and pitfalls**

- **Moderator:** M. Rupreht; Maribor/SI
  - A. Shoulder
    - K. Wörtler; Munich/DE
  - B. Elbow
    - M. Zanetti; Zurich/CH
  - C. Wrist
    - A.H. Karantanas; Iraklion/GR
All about the liver

By Mélisande Rouger

The liver, this complex organ of the human body, is a challenging field of application for radiologists, who have at their disposal all imaging modalities with the addition of specific liver contrast agents. To help professionals make the most of their knowledge, a new, organ-oriented mini course will present them with the most common and emerging liver diseases, and the advanced imaging techniques to diagnose and treat them.

Liver tumours will be in the spotlight with two dedicated chapters, including one on primary liver tumours, an increasingly frequent disease all around the world. Hepatocellular carcinoma has for instance become a recurrent diagnostic issue in the daily practice of radiologists.

“This carcinoma was still rather unknown 20 years ago but it is one of the most emerging issues today,” said Professor Bartolozzi, Director of the Diagnostic and Interventional Radiology at the University of Pisa, and coordinator of the ECR mini course.

These tumours occur in a cirrhotic liver. One explanation for their incidence is the rising number of cirrhotic patients in the last two decades, with augmented risk of developing hepatocellular carcinoma.

Cirrhosis can either be caused by viral infections B and C, frequent in the Mediterranean, Northern Europe, United States and Far East countries, or alcohol abuse.

These factors affect the development of hepatocellular carcinoma by creating an injury to the hepatic cells, to which the liver responds by regenerating its cells, the first step towards a neoplastic disease. This process is a long lasting one, and hepatocellular carcinoma may develop more than 20 years after the infection took place. Alcohol may affect the course of the disease, allowing tumours to develop more quickly.

It has become crucial to follow up hepatic cirrhosis patients early on in their diseases, and radiologists do so with ultrasound (US) every three to six months, depending on the aggressiveness of the disease, to detect the possible development of carcinoma.

In Europe and Japan computed tomography (CT) and magnetic resonance (MR) are used at a later stage, for instance when a nodule is detected. As often, CT is used earlier in the United States.

Liver biopsy was long regarded as the only technique to show the existence of a tumour. But radiologists can now track the building up of neovascularisation (neoangiogenesis), strong indicators for the presence of a tumour, from the hepatic artery by using contrast media combined with CT, US or MR. This advance has considerably increased the role of imaging in the treatment of liver tumours, a fact radiologists need to be aware of, Prof. Bartolozzi believes.

Infectious diseases in the liver are another important issue radiologists should become familiar with. Having long been a frequent problem in emerging countries, they are now spreading to Europe due to increased migrations of people.

European radiologists should gain knowledge of how to diagnose these diseases since they are not used to dealing with such cases, Prof. Bartolozzi said. The course will teach how to image post-viral diseases and also bacterial and parasitic infections.

Vascular diseases are another important issue because the liver is a highly vascularised organ, the only one receiving blood supply from two sources – the portal vein and the hepatic artery – which considerably increase its exposure to vascular diseases.
“It is critical to make an early diagnosis of a vascular disease because in that case treatment should be started promptly, from anticoagulation therapy to complex interventional procedures, such as stenting or TIPS. The timing is also very critical,” Bartolozzi explained.

Diagnosis is very often made within an emergency department in patients presenting with acute pain, and it is crucial to react quickly.

In liver transplantations, vascularisation is also critical because vascular diseases may occur after the procedure, for instance when an artery is obstructed.

Professor Valérie Vilgrain, a radiologist at the Hôpital Beaujon in Clichy (France), where an important transplant project brings radiology to work together closely with surgery, will detail this point in her presentation.

The liver is a key organ and it comes as no surprise to Prof. Bartolozzi that it should open this new series of mini courses.

“The liver for the radiologist is a little like the Matterhorn for the alpinist: a challenging summit to reach,” said Prof. Bartolozzi, referring to ECR 2009 symbol. “All radiologists should be aware of the importance of this organ in terms of pathologies, imaging techniques and modalities widely used in the diagnostic and therapeutic work-up of patients with hepatic diseases.”

Mini Course
Organs from A to Z: Liver

Figures:
(a) Arterial phase MDCT axial image shows highly hypervascular focal liver lesion (*).
(b) CT perfusion map reveals markedly increased hepatic arterial fraction in the lesion compared to the surrounding liver parenchyma, indicating that blood supply to the lesion is mainly provided by arterial feeders, consistently with the diagnosis of hepatocellular carcinoma.
## Refresher Courses
### Abdominal and Gastrointestinal

#### Thursday, March 4, 16:00-17:30
**RC 201** Gastroesophageal cancer: Is modern imaging accurate enough?
- **Moderator:** F.-T. Fork; Malmö/SE
- **A. Role of US, EUS and CEUS**
  - S.A. Roberts; Cardiff/UK
- **B. Role of CT and MRI**
  - E.J. Rummeny; Munich/DE
- **C. Role of PET/CT**
  - W.L. Wong; Northwood/UK

#### Friday, March 5, 08:30-10:00
**RC 301** Quantification of liver processes: Defining biomarkers
- **Moderator:** M.A. Bali; Brussels/BE
- **A. Steatosis**
  - P. Chevallier; Nice/FR
- **B. Iron overload**
  - J.M. Alústiza; San Sebastián/ES
- **C. Fibrosis**
  - B. Van Beers; Clichy/FR

#### Friday, March 5, 16:00-17:30
**RC 601** Tumor follow-up evaluation: Which modality for what?
- **Moderator:** S. Terraz; Geneva/CH
- **A. US and CEUS**
  - T. Rettenbacher; Innsbruck/AT
- **B. CT and MRI perfusion**
  - F. Berger; Munich/DE
- **C. MR diffusion**
  - C. Della Pina; Pisa/IT

#### Saturday, March 6, 08:30-10:00
**RC 701** Abdominal MRI: Protocols that work
- **Moderator:** L. Grazioli; Brescia/IT
- **A. Liver**
  - W. Schima; Vienna/AT
- **B. Small bowel and colon**
  - N. Papanikolaou; Iraklion/GR
- **C. Pancreas and bile ducts**
  - C. Matos; Brussels/BE

#### Sunday, March 7, 08:30-10:00
**RC 1101** Rectal cancer
- **Moderator:** H. Trillaud; Bordeaux/FR
- **A. Staging with US and CT**
  - A. Maier; Vienna/AT
- **B. Staging with MRI**
  - C. Hoefel; Reims/FR
- **C. Follow-up**
  - G. Brown; Sutton/UK

#### Monday, March 8, 08:30-10:00
**RC 1501** CT colonography: All the relevant aspects
- **Moderator:** A.K. Dixon; Cambridge/UK
- **A. State-of-the-art technique**
  - F. Iafrate; Rome/IT
- **B. Avoiding traps or pitfalls**
  - P. Lefere; Roeselare/BE
- **C. Evidence based results?**
  - S.A. Taylor; London/UK

#### Monday, March 8, 16:00-17:30
**RC 1801** Crohn’s disease: Techniques and results
- **Moderator:** F. Maccioni; Rome/IT
- **A. Role of US, EUS and CEUS**
  - V. Valek; Brno/CZ
- **B. MRI and MR-related tools**
  - S. Gourtsoyianni; Iraklion/GR
- **C. CT vs MRI**
  - M.A. Patak; Berne/CH
**Thursday, March 4, 16:00–17:30**  
**RC 202**  
**Breast US**  
Moderator: G. Rizzatto; Gorizia/IT  
A. Ultrasound and BI-RADS  
H.M. Zonderland; Amsterdam/NL  
B. The role of ultrasound in premalignant and benign lesions  
I. Leconte; Brussels/BE  
C. Axillary tail and US  
E.E. Deurloo; Amsterdam/NL

**Friday, March 5, 16:00–17:30**  
**RC 602**  
**Breast MRI: Lesion characterisation**  
Moderator: K. Kinkel; Chêne-Bougeries/CH  
A. Morphology and kinetics at CE dynamic imaging  
G. Esen; Istanbul/TR  
B. Overdiagnosis by breast MRI?  
F. Sardanelli; Milan/IT  
C. How to improve specificity of breast MRI?  
J. Veltman; Nijmegen/NL

**Sunday, March 7, 08:30–10:00**  
**RC 1102**  
**Interventional techniques**  
Moderator: R. Schulz-Wendtland; Erlangen/DE  
A. US-guided core biopsy  
L. Apesteguía; Pamplona/ES  
B. Stereotactic large core biopsy  
P.D. Britton; Cambridge/UK  
C. An update on MR-guided wide excision biopsy  
S.H. Heywang-Köbrunner; Munich/DE

**Sunday, March 7, 14:00–15:30**  
**RC 1302**  
**Screening programmes: New challenges**  
Moderator: S.B. Grover; New Delhi/IN  
A. Digital mammography screening  
M. Yaffe; Toronto, ON/CA  
B. Are CAD systems of any help in screening?  
P.A.T. Baltzer; Jena/DE  
C. Screening with MRI: The future?  
H. Dobson; Glasgow/UK

**Sunday, March 7, 16:00–17:30**  
**RC 1402**  
**Detection of ductal carcinoma in situ**  
Moderator: G. Forrai; Budapest/HU  
A. Mammography  
B. Brancato; Florence/IT  
B. Ultrasound  
C. F. Weismann; Salzburg/AT  
C. MR imaging  
R.A. Kubik-Huch; Baden/CH
Refresher Courses
Cardiac

Thursday, March 4, 16:00–17:30
RC 203 Tips and tricks to improve your image quality

Moderator: T. Bader; Vienna/AT
A. Sharp CT images with little radiation
   L. Lehmkuhl; Leipzig/DE
B. Clear MR images without artefacts
   J. Bremerich; Basle/CH
C. Rescuing the examination with post-processing
   P.M.A. van Ooijen; Groningen/NL

Friday, March 5, 08:30–10:00
RC 303 Systematic approach to congenital heart disease (CHD)

Moderator: A. de Roos; Leiden/NL
A. Echocardiography: The first line modality
   H. Abdul-Khaliq; Homburg a.d. Saar/DE
B. MRI: Getting more specific
   P. Beerbaum; London/UK
C. MDCT: Filling the gap
   A. Küttner; Erlangen/DE

Sunday, March 7, 16:00–17:30
RC 1403 Valvular heart disease

Moderator: F. Cademartiri; Parma/IT
A. Echocardiography:
   Clinical standard with limitations
   M.R. Rees; Gwynedd/UK
B. Computed tomography:
   More than calcification!
   A. Lembcke; Berlin/DE
C. Magnetic resonance:
   Value of flow measurements
   N.L. Kelekis; Athens/GR

Monday, March 8, 08:30–10:00
RC 1503 Imaging coronary artery disease (CAD)

Moderator: G. Roditi; Glasgow/UK
A. CT of coronary arteries:
   Luminography and beyond
   H. Alkadhi; Zurich/CH
B. MRI: What can it provide in CAD?
   L. Natale; Rome/IT
C. MRI and MDCT: Complementary or competitive?
   K. Nikolaou; Munich/DE
## Refresher Courses

### Chest

**Friday, March 5, 16:00–17:30**  
**RC 604** Hot CT issues in clinical practice  
**Moderator:** C. Schaefer-Prokop; Amsterdam/NL  
**A.** How to manage incidentally found pulmonary nodules  
L. Bonomo; Rome/IT  
**B.** Optimising and minimising radiation dose  
D. Tack; Baudour/BE  
**C.** Phenotyping and interventions in COPD  
P.A. Grenier; Paris/FR

**Saturday, March 6, 08:30–10:00**  
**RC 704** ‘Known’ conditions revisited  
**Moderator:** M.-L. Storto; Chieti/IT  
**A.** An approach to cystic lung disease on HRCT  
A. Devaraj; Cambridge/UK  
**B.** Under-recognised infections in immune competent individuals  
T. Franquet; Barcelona/ES  
**C.** Imaging of thoracic tuberculosis  
I.E. Tyurin; Moscow/RU

**Saturday, March 6, 16:00–17:30**  
**RC 1004** Chest in the emergency room  
**Moderator:** A.P. Parkar; Bergen/NO  
**A.** Can chest radiography tell you the whole truth?  
K. Malagari; Athens/GR  
**B.** Triple rule-out CT in atypical chest pain: Must or luxury?  
G. Savino; Rome/IT  
**C.** Imaging of chest trauma  
A. Oikonomou; Alexandroupolis/GR

**Sunday, March 7, 08:30–10:00**  
**RC 1104** Bedside chest imaging  
**Moderator:** J. Neuwirth; Prague/CZ  
**A.** Bedside chest radiography:  
Technical aspects and main results  
E. Eisenhuber; Vienna/AT  
**B.** Role of bedside ultrasonography of the thorax  
K. Vidmar Kocijancic; Ljubljana/SI  
**C.** Radiologic-guided bedside interventions of the thorax  
F. Gleeson; Oxford/UK

**Sunday, March 7, 14:00–15:30**  
**RC 1304** Airways evaluation  
**Moderator:** S. Matthews; Sheffield/UK  
**A.** Volume CT assessment of diffuse diseases of the airways  
G.R. Ferretti; Grenoble/FR  
**B.** Quantitative assessment of the airways  
F. Laurent; Pessac/FR  
**C.** CT quantification of pulmonary emphysema  
P.A. Gevenois; Brussels/BE

**Monday, March 8, 16:00–17:30**  
**RC 1804** Non-small cell lung cancer  
**Moderator:** Ç. Atasoy; Ankara/TR  
**A.** Update in TNM classification  
S. Diederich; Düsseldorf/DE  
**B.** PET/CT in lung cancer  
N. Howarth; Chêne-Bougeries/CH  
**C.** Radiofrequency ablation of NSCLC: Current status  
T. de Baère; Villejuif/FR
**Refresher Courses**

**Computer Applications**

**Thursday, March 4, 16:00–17:30**

**RC 205  Image sharing**

Moderator: A. Abildgaard; Oslo/NO

A. Exchange of imaging data with portable media (CD, DVD, USB)
   N.H. Strickland; London/UK

B. Images crossing borders: What about administration and law?
   H.K. Pohjonen; Espoo/FI

   E. Kotter; Freiburg/DE

**Monday, March 8, 16:00–17:30**

**RC 1805  PACS: Evolution**

Moderator: J. Chabriais; Aurillac/FR

A. How to improve PACS with open source software
   O. Ratib; Geneva/CH

B. How PACS is useful for eLearning
   P. Pokieser; Vienna/AT

C. What radiologists should know about the use of PACS in surgical procedures
   E. Neri; Pisa/IT

**Refresher Courses**

**Molecular Imaging and Contrast Media**

**Friday, March 5, 16:00–17:30**

**RC 606  Organ-specific and future contrast media in MRI**

Moderator: A.J. van der Molen; Leiden/NL

A. Real added value of liver-specific contrast media
   O. Clément; Paris/FR

B. Contrast for atherosclerosis imaging
   J.H. Gillard; Cambridge/UK

C. CEST-type contrast media in MRI
   J.W.M. Bulte; Baltimore, MD/US

**Sunday, March 7, 16:00–17:30**

**RC 1406  Molecular imaging probes on your doorstep**

Moderator: J.Å. Jakobsen; Oslo/NO

A. SPIO and USPIO probes for inflammatory diseases
   N. Grenier; Bordeaux/FR

B. Multi-functional MRI for assessing novel therapies: Decision tools or decorations?
   A.R. Padhani; Northwood/UK

C. MRI cell tracking
   J.W.M. Bulte; Baltimore, MD/US
### Friday, March 5, 08:30–10:00
**RC 307  Female infertility**

- **Moderator:** E. Kuligowska; Boston, MA/US
- **A.** 'Functional imaging' of the ovary for everybody  
  M. Weston; Leeds/UK
- **B.** Pelvic endometriosis: Why is it commonly overlooked?  
  G. Restaino; Campobasso/IT
- **C.** Understanding gynecologic malformations  
  F.M. Danza; Rome/IT

### Friday, March 5, 16:00–17:30
**RC 607  Imaging of the scrotum and penis**

- **Moderator:** B. Brkljačić; Zagreb/HR
- **A.** Acute scrotum  
  L.E. Derchi; Genoa/IT
- **B.** Incidentaloma in scrotal US  
  L. Rocher; Le Kremlin-Bicêtre/FR
- **C.** Imaging of the penis  
  M. Bertolotto; Trieste/IT

### Saturday, March 6, 08:30–10:00
**RC 707  CTU and MRU: Urinary tract imaging**

- **Moderator:** H.J. Michaely; Mannheim/DE
- **A.** CTU/MRU in acute obstruction  
  T. Meindl; Munich/DE
- **B.** Chronic/intermittent obstruction  
  M.-F. Bellin; Le Kremlin-Bicêtre/FR
- **C.** Tumors: CTU/MRU  
  N.C. Cowan; Oxford/UK

### Saturday, March 6, 16:00–17:30
**RC 1007  Kidney: Imaging and intervention**

- **Moderator:** R. Stern Padovan; Zagreb/HR
- **A.** Angiomyolipoma: A review  
  N. Grenier; Bordeaux/FR
- **B.** The (not so) rare malignant tumors of the kidney  
  P. Hallscheidt; Heidelberg/DE
- **C.** Radiofrequency and cryotherapy of renal tumors: Techniques, results and complications  
  J.-M. Correas; Paris/FR

### Sunday, March 7, 14:00–15:30
**RC 1307  Uterus: Imaging and intervention**

- **Moderator:** R. Forstner; Salzburg/AT
- **A.** Benign diseases  
  T.M. Cunha; Lisbon/PT
- **B.** Malignant tumors  
  J.A. Spencer; Leeds/UK
- **C.** Ultrasound ablation and uterine artery embolisation for treatment of uterine leiomyomas  
  T.J. Kroencke; Berlin/DE
Refresher Courses
Head and Neck

Thursday, March 4, 16:00–17:30
RC 208 Skull base

Moderator: K. Hrabák; Budapest/HU
A. Anatomical survival kit
   E. Steiner; St. Pölten/AT
B. Cranial nerves in cancer imaging
   J.W. Casselman; Bruges/BE
C. Depiction of dural invasion:
   How good is MRI?
   A. Borges; Lisbon/PT

Saturday, March 6, 16:00–17:30
RC 1008 Suprahyoid neck

Moderator: C. Czerny; Vienna/AT
A. Neck spaces: What you need to know
   S. Bisdas; Tübingen/DE
B. How to ruin or improve your
   head and neck study
   V. Chong; Singapore/SG
C. Tips and tricks in the
   parapharyngeal space
   A. Trojanowska; Lublin/PL

Sunday, March 7, 08:30–10:00
RC 1108 Infrahyoid neck

Moderator: A.A.A. Abdel Razek; Mansoura/EG
A. Hypopharyngeal cancer:
   What you need to know
   C.R. Habermann; Hamburg/DE
B. The suspected recurrence:
   How to deal with it
   R. Hermans; Leuven/BE
C. Lymph node imaging from A to Z
   R. Maroldi; Brescia/IT

Monday, March 8, 08:30–10:00
RC 1508 Common pains in the
   head and neck

Moderator: F. Torrinha; Lisbon/PT
A. Salivary colic
   T. Beale; London/UK
B. Trigeminal neuralgia
   B.F. Schuknecht; Zurich/CH
C. Painful swallowing
   M. Becker; Geneva/CH

Monday, March 8, 16:00–17:30
RC 1808 Reporting and staging
   head and neck tumors

Moderator: S.J. Golding; Oxford/UK
A. Paranasal sinuses
   D. Farina; Brescia/IT
B. Oral cavity
   F.A. Pameijer; Utrecht/NL
C. Larynx
   A.D. King; Hong Kong/CN
Thursday, March 4, 16:00–17:30
RC 209 The trauma patient
Moderator: A.A. Hatzidakis; Iraklion/GR
A. Imaging algorithms
L.S. Fournier; Paris/FR
B. Principles of embolisation
J.C. van den Berg; Lugano/CH
C. Iatrogenic trauma
P. Haage; Wuppertal/DE

Friday, March 5, 16:00–17:30
RC 609 RF ablation beyond the liver
Moderator: R.D. Garcia-Mónaco; Buenos Aires/AR
A. RF ablation in bone
A.D. Kelekis; Athens/GR
B. RF ablation in the kidney
M.A. Farrell; Waterford/IE
C. RF ablation in the chest
I. Bargellini; Pisa/IT

Sunday, March 7, 08:30–10:00
RC 1109 Venous thromboembolism
Moderator: O.M. van Delden; Amsterdam/NL
A. Which IVC filter?
D.K. Tsetis; Iraklion/GR
B. Complications of IVC filters and their management
A. Nicholson; Leeds/UK
C. Central venous occlusions in the chest
A. Basile; Catania/IT

Sunday, March 7, 14:00–15:30
RC 1309 Infection and percutaneous drainage
Moderator: M. Bezzi; Rome/IT
A. Empyema
A.G. Ryan; Waterford/IE
B. Abdominal abscess
V. Válek; Brno/CZ
C. Pelvic abscess
M.A. Funovics; Vienna/AT

Sunday, March 7, 16:00–17:30
RC 1409 Oncologic interventions in the liver
Moderator: J.I. Bilbao; Pamplona/ES
A. RF ablation
F. Deschamps; Villejuif/FR
B. New embolisation techniques
F. Orsi; Milan/IT
C. Future directions
J. Kettenbach; Berne/CH

Monday, March 8, 08:30–10:00
RC 1509 Minimally invasive treatment of uterine fibroids
Moderator: R. Pietura; Lublin/PL
A. Choice of embolic agent
N. Hacking; Southampton/UK
B. Recurrence of fibroids after embolisation
C. Binkert; Winterthur/CH
C. UAE and HIFUS: What the radiologist needs to know
T.J. Kroencke; Berlin/DE
Insights into Imaging
Education and strategies in European radiology

A new journal brought to you by ESR

- original articles
- educational material, such as state of the art reviews
- scientific and best-practice knowledge
- guidelines
- recommendations & statements from leading radiological societies in Europe

Submit your manuscript at www.editorialmanager.com/inii

Starting from January 2010, full electronic access will be freely available to members of ESR.
www.i3-journal.org
Friday, March 5, 16:00–17:30
RC 610 Metabolic bone diseases

Moderator: G. Guglielmi; Foggia/IT
A. Latest advances in osteoporosis
   C.R. Krestan; Vienna/AT
B. The many faces of Paget’s disease
   V.N. Cassar-Pullicino; Oswestry/UK
C. Rickets and osteomalacia
   J.E. Adams; Manchester/UK

Saturday, March 6, 08:30–10:00
RC 710 Arthritis: Back to basics

Moderator: V. Jevtic; Ljubljana/SI
A. Radiographic diagnosis
   A.J. Grainger; Leeds/UK
B. Imaging crystal arthritis
   A. Cotten; Lille/FR
C. Imaging the spine in arthritis
   A.G. Jurik; Århus/DK

Saturday, March 6, 16:00–17:30
RC 1010 Hip through the ages

Moderator: M. Padrón; Madrid/ES
A. The pediatric hip
   D.J. Wilson; Oxford/UK
B. The hip in the young athlete
   C.W.A. Pfirrmann; Zurich/CH
C. The ageing hip
   A.H. Karantanas; Iraklion/GR

Sunday, March 7, 08:30–10:00
RC 1110 Shoulder

Moderator: C. Masciocchi; L’Aquila/IT
A. Rotator cuff and impingement
   J. Kramer; Linz/AT
B. Instability
   M. Reijnierse; Leiden/NL
C. The post-operative shoulder
   M. Zanetti; Zurich/CH

Sunday, March 7, 14:00–15:30
RC 1310 Knee

Moderator: M. Maas; Amsterdam/NL
A. Menisci: Latest advances
   S.J. Eustace; Dublin/IE
B. The posterior corners
   J. Hodler; Zurich/CH
C. The post-operative knee
   C. Glaser; Munich/DE

Sunday, March 7, 16:00–17:30
RC 1410 Bone tumors

Moderator: K. Verstraete; Gent/BE
A. Diagnosis: From radiographs to MRI
   K. Wörtler; Munich/DE
B. Staging and intervention
   S. James; Birmingham/UK
C. New techniques (including DWI)
   S. Pans; Leuven/BE

Monday, March 8, 08:30–10:00
RC 1510 Elbow and wrist

Moderator: J.-L. Drapé; Paris/FR
A. Elbow and wrist trauma
   M.C. De Jonge; Amsterdam/NL
B. Overuse of elbow and wrist
   E. Llopis; Valencia/ES
C. Neuropathy
   C. Martinoli; Genoa/IT
Refresher Courses

Neuro

Thursday, March 4, 16:00–17:30
RC 211 Basic MRI
Moderator: M.I. Argyropoulou; Ioannina/GR
A. Basic techniques and pattern recognition
P. Parizel; Antwerp/BE
B. New MR sequences in daily practice
R. Gasparotti; Brescia/IT
C. Diffusion tensor imaging: Basic tool for radiologists?
S. Lehéricy; Paris/FR

Saturday, March 6, 16:00–17:30
RC 1011 Focal brain lesions
Moderator: J. Walecki; Warsaw/PL
A. Differential diagnosis of T2 hyperintense lesions
A. Rovira-Cañellas; Barcelona/ES
B. Neoplasm or not? Decision making in focal mass lesions of the brain
Z. Rumboldt; Charleston, SC/US
C. Adult glioma: Advanced neuroimaging for treatment planning
C. Calli; Izmir/TR

Sunday, March 7, 08:30–10:00
RC 1111 Stroke
Moderator: R. Siemund; Lund/SE
A. CT or MRI in the acute ischemic stroke?
G. Krumina; Riga/LV
B. DWI, CT/MR PWI, and/or CTA/MRA: What is necessary?
A. Dörfler; Erlangen/DE
C. Nontraumatic intracranial hemorrhage
L. van den Hauwe; Brasschaat/BE

Sunday, March 7, 14:00–15:30
RC 1311 Neurodegenerative disorders
Moderator: X. Feng; Shanghai/CN
A. The new MS diagnostic criteria
B. Göraj; Nijmegen/NL
B. Early diagnosis and differential neuroimaging issues in dementia
M.P. Wattjes; Amsterdam/NL
C. Neuroimaging in abnormal movement diseases
B. Gómez-Ansón; Barcelona/ES

Sunday, March 7, 16:00–17:30
RC 1411 Common disorders of the pediatric brain
Moderator: P. Eliás; Hradec Králové/CZ
A. Fetal MR imaging: More than just T2-weighted images
C. Hoffmann; Tel Hashomer/IL
B. Normal findings and pitfalls in pediatric neuroimaging
W.K. Chong; London/UK
C. Neuroimaging in the acutely ill child
E. Vázquez; Barcelona/ES

Monday, March 8, 08:30–10:00
RC 1511 Interventional neuroradiology
Moderator: M. Forsting; Essen/DE
A. Endovascular management of intracranial aneurysms
A. Krajina; Hradec Králové/CZ
B. Endovascular treatment of acute ischemic stroke
L. Castellan; Genoa/IT
C. Stent-based technologies in the treatment of intracranial aneurysms and atherosclerotic disease
I. Szikora; Budapest/HU

Monday, March 8, 16:00–17:30
RC 1811 Basic MR spectroscopy
Moderator: K.-O. Løvblad; Geneva/CH
A. MRS in daily practice made easy
A. Urbanik; Krakow/PL
B. MRS in metabolic CNS disorders
P.C. Maly Sundgren; Lund/SE
C. MRS in brain tumors
M. Essig; Heidelberg/DE
Saturday, March 6, 08:30–10:00
RC 712  Imaging the GI/GU tracts

Moderator: G. del Pozo; Madrid/ES
A. Is ultrasound enough for a comprehensive diagnosis?
   M. Riccabona; Graz/AT
B. Role of plain film, fluoroscopy, nuclear medicine and CT
   V. Donoghue; Dublin/IE
C. MRI: Current state and new options
   W. Hirsch; Leipzig/DE

Sunday, March 7, 08:30–10:00
RC 1112 Advanced brain MR imaging: Why and when

Moderator: J.-F. Chateil; Bordeaux/FR
A. Diffusion tensor imaging
   A. Righini; Milan/IT
B. Spectroscopy
   L. Astrakas; Ioannina/GR
C. Functional MRI
   L. Hertz-Pannier; Gif sur Yvette/FR

Sunday, March 7, 14:00–15:30
RC 1312 Safety first

Moderator: S. Ryan; Dublin/IE
A. CT in children: Dose reduction strategies
   R.A.J. Nievelstein; Utrecht/NL
B. Ensuring safety for infants undergoing MRI
   T.G. Maris; Iraklion/GR
C. Fetal MRI: Attitudes towards safety
   D. Price; London/UK
Refresher Courses
Physics in Radiology

Saturday, March 6, 16:00–17:30
RC 1013 High field MRI: Beyond 3T

Moderators: E. Atalar; Ankara/TR
H. Köstler; Würzburg/DE
A. Challenges of high field MR
M. Bock; Heidelberg/DE
B. A complicated solution to a complicated problem: Transmit array
K.P. Pruessmann; Zurich/CH
C. Is 7T ready for clinical use?
R.W. Bowtell; Nottingham/UK

Sunday, March 7, 08:30–10:00
RC 1113 Diagnostic radiology and pregnancy

Moderators: H. Bosmans; Leuven/BE
E. Vaño; Madrid/ES
A. Conceptus doses and risks from maternal diagnostic X-ray examinations
J. Damilakis; Iraklion/GR
B. X-ray imaging and pregnancy: Justification and optimisation of exposure
P. Vock; Berne/CH
C. Pregnancy and MRI: Risks to the unborn child
J. De Wilde; Edinburgh/UK

Sunday, March 7, 14:00–15:30
RC 1313 Radiation dose management

Moderators: M. Koutalonis; London/UK
J.N. Vassileva, Sofia/BG
A. Justification in clinical practice
J.R. Mayo; Vancouver, BC/CA
B. Practical CT dose reduction strategies
W.A. Kalender; Erlangen/DE
C. Digital vs conventional radiography: What about the dose?
J.R.G. Persliden; Örebro/SE

Sunday, March 7, 16:00–17:30
RC 1413 Clinical audit, accreditation and the role of the medical physicist

Moderators: A. Del Guerra; Pisa/IT
J. Geleijns; Leiden/NL
A. European-wide perspective on clinical audit
H. Jarvinen; Helsinki/FI
B. National perspective: Clinical audit inspections
S. Ebdon-Jackson; Didcot/UK
C. Hospital perspective on clinical audit
P. Gilligan; Dublin/IE

Monday, March 8, 08:30–10:00
RC 1513 Visualisation, perception and image processing

Moderators: L. Donoso; Barcelona/ES
W.J.M. van der Putten; Galway/IE
A. Visualisation and perception
A.G. Gale; Loughborough/UK
B. Image processing and perception
B.M. ter Haar Romney; Eindhoven/NL
C. Clinical application of image processing
A. Persson; Linköping/SE
### Saturday, March 6, 08:30–10:00
**RC 714 MRI**

**Moderators:** H. Ringertz; Stanford, CA/US  
C. Vandulek; Kaposvár/HU

**A. Investigation of occlusive peripheral arterial diseases:**  
Role of CT, MR, US and DSA  
G. Pavlikovics; Miskolc/HU

**B. Practical approach to fMRI:**  
Methods and cases  
P. Bogorodzki; Warsaw/PL

### Saturday, March 6, 16:00–17:30
**RC 1014 Administrative issues**

**Moderators:** K. Åhlström Riklund; Umeå/SE  
S. Braico; Rome/IT

**A. Lean project at OUH**  
L. Tarp; Odense/DK

**B. Lean project at the NHS Lothian Edinburgh**  
L. Hudson; Edinburgh/UK

### Sunday, March 7, 08:30–10:00
**RC 1114 Patient interaction**

**Moderators:** P. Blackburn Andersen; Kolding/DK  
C. Garvey; Liverpool/UK

**A. Interaction between patient and radiographer during radiological examinations**  
B.T. Andersson; Lund/SE

**B. The role of the radiographer in patient advocacy**  
V. Challen; Lancaster/UK

**C. Measuring short and long-term consequences of a false-positive mammography among women attending breast cancer screening programmes**  
A. Bolejko; Malmö/SE

### Sunday, March 7, 14:00–15:30
**RC 1314 CT imaging**

**Moderators:** M. Golebiowski; Warsaw/PL  
D. Pekarovic; Ljubljana/SI

**A. CT of the GI system**  
M. Leidner; Stockholm/SE

**B. Introduction to PET/CT: Modalities and patient care**  
K.J. Thomsen; Odense/DK

### Sunday, March 7, 16:00–17:30
**RC 1414 Pediatric imaging**

**Moderators:** C. Balassy; Toronto, ON/CA  
P. Gerson; Paris/FR

**A. DR system: How to find the best hardware and software to achieve minimum dose and best images**  
H. Precht; Odense/DK

**B. CT: Cardiac examinations in children**  
T. Bock-Pedersen; Copenhagen/DK
Refresher Courses

Vascular

Thursday, March 4, 16:00–17:30
RC 215 Diseases of the visceral arteries

Moderator: M.I. Furmanek; Warsaw/PL
A. Renal vascular disease
   D. Vorwerk; Ingolstadt/DE
B. Acute and chronic mesenteric ischemia
   R. Uberoi; Oxford/UK
C. Imaging before and after liver transplantation
   T. Schroeder; Essen/DE

Friday, March 5, 16:00–17:30
RC 615 Peripheral vascular malformations

Moderator: M. Sapoval; Paris/FR
A. Pathology, correct anatomical classification and clinical work-up
   H. Kubiena; Vienna/AT
B. Diagnostic approaches to AVM: How to image the dynamic
   S. Frevert; Copenhagen/DK
C. Treatment of AVMs: Image-guided interventions: When and when not
   J.A. Reekers; Amsterdam/NL

Saturday, March 6, 08:30–10:00
RC 715 Vascular imaging: The diabetic patient

Moderator: J.H. Peregrin; Prague/CZ
A. What the radiologist needs to know about the diabetic patient
   A. Raptis; Athens/GR
B. Imaging of the diabetic patient
   L.P. Lawler; Dublin/IE
C. Cost-effective selection of the appropriate imaging technique
   R. Ouwendijk; Rotterdam/NL

Monday, March 8, 16:00–17:30
RC 1815 Aortic imaging

Moderator: W. Cwikiel; Ann Arbor, MI/US
A. Aortic dissections: New insights into an old disease
   F. De Cobelli; Milan/IT
B. Imaging requirements prior to endovascular aneurysm repair
   T. Pfammatter; Zurich/CH
C. Detection of complications after aortic stent grafting
   E. Brountzos; Athens/GR
New technology in diagnostic radiology: Risk management, technology assessment and improved diagnosis

Organising Committee:
Chairman: K. Faulkner; Wallsend/UK
Members:
- E. Atalar; Ankara/TR
- S. Christofides; Nicosia/CY
- A. Del Guerra; Pisa/IT
- A. Torresin; Milan/IT

Saturday, March 6, 08:30–10:00

**EF 1 Technology assessment for imaging equipment**

Moderators: A. Del Guerra; Pisa/IT
- K. Faulkner; Wallsend/UK
- Welcome address
  - S. Christofides; Nicosia/CY
  - M. Szczerbo-Trojanowska; Lublin/PL
- Introduction to EC initiatives in acceptability criteria for imaging equipment
  - K. Faulkner; Wallsend/UK
- Technology assessment and radiological imaging
  - S. Christofides; Nicosia/CY
- Acceptability criteria: A perspective from standards and equipment manufacturers
  - R. Klausz; Buc/FR

Saturday, March 6, 10:30–12:00

**EF 2 Risk management and technology assessment**

Moderators: S. Christofides; Nicosia/CY
- A. Torresin; Milan/IT
- Acceptability criteria and radiography equipment, digital imaging and CT
  - J. Malone; Dublin/IE
- Acceptability criteria and equipment for fluoroscopy and interventional radiology
  - S. Balter; New York, NY/US
- Acceptability criteria and equipment for nuclear medicine
  - S. Mattsson; Malmö/SE
### E³ – European Excellence in Education

**Foundation Course: Head and Neck Radiology**

#### Friday, March 5, 08:30–10:00
**E³ 320a Imaging techniques and common pitfalls**
- **Moderator:** B. Bobek-Billewicz; Gliwice/PL
  - A. Computed tomography
    - R. Maroldi; Brescia/IT
  - B. Magnetic resonance imaging
    - M.G. Mack; Frankfurt a. Main/DE

#### Friday, March 5, 10:30–12:00
**E³ 420 Temporal bone**
- **Moderator:** B. De Foer; Antwerp/BE
  - A. External and middle ear
    - A. Trojanowska; Lublin/PL
  - B. Inner ear and internal auditory canal
    - B. Verbist; Leiden/NL

#### Friday, March 5, 14:00–15:30
**E³ 520 Nose and paranasal sinuses**
- **Moderator:** H.B. Eggesbø; Oslo/NO
  - A. Inflammatory disease
    - D. Farina; Brescia/IT
  - B. Neoplastic disease
    - T. Beale; London/UK

#### Friday, March 5, 16:00–17:30
**E³ 620 Oral cavity, oropharynx and nasopharynx**
- **Moderator:** V. Chong; Singapore/SG
  - A. Oral cavity and oropharynx
    - A. Borges; Lisbon/PT
  - B. Nasopharynx
    - F. Dubrulle; Lille/FR

#### Saturday, March 6, 08:30–10:00
**E³ 720a Larynx and hypopharynx**
- **Moderator:** M. Gödeny-Polony; Budapest/HU
  - A. Benign lesions
    - R. Hermans; Leuven/BE
  - B. Malignant lesions
    - F.A. Pameijer; Utrecht/NL

#### Saturday, March 6, 10:30–12:00
**E³ 820 Neck lymph nodes and glands**
- **Moderator:** S. Robinson; Vienna/AT
  - A. Neck lymph nodes and salivary glands
    - H.C. Thoeny; Berne/CH
  - B. Thyroid and parathyroid glands
    - A.D. King; Hong Kong/CN

#### Saturday, March 6, 12:15–13:15
**Self assessment test**
- **Moderator:** R. Hermans; Leuven/BE
  - Interactive computer evaluation of course learning
# E³ – European Excellence in Education

## Interactive Teaching Sessions

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Session</th>
<th>Moderators</th>
</tr>
</thead>
</table>
| Thursday, March 4     | 14:00–15:30           | E³ 120 Imaging in common clinical problems: Soft tissue tumors | Moderator: R. Arkun; Izmir/TR  
J. L. Bloem; Leiden/NL  
A. M. A. de Schepper; Antwerp/BE |
| Thursday, March 4     | 16:00–17:30           | E³ 220a Imaging in common clinical problems: Hematuria | Moderator: W. Szmigielski; Doha/QA  
J. J. Fütterer; Nijmegen/NL  
R. H. Oyen; Leuven/BE |
| Thursday, March 4     | 16:00–17:30           | E³ 220b Commonly missed diagnosis in musculoskeletal conditions | Moderator: H. Imhof; Vienna/AT  
F. Kainberger; Vienna/AT  
K. Bohndorf; Augsburg/DE |
| Friday, March 5       | 08:30–10:00           | E³ 320b Breast cancer: Diagnosis, staging and follow-up | Moderator: A. Tardivon; Paris/FR  
K. Kinkel; Chêne-Bougeries/CH  
J. Camps Herrero; Valencia/ES |
| Saturday, March 6     | 08:30–10:00           | E³ 720b Cancer of the uterus: Diagnosis, staging and follow-up | Moderator: H. Hricak; New York, NY/US  
B. Hamm; Berlin/DE  
P. Petrow; Paris/FR |
| Sunday, March 7       | 08:30–10:00           | E³ 1120 Colorectal cancer: Diagnosis, staging and follow-up | Moderator: M. Marotti; Zagreb/HR  
R. G. H. Beets-Tan; Maastricht/NL  
A. H. Freeman; Cambridge/UK |
| Sunday, March 7       | 10:30–12:00           | E³ 1220 Lung cancer: From plain film to sectional imaging | Moderator: G. H. Mostbeck; Vienna/AT  
J. Cáceres; Barcelona/ES  
J. Vilar; Valencia/ES |
| Sunday, March 7       | 14:00–15:30           | E³ 1320 Imaging in common clinical problems: Acute abdomen | Moderator: F. Takis; Keratea/GR  
A. Palkó; Szeged/HU  
P.- A. Poletti; Geneva/CH |
| Sunday, March 7       | 16:00–17:30           | E³ 1420 Lymphomas: Diagnosis, staging and follow-up | Moderator: J. A. Verschakelen; Leuven/BE  
R. M. Mendelson; Perth, WA/AU  
E. de Kerviler; Paris/FR |
| Monday, March 8       | 08:30–10:00           | E³ 1520 Common clinical problems: Cognitive decline and dementia | Moderator: A. Platkajis; Riga/LV  
B. Gómez-Ansón; Barcelona/ES  
F. Barkhof; Amsterdam/ML |
| Monday, March 8       | 10:30–12:00           | E³ 1620 Imaging in common clinical problems: Neck mass | Moderator: M. G. Mack; Frankfurt a. Main/DE  
A. Above hyoid  
S. J. Golding; Oxford/UK  
B. Below hyoid  
N. J. M. Freling; Amsterdam/ML |

* = Interactive session with electronic voting/self assessment
E³ – European Excellence in Education

Interactive Teaching Sessions

**Monday, March 8, 14:00–15:30**

**E³ 1720 Imaging in common clinical problems: Hemoptysis**

- Moderator: E. Castañer; Sabadell/ES
  - S. Diederich; Düsseldorf/DE
  - M.-L. Storto; Chieti/IT

**Monday, March 8, 16:00–17:30**

**E³ 1820a Imaging in common clinical problems: Acute chest pain**

- Moderator: G.A. Krombach; Aachen/DE
  - A. Cardiac
    - A. de Roos; Leiden/NL
  - B. Non-cardiac
    - L.R. Goodman; Milwaukee, WI/US

**Monday, March 8, 16:00–17:30**

**E³ 1820b Imaging in common clinical problems: Jaundice**

- Moderator: C. Roche; Galway/IE
  - C. Matos; Brussels/BE
  - C.D. Becker; Geneva/CH

= Interactive session with electronic voting/self assessment
Accompanying Sessions

**ESOR Session**
Friday, March 5, 14:00–15:30

Moderators:
N. Gourtsoyiannis; Iraklion/GR
C.J. Herold; Vienna/AT

- **Introduction**
  C.J. Herold; Vienna/AT
- **ESOR in action**
  N. Gourtsoyiannis; Iraklion/GR
- **Educating future leaders**
  M. Maas; Amsterdam/NL
- **Fellowships in radiology: Why and How**
  B. Marincek; Zurich/CH
- **My experience with ESOR**

**Radiology Trainees Forum**
**RTF Highlighted Lectures**
Friday, March 5, 16:00–17:30

Moderators:
D. Bulja; Sarajevo/BA
P.R. Kornaat; Leiden/NL

- **Common pitfalls in MR mammography**
  D. Djilas-Ivanovic; Sremska Kamenica/RS
- **An easy approach to tackle neck imaging**
  D. Farina; Brescia/IT
- **Management in radiology**
  L. Donoso; Barcelona/ES

**ESR Audit Session:**
**Clinical audit for radiologists: Why it is worth doing, and how to make it work**
Saturday, March 6, 10:30–12:00

Moderator: E.J. Adam; London/UK

- **Clinical audit:** What is it and who should do it?
  E.J. Adam; London/UK
- **Clinical audit and accreditation:** Intimidating or encouraging? Experience in Germany
  B. Erl-Wagner; Munich/DE
- **Clinical audit:** Getting everyone involved! UK experience and the role of national audit projects
  S. Barter; Cambridge/UK
- **Implementation of the EC guideline in practice**
  S. Soimakallio; Tampere/FI
- **Discussion**

**Image Interpretation Quiz:**
**Experienced vs Hungry Sharks**
Saturday, March 6, 14:00–15:30

Moderator: M. Stajgis; Poznan/PL

Team 1:
E. Brountzos; Athens/GR
L. Marti-Bonmati; Valencia/ES
M.M. Thurnher; Vienna/AT

Team 2:
L.S. Fournier; Paris/FR
T.R.C. Johnson; Munich/DE
A. Kahn; Lund/SE

**Junior Image Interpretation Quiz**
Sunday, March 7, 13:00–14:00

Moderator: E. Szabó; Szeged/HU

**3rd Workstation Face-Off Session**
Friday, March 5, 12:15–13:30

Coordinators:
H.-C. Becker; Munich/DE
A. Graser; Munich/DE

**Hospital Management Symposium**
Saturday, March 6, 12:30–17:30

(organised in cooperation with European Hospital)

**Joint Session of ESR and EC (European Commission):**
**eHealth: Legal and technical challenges for radiology**
Saturday, March 6, 12:30–13:30

Moderator: I.W. McCall; Oswestry/UK

- **Introduction on eHealth**
  C. Dima; Brussels/BE
- **Legal aspects of eHealth related to medical imaging**
  C. Dima; Brussels/BE
- **Radiology’s view on telemedicine communication**
  L. Donoso; Barcelona/ES
- **eHealth: Technical aspects**
  D. Caramella; Pisa/IT
- **Discussion**
Satellite Symposia

**Friday, March 5, 12:30–13:30**
Satellite Symposium organised by GE Healthcare

Latest innovations in CT and MR: Improving patient care
Programme to be announced

**Friday, March 5, 12:30–13:30**
Satellite Symposium organised by Bayer Schering Pharma

Investigating: Excellent contrast in MRI
Moderator: V. Runge; Temple, TX/US
- Welcome and introduction
  V. Runge; Temple, TX/US
- Investigating the CNS: Excellent contrast meets function
  M. Essig; Heidelberg/DE
- Investigating MRA: Contrast meets speed
  W.A. Willinek; Bonn/DE
- Investigating: Contrast-enhanced breast MRI in clinical practice
  M. Sentís; Sabadell/ES
- Closing remarks
  V. Runge; Temple, TX/US

**Friday, March 5, 12:30–13:30**
Satellite Symposium organised by SuperSonic Imagine

MultiWave technology introducing ShearWave elastography
Programme to be announced

**Friday, March 5, 14:00–15:30**
Satellite Symposium organised jointly by Siemens Healthcare and Bayer Schering Pharma

Synergies in CT – for better patient care
Moderator: N.N.
- Welcome
- High pitch scanning in challenging patients
  H. Alkadhi; Zurich/CH
- Sub mSv cardiac imaging in clinical routine
  J. Hausleiter; Munich/DE
- CT going beyond morphology
  H.-C. Becker; Munich/DE
- A guide towards optimising contrast administration in Flash CT-angiography
  A.H. Mahnken; Aachen/DE
- Highest IQ @ the lowest radiation dose
  N.N.
- Closing

**Saturday, March 6, 10:30–12:00**
Satellite Symposium organised by Bracco and GE Healthcare

Technological development and current role of contrast enhanced ultrasound
Moderator: J.-M. Correas; Paris/FR
- Introduction
  J.-M. Correas; Paris/FR
- Technological evolution and current role of CEUS in clinical imaging
  E. Leen; London/UK
- CEUS in focal liver lesions examination
  V. Vilgrain; Clichy/FR
- CEUS in superficial imaging
  N.N.
- Conclusion
  J.-M. Correas; Paris/FR

**Saturday, March 6, 12:30–13:30**
Satellite Symposium organised by Guerbet

CT contrast media optimisation for patient benefit
Moderator: M. Maurer; Berlin/DE
- Introduction
  M. Maurer; Berlin/DE
- Main parameters involved in CIN: Is viscosity the main one?
  L. Juillard; Lyon/FR
- Comparative study of low osmolar contrast media in pediatric renal tolerance
  M. Hörmann; Vienna/AT
- Xenetix®: Excellent tolerance confirmed by 160,000 additional patients
  M. Maurer; Berlin/DE
- Optimised contrast media management in cardiac CT
  J.-F. Paul; Le Plessis Robinson/FR
- Questions and conclusion
  M. Maurer; Berlin/DE
Saturday, March 6, 12:30-13:45
Satellite Symposium organised by GE Healthcare

New and efficient case-solving tools in daily breast and chest procedures
Moderator: L. Katz; Buc/FR

- Clinical experience with dual-energy contrast-enhanced digital mammography (CEDM) for detection of breast carcinomas
  C. Dromain; Villejuif/FR
- The value of digital tomosynthesis in the diagnosis of thoracic lesions
  E. Quaia; Trieste/IT
- Digital chest tomosynthesis in daily clinical practice
  M. Boijsen; Gothenburg/SE

Saturday, March 6, 12:30-13:30
Satellite Symposium organised by Hitachi

Programme to be announced

Saturday, March 6, 12:30-13:30
Satellite Symposium organised by Philips Healthcare

Programme to be announced

Saturday, March 6, 12:30-13:30
Satellite Symposium organised by Philips Healthcare

Programme to be announced

Saturday, March 6, 14:00-15:30
Satellite Symposium organised by Hologic

Breast tomosynthesis: Clinician experiences with the first commercial system
Moderator: A. Smith; Bedford, MA/US

- A comparison of the accuracy of digital breast tomosynthesis, film-screen mammography, and digital mammography
  M.J. Michell; London/UK
- Evaluation of digital breast tomosynthesis for use in a national screening program
  P. Skaane; Oslo/NO
- Vacuum assisted biopsy on a digital breast tomosynthesis system: Initial clinical experience
  P. Gignier; Antony/FR

Saturday, March 6, 14:00-15:30
Satellite Symposium organised by Bayer Schering Pharma

From molecular imaging to histopathology MRI
Moderator: J. Ricke; Magdeburg/DE

- Introduction
  J. Ricke; Magdeburg/DE
- Imaging of dementia today and tomorrow
  G. Frisoni; Brescia/IT
- Liver cell-specific imaging reaching out to histopathology
  J. Ricke; Magdeburg/DE
- The added value of Primovist (Gd-EOB-DTPA) in the diagnosis and treatment of HCC
  A. Filippone; Chieti/IT
- Dual excretion pathway paving the way for biliary imaging
  E.M. Merkle; Durham, NC/US

Saturday, March 6, 14:00-15:30
Satellite Symposium organised by Siemens Healthcare

Open new ways of imaging in radiology
Moderator: M. Forsting; Essen/DE

- Redefining productivity in MR
  M. Forsting; Essen/DE
- MR from head to toe with TimCT
  M. Lentschig; Bremen/DE
- Molecular CT: Radiological aspects in hybrid imaging
  G. Antoch; Essen/DE
- Clinical PET/CT beyond FDG
  P. Bartenstein; Munich/DE
Satellite Symposia

Saturday, March 6, 14:00–15:30
Satellite Symposium organised by Sectra

How do we improve cancer detection rates in mammography today?
Moderators: M. Danielsson; Stockholm/SE
H. Ringertz; Linköping/SE

• Why do we miss cancers in mammography:
  What the DMIST trial tells us
  M.J. Yaffe; Toronto, ON/CA

• Tomosynthesis imaging of the breast:
  Challenges and opportunities
  M.G. Wallis; Cambridge/UK

• Contrast mammography:
  How is it done and how can it help
  F. Diekmann; Berlin/DE

• Photon counting mammography in daily practice
  J.-C. Piguet; Geneva/CH

• Discussion

Saturday, March 6, 14:00–15:30
Satellite Symposium organised by Siemens Healthcare

Biopsies in breast imaging: Methods and needs
Moderator: J. Dick; Erlangen/DE

• Introduction
  J. Dick; Erlangen/DE

• Innovations and challenges in mammography guided biopsies
  K. Ridder; Dortmund/DE

• Innovations and challenges in ultrasound guided biopsies
  F. Stöblen; Essen/DE

• Breast MRI guided diagnostic interventions
  E. Wenkel; Erlangen/DE

• Panel discussion

Sunday, March 7, 10:30–12:00
Satellite Symposium organised by Bracco

Programme to be announced

Sunday, March 6, 14:00–15:30
Satellite Symposium organised by Guerbet

How to optimise the dynamic use of contrast media in MRI?
Moderator: C. Ayuso; Barcelona/ES

• Introduction
  C. Ayuso; Barcelona/ES

• Main indication in dynamic MRI
  C. Ayuso; Barcelona/ES

• 3D tricks in intracranial arteriovenous malformations
  O. Naggara; Paris/FR

• Benefit of MRI myocardial perfusion with Dotarem® at 1.5T and 3T
  P. Bernhardt; Ulm/DE

• Is Gd chelates concentration an issue for peripheral MRA diagnostic performance?
  S. Haneder; Mannheim/DE

• Questions and conclusion
  C. Ayuso; Barcelona/ES

Sunday, March 7, 12:30–13:45
Satellite Symposium organised by GE Healthcare

Changing the dose paradigm, enhancing CT diagnosis and optimising patient care
Moderator: J. de Mey; Brussels/BE

• Does spectral imaging take us to the next level in characterisation and image quality?
  M. Bourne; Cardiff/UK

• Pediatric low dose CT with GE discovery CT 750HD:
  Experiences from the Queen Silvia Children’s Hospital, Gothenburg, Sweden
  F. Stålhammar; Göteborg/SE

• Contrast media: How to optimise enhancement and minimise patient risk
  A. Laghi; Latina/IT
Satellite Symposia

**Sunday, March 7, 12:30–13:30**
**Satellite Symposium organised by Bracco**
Programme to be announced

**Sunday, March 7, 12:30–13:30**
**Satellite Symposium organised by GE Healthcare**
Cases of suspected recurrences in oncology: Options and solutions
Programme to be announced

**Sunday, March 7, 12:30–13:30**
**Satellite Symposium organised by Esaote**
Diagnosis and therapy in ultrasound: What’s next?
Moderator: C. Bartolozzi; Pisa/IT
Y. Menu; Paris/FR
- Abdominal ultrasound: Faster and reliable interventional procedures
  L. Solbiati; Busto Arsizio/IT
- Breast ultrasound: Extend the vision of daily screening
  H. Dobson; Glasgow/UK
- Vascular ultrasound: Towards preventive healthcare
  K.D. Reesink; Maastricht/NL

**Sunday, March 7, 12:30–13:30**
**Satellite Symposium organised by Toshiba**
Programme to be announced
Industry Hands-On Workshops

Saturday, March 6 and Sunday March 7, 08:00-18:00
Industry Hands-On Workshop organised by Carestream Health

**Digital mammography self-assessment workshop**
Run in conjunction with Radboud University Nijmegen/NL and Charité - Universitätsmedizin Berlin/DE.
One hour per workshop, 15 minutes break
**Instructors:** R. Holland, Nijmegen/NL
U. Bick, Berlin/DE

Industry Hands-On Workshop organised by Philips Healthcare

Programme to be announced

Thursday, March 4 to Sunday March 7
Industry Hands-On Workshop organised by Siemens Healthcare

Clinical experts will demonstrate to you how to better use and further benefit from our solutions for advanced multimodality reading. A special focus will be placed on automated case preparation and structured case navigation. Benefit from experts’ experience and receive an update on state-of-the-art techniques in CT, MR and Molecular Imaging. As a registered attendee for ECR 2010 these workshops are free of charge. Programme to be announced.

Friday, March 5 to Monday March 8
Industry Hands-On Workshop organised by Aycan

**About OsiriX PRO**
Medical images present a steadily growing challenge. In these Hands-on Workshops, we introduce you to the latest state in medical image postprocessing. The attendees can immediately follow the demonstrated contents on Apple Macintosh workstations at hand. The software in use is OsiriX PRO – the CE-labeled and FDA-cleared version of OsiriX. OsiriX is an excellent Open Source Software which meets this challenge and was decorated with multiple international awards.

Agenda Basic Course: OsiriX PRO Basics, Import/Export, 2D-Viewer, Reviewing, Thickslab/MPR/MIP, OsiriX Mobile with iPhone
Agenda Advanced Course: 3D Volume Rendering, Segmentation, Bone Removal, Fusion, Volumetric Analysis
Hands-On Workshops
Post-Processing of CT and MRI in Stroke Patients

Coordinator:
J. Fiehler; Hamburg/DE

Speakers:
J. Fiebach; Berlin/DE
J. Fiehler; Hamburg/DE
L. Østergaard; Århus/DK
S. Pedraza; Girona/ES

Instructors:
J. Fiebach; Berlin/DE
J. Fiehler; Hamburg/DE
S. Pedraza; Girona/ES
S. Siemonsen; Hamburg/DE

The workshop starts with a 90-minute lecture programme focusing on how to interpret stroke CT and stroke MRI and datasets.

Clinical experts will provide an overview of the anatomical and pathophysiological prerequisites for the interpretation of perfusion CT and MRI in ischemic stroke and the basic concepts and new developments in post-processing of stroke MRI. The potential and limitations of perfusion CT and perfusion MRI will be discussed separately. After attending these lectures, participants will have learned which key imaging findings should be considered for a comprehensive stroke CT or stroke MRI report. The second part of the workshop provides hands-on experience of post-processing CT or MRI perfusion data of stroke patients using workstations of different vendors. Each vendor supplies six workstations (each vendor 3 CT and 3 MRI workstations). Each type of workstation is mounted with clinical cases (12 CT, 12 MRI) including either non-enhanced CT, CT-angiography and CT-perfusion, or diffusion, perfusion, FLAIR, T2*w MRI and MRA. During the workshops, clinical stroke case data will be post-processed and interpreted and implications for treatment decisions will be discussed.

Non-experienced users are advised to follow the introductory lectures before entering the hands-on sessions. The user will need to select either CT or MRI post-processing for each vendor.

Introductory lectures:
• Anatomical and patho-physiological basics of ischemic stroke
  J. Fiehler; Hamburg/DE
• Basic concepts and new developments in post-processing of stroke MRI
  L. Østergaard; Århus/DK
• How to image perfusion in CT:
  Potentials and limitations
  S. Pedraza; Girona/ES
• How to image perfusion in MRI:
  Potentials and limitations
  J. Fiebach; Berlin/DE

Learning objectives:
1. To learn the pathophysiological fundamentals of stroke CT and stroke MRI.
2. To learn how to use different post-processing techniques on different workstations.
3. To estimate the power, pitfalls, and constraints of current state-of-the-art CT and MRI perfusion software.

Registration:
The number of participants for each session is restricted. Participants need to register in advance for the hands-on sessions [myESR.org] as of October 1, 2009, and must pay a fee of €30.

Schedule:
Friday, March 5
WS 322 08:30–10:00 Introductory lectures
WS 522 14:00–16:00 Hands-on session

Saturday, March 6
WS 722 08:30–10:30 Hands-on session

Sunday, March 7
WS 1122 08:30–10:30 Hands-on session

Monday, March 8
WS 1522 08:30–10:30 Hands-on session
Hands-On Workshops
Cardiac CT Post-Processing and Analysis

Coordinators:
N.R. Mollet; Rotterdam/NL
W.J. Niessen; Rotterdam/NL

Speakers:
F. Cademartiri; Parma/IT
M. Dewey; Berlin/DE
S. Leschka; Zurich/CH
M. Prokop; Utrecht/NL
J.-L. Sablayrolles; St. Denis/FR

Instructors:
M.L. Dijkshoorn; Rotterdam/NL
A. Moelker; Rotterdam/NL
L. Neefjes; Rotterdam/NL
K. Nieman; Rotterdam/NL
F. Pugliese; London/UK
M. Rengo; Latina/IT
A. Rossi; Rotterdam/NL
A. Weustink; Rotterdam/NL

The workshop starts with a 90-minute lecture programme focusing on how to report on cardiac CT datasets. Clinical experts will provide an overview of the anatomy of the heart, diagnostic accuracy and limitations of CT coronary angiography, and tips and tricks in the evaluation of cardiac CT examinations. After attending these lectures, participants will have learned which key imaging findings should be reported in a comprehensive cardiac CT report.

The second part of the workshop provides hands-on experience of cardiac CT post-processing using dedicated workstations of different vendors. Each workstation is loaded with the same clinical cases, including calcium scoring, coronary angiography, and left ventricular function CT datasets. A comprehensive report of the case will be presented including conventional coronary angiography correlation after each session. This format allows the participants to evaluate the performance of three different workstations using the same CT datasets.

It is recommended that non-experienced users follow the introductory lectures before entering the hands-on sessions.

Introductory lectures:
- Anatomy of the heart
  J.-L. Sablayrolles; St. Denis/FR
- CT coronary calcium scoring:
  Technical issues and current indications
  M. Prokop; Utrecht/NL
- How to evaluate a CT coronary angiography scan:
  Advantages and disadvantages of different post-processing techniques
  S. Leschka; Zurich/CH
- Diagnostic accuracy of CT coronary angiography in the detection of coronary stenoses and plaques
  F. Cademartiri; Parma/IT
- Beyond the coronary arteries:
  Evaluation of cardiac valves, left ventricular function, and non-cardiac findings
  M. Dewey; Berlin/DE

Learning objectives:
1. To learn how to make a comprehensive cardiac CT report.
2. To learn how to use different post-processing techniques on different workstations.
3. To estimate the power, pitfalls, and constraints of current state-of-the-art cardiac CT evaluation software.

Registration:
The number of participants for each session is restricted. Participants need to register in advance for the hands-on sessions [myESR.org] as of October 1, 2009, and must pay a fee of €30.

Schedule:
Thursday, March 4
WS 123  14:00–15:30  Introductory lectures

Friday, March 5
WS 423  10:30–12:30  Hands-on session

Saturday, March 6
WS 823  10:30–12:30  Hands-on session
WS 923  14:00–16:00  Hands-on session
ulrich medical®
contrast agent injectors
for CT/MRI

In medicine every detail counts – we make it visible.

Visit us at
ECR 2010!
Coordinator:
E.G. McNally; Oxford/UK

Speakers:
A. Klauser; Innsbruck/AT
C. Martinoli; Genoa/IT
E.G. McNally; Oxford/UK
P. Peetrons; Brussels/BE

Instructors:
N. Boutry; Lille/FR
M. Court-Payen; Copenhagen/DK
J.W.J. De Rooy; Nijmegen/NL
A.J. Grainger; Leeds/UK
A. Klauser; Innsbruck/AT
C. Martinoli; Genoa/IT
P.J. O'Connor; Leeds/UK
P. Peetrons; Brussels/BE
M. Reijnierse; Leiden/NL
E. Silvestri; Genoa/IT
J. Teh; Oxford/UK

This programme will be in two parts. The first part will be a live demonstration of US anatomy and examination techniques for the wrist/hand and the foot/ankle, coupled with a review of the common pathological findings in these areas. The demonstrators will emphasise the important anatomical features and provide participants with useful tips to get the most from US examinations in these challenging areas. This will be followed by a small group hands-on ‘meet the experts’ session where participants can refine their own examination skills under expert guidance.

It is recommended that non-experienced users follow the introductory lectures before entering the hands-on sessions.

Introductory lectures:
US of the hand and wrist
- US pathology of the wrist and hand
  A. Klauser; Innsbruck/AT
- To demonstrate normal US anatomy
  C. Martinoli; Genoa/IT

US of the foot and ankle
- US pathology of the hindfoot
  P. Peetrons; Brussels/BE
- To demonstrate normal US anatomy
  E.G. McNally; Oxford/UK

Learning objectives:
1. To understand the applications of US in these two areas.
2. To see an expert examination performed live.
3. To see examples of common pathology.
4. To have the opportunity for group and expert appraisal of the delegates own techniques.

Registration:
The number of participants for each session is restricted. Participants need to register in advance for the hands-on sessions ([myESR.org](http://www.myESR.org)) as of October 1, 2009, and must pay a fee of €30.

Schedule:

**Friday, March 5**
<table>
<thead>
<tr>
<th>Session</th>
<th>Time</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>WS 324</td>
<td>08:30–10:00</td>
<td>Introductory lectures</td>
</tr>
<tr>
<td>WS 424</td>
<td>10:30–12:00</td>
<td>Hands-on session</td>
</tr>
<tr>
<td>WS 524</td>
<td>14:00–15:30</td>
<td>Hands-on session</td>
</tr>
</tbody>
</table>

**Saturday, March 6**
<table>
<thead>
<tr>
<th>Session</th>
<th>Time</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>WS 824</td>
<td>10:30–12:00</td>
<td>Hands-on session</td>
</tr>
</tbody>
</table>
Andy Adam  
London/UK,  
Gold Medallist

Andy Adam is Professor of Interventional Radiology at the University of London. His research work has shaped clinical practice internationally. He is President of the Royal College of Radiologists and past-president of seven other medical societies, including the ESR. At ECR 2010, he will be awarded the Gold Medal of the ESR.

Gary J. Becker  
Tucson, AZ/US,  
Honorary Member

Gary Jay Becker is the Executive Director of the American Board of Radiology in Tucson, Arizona, and a professor in the interventional section of the Department of Radiology at the University of Arizona College of Medicine in Tucson. An active researcher, he developed new metallic stents for the treatment of coronary, peripheral and carotid arterial disease, a field in which he holds 10 patents. He has also been an investigator and principal investigator in numerous clinical trials in the field of vascular and interventional radiology, including much of the early work on transluminal endografts for the treatment of aortic aneurysms and traumatic injury. He currently serves as the President of the Radiological Society of North America (RSNA). At ECR 2010, he will be awarded Honorary Membership of the European Society of Radiology.

Willi A. Kalender  
Erlangen/DE,  
Honorary Member

Willi A. Kalender is professor and chairman of the Institute of Medical Physics at the Friedrich-Alexander-University Erlangen-Nuremberg in Germany. He is a visiting professor at the Department of Radiology at Stanford University, California, and a visiting professor of medical physics at the University of Wisconsin. A prominent researcher in computed tomography, he also worked on radiation protection and the development of quantitative diagnostic procedures for the assessment of osteoporosis, lung and cardiac diseases. He is a Fellow of the American Association of Physicists in Medicine and received the Cross of the Order of Merit of the Federal Republic of Germany in 2004. More recently, he was awarded the European Research Foundation’s Latsis Price (2007) and the William D. Coolidge Award of the American Association of Physicists in Medicine (2009). At ECR 2010, he will be presented with Honorary Membership of the European Society of Radiology (ESR).

Ji Qi  
Tianjin/CN,  
Honorary Member

Ji Qi is professor of radiology and chief of the Radiological Department of the First Central Hospital, Tianjin Medical University. Having served the Chinese Society of Radiology for 12 years, first as General Secretary, then Vice-President and President, he greatly contributed to the development of radiology in China. He also succeeded in setting up close relationships with international societies such as the ESR, RSNA, Japanese Radiological Society, Korean Society of Radiology, Radiological Society of Finland, and the Indian Radiological & Imaging Association (IRIA). At ECR 2010, he will be awarded Honorary Membership of the European Society of Radiology.

Donald L. Resnick  
San Diego, CA/US,  
Honorary Member

Donald L. Resnick is professor of radiology and chief of musculoskeletal imaging at the University of California in San Diego. A world acclaimed musculoskeletal radiologist, he has received numerous awards including the Gold Medal from the American Roentgen Ray Society. He has also twice given the Annual Oration at the meeting of the Radiological Society of North America. At ECR 2010, he will be presented with Honorary Membership of the European Society of Radiology.
Anne G. Osborn
Salt Lake City, UT/US, Opening Lecturer

Anne G. Osborn is university distinguished professor and professor of radiology at the University of Utah School of Medicine in Salt Lake City. She holds the William H. and Patricia W. Child Presidential Endowed Chair in Radiology at the University of Utah. A world acclaimed neuroradiologist, she wrote 'Diagnostic Neuroradiology', the best-selling textbook in the history of radiology. She received the Gold Medal of the Radiological Society of North America (RSNA), where she served as First Vice-President and Chair of the RSNA Research and Education Foundation Board of Trustees. She was also the first woman to be elected President of the American Society of Neuroradiology. At ECR 2010, she will present the Opening Lecture 'The two faces of HIV/AIDS in the brain: The face you know – And the one you don’t'.

Suzanne E. Anderson
Darlinghurst, NSW/AU, Honorary Lecturer

Suzanne Anderson is currently chair and professor of medical imaging at the School of Medicine Sydney at the University of Notre Dame, Australia, and has an affiliated position at the University of Bern and Inselspital in Switzerland. A remarkable musculoskeletal radiologist, she is an active member of prestigious societies including the International Skeletal Society (ISS), the European Society of Skeletal Radiology (ESSR) and the International Society for Magnetic Resonance in Medicine (ISMRM). She is currently on the Education Committee of the RSNA and organising committee of the ISS. At ECR 2010, she will present the Josef Lissner Honorary Lecture 'The advance of musculoskeletal radiology and creating defining moments'.

Michael N. Brant-Zawadzki
Newport Beach, CA/US, Honorary Lecturer

Michael N. Brant-Zawadzki is the Executive Medical Director of Neurosciences at Hoag Memorial Hospital in Newport Beach, California, and also holds an adjunct clinical professorship in neuroradiology at Stanford University. He has authored numerous books and articles, lectured internationally, is a Fellow of the American College of Radiology and has received the special Gold Medal from the Society of Magnetic Resonance in Medicine for outstanding pioneering achievements in magnetic resonance imaging. At ECR 2010, he will present the Wilhelm Conrad Röntgen Honorary Lecture 'Diagnostic radiation and carcinogenesis: What do we know?'

Andrzej Pawel Wieczorek
Lublin/PL, Honorary Lecturer

Andrzej Pawel Wieczorek is associate professor of radiology and Director of the Department of Paediatric Radiology at the Medical University of Lublin, Poland. Although primarily a paediatric radiologist, he has also focused on the male and female genitourinary tracts with special attention to male infertility and female urinary incontinence. He is a researcher in ultrasound diagnostics and a vice-president of the Polish Society of Ultrasound. At ECR 2010, he will present the Maria Skłodowska-Curie Honorary Lecture 'Female urinary incontinence: Is there still a place for radiology/radiologists?'
Share an evening with the eighth muse at Vienna’s theatrical venues ...
Left to right:

Diesseits des Lustprinzips: Freud und die Folgen
© Alexi Pelekanos / Schauspielhaus

samuel Adamson,
Alles über meine Mutter
© Thilo Beu / Volkstheater

Daniel Glattauer,
Gut gegen Nordwind
© Moritz Schell / Theater in der Josefstadt

Peter Handke,
Untertagblues
© Georg Soulek / Akademietheater

Lionel Goldstein,
Halpern & Johnson
© sepp Gallauer / Theater in der Josefstadt

Pedro Calderón de la Barca,
Das Leben ein Traum
© reinhard Werner / Burgtheater

Ray Cooney,
Außer Kontrolle
© Lalo Jodlbauer / Volkstheater
ESR
Executive Council
(March 2009 – March 2010)

President
Christian J. Herold, Vienna/AT

1st Vice-President
Maximilian F. Reiser, Munich/DE

2nd Vice-President
András Palkó, Szeged/HU

Congress Committee Chairperson
Małgorzata Szczerbo-Trojanowska, Lublin/PL

1st Vice-Chairman of the Congress Committee
Yves Menu, Paris/FR

2nd Vice-Chairman of the Congress Committee
Lorenzo Bonomo, Rome/IT

Publications Committee Chairman
Adrian K. Dixon, Cambridge/UK

Research Committee Chairman
Gabriel P. Krestin, Rotterdam/NL

Education Committee Chairman
Éamann Breatnach, Dublin/IE

Professional Organisation Committee Chairman
Luis Donoso, Barcelona/ES

Subspecialties Committee Chairman
Fred E. Avni, Brussels/BE

National Societies Committee Chairman
Guy Frija, Paris/FR

Communication & International Relations Committee Chairman
Luigi Solbiati, Busto Arsizio/IT

Finance Committee Chairman
Katrine Åhlström-Riklund, Umeå/SE

Executive Director
Peter Baierl, Vienna/AT

ESOR Scientific/Educational Director
N. Gourtsoyiannis, Iraklion/GR
CONGRESS COMMITTEE

Chairperson (Congress President)
M. Szczero-Trojanowska; Lublin/PL

1st Vice-Chairperson
(1st Congress Vice-President)
Y. Menu; Paris/FR

2nd Vice-Chairperson
(2nd Congress Vice-President)
L. Bonomo; Rome/IT

Ordinary Members:
J.I. Bilbao; Pamplona/ES
V.E. Sinitsyn; Moscow/RU
B. Hamm; Berlin/DE

ESR President
C.J. Herold; Vienna/AT

ESR Executive Director
P. Baierl; Vienna/AT

Ex-officio Members:
Finance Committee Chairman
K. Åhlström Riklund; Umeå/SE

Publications Committee Chairman
A.K. Dixon; Cambridge/UK

PROGRAMME PLANNING COMMITTEE

Postgraduate Educational Programme
Chairman:
L. Bonomo; Rome/IT

Members:
E. Azavedo; Stockholm/SE
B. Brkljačić; Zagreb/HR
J. Damlakis; Iraklion/GR
A.M. Davies; Birmingham/UK
K. Nikolaou; Munich/DE
C. Roche; Galway/IE
S. Sunaert; Leuven/BE
A.J. van der Molen; Leiden/NL
F. Veillon; Strasbourg/FR

Scientific Papers
Chairman:
J.I. Bilbao; Pamplona/ES

Members:
M.G. Mack; Frankfurt a. Main/DE
A.M. Taylor; London/UK
M. Zanetti; Zurich/CH

Scientific Exhibition (EPOS™)
Chairman:
V.E. Sinitsyn; Moscow/RU

Members:
F. Caseiro-Alves; Coimbra/PT
E.T. Tali; Ankara/TR

Categorical Courses
B. Hamm; Berlin/DE
M. Rémy-Jardin; Lille/FR
M.M. Thurnher; Vienna/AT

E³ - European Excellence in Education
Interactive Teaching Sessions
J. Vilar; Valencia/ES

Foundation Course
R. Hermans; Leuven/BE

e-Learning
D. Caramella; Pisa/IT
P. Pokieser; Vienna/AT

Cases of the Day
J. Neuwirth; Prague/CZ

Physics Programme
A. Del Guerra; Pisa/IT

Image Interpretation Quiz
M. Stajgis; Poznan/PL

Junior Image Interpretation Quiz
E. Szabó; Szeged/HU

Evaluation
G.A. Krombach; Aachen/DE

Liaison ‘European Radiology’
A.K. Dixon; Cambridge/UK
## SCIENTIFIC SUBCOMMITTEES

### Abdominal and Gastrointestinal

*The ESR would like to thank ESGAR for their cooperation on this subcommittee*

**Chairmen:**
- L. Marti-Bonmatí; Valencia/ES
- P. Lefere; Roeselare/BE

**Members:**
- A. Ba-Ssalamah; Vienna/AT
- R. Bouzas; Vigo/ES
- J.B. Dormagen; Oslo/NO
- H. Fenlon; Dublin/IE
- A. Graser; Munich/DE
- P. Leander; Malmö/SE
- G. Morana; Treviso/IT
- B.J. Op de Beeck; Antwerp/BE
- M.A. Patak; Berne/CH
- S. Romano; Naples/IT
- J. Rosna; Jerusalem/IL
- C. Stoupis; Männedorf/CH
- Z. Tarján; Budapest/HU
- K. Vidmar Kocijancic; Ljubljana/SI

### Cardiac

*The ESR would like to thank ESCR for their cooperation on this subcommittee*

**Chairman:**
- M. Gutberlet; Leipzig/DE

**Members:**
- H. Alkadhi; Zurich/CH
- R. Fattori; Bologna/IT
- G. Feuchtner; Innsbruck/AT
- N.L. Kelekis; Athens/GR
- D.D. Lubbers; Groningen/NL
- J.-P. Paul; Le Plessis Robinson/FR
- D. Piotrowska-Kownacka; Warsaw/PL
- R. Soler; La Coruña/ES

### Breast

*The ESR would like to thank EUSOBI for their cooperation on this subcommittee*

**Chairman:**
- C. Boetes; Nijmegen/NL

**Members:**
- U. Bick; Berlin/DE
- J. Camps Herrero; Valencia/ES
- H. Dobson; Glasgow/UK
- M.H. Fuchsjäger; Vienna/AT
- A.A. Ghiatas; Athens/GR
- I. Leconte; Brussels/BE
- F. Sardanelli; Milan/IT
- F. Thibault; Paris/FR

### Chest

*The ESR would like to thank ESTI for their cooperation on this subcommittee*

**Chairman:**
- G.R. Ferretti; Grenoble/FR

**Members:**
- S.R. Desai; London/UK
- W. De Wever; Leuven/BE
- M. Herman; Olomouc/CZ
- A.R. Larici; Rome/IT
- K. Marten; Göttingen/DE
- A. Oikonomou; Alexandroupolis/GR
- M. Prokop; Utrecht/NL
- K. Vidmar Kocijancic; Ljubljana/SI

### Computer Applications

*The ESR would like to thank EuroPACS for their cooperation on this subcommittee*

**Chairman:**
- P. Mildenberger; Mainz/DE

**Members:**
- A. Abildgaard; Oslo/NO
- J. Fernandez-Bayò; Sabadell/ES
- T.G. Maris; Irlkion/GR
- E. Neri; Pisa/IT
- E. Pietka; Gliwice/PL
- O. Ratib; Geneva/CH

### Molecular Imaging and Contrast Media

**Chairman:**
- J.O. Barentsz; Nijmegen/NL

**Members:**
- S. Chatziioannou; Athens/GR
- A. Cuocolo; Naples/IT
- A.M. Herneth; Vienna/AT
- A. Klausner; Innsbruck/AT
- S.K. Morcos; Sheffield/UK
- B. Van Beers; Clichy/FR

### Genitourinary

*The ESR would like to thank ESUR for their cooperation on this subcommittee*

**Chairman:**
- C.S. Balleyguier; Villejuif/FR

**Members:**
- B. Brklijačić; Zagreb/HR
- E.M. Danza; Rome/IT
- P. Liss; Uppsala/SE
- V. Logager; Copenhagen/DK
- M. Memarsadeghi; Vienna/AT
- H.J. Michaela; Mannheim/DE
- S. Moussa; Edinburgh/UK
- H.C. Thoeny; Berne/CH

### Head and Neck

*The ESR would like to thank ESHNR for their cooperation on this subcommittee*

**Chairman:**
- A. Borges; Lisbon/PT

**Members:**
- L. Akesson; Lund/SE
- E. Arana; Valencia/ES
- T. Beale; London/UK
- N. Bisdas; Tübingen/DE
- N. Gritzmann; Salzburg/AT
- P.-Y. Marcy; Nice/FR
- A. Trojanowska; Lublin/PL
- A. Vasilyev; Moscow/RU
Interventional Radiology

The ESR would like to thank CIRSE for their cooperation on this subcommittee

Chairman:
A.-M. Belli; London/UK

Members:
P.E. Andersen; Odense/DK
A. Basile; Catania/IT
B. Dolgushin; Moscow/RU
P. Haage; Wuppertal/DE
A.D. Kelekis; Athens/GR
A. Krajina; Hradec Králové/CZ
A.G. Ryan; Waterford City/IE
O.M. van Delden; Amsterdam/NL

Musculoskeletal

The ESR would like to thank ESSR for their cooperation on this subcommittee

Chairman:
F.M.H.M. Vanhoenacker; Antwerp/BE

Members:
I. Boric; Zagreb/HR
M. Epermane; Valmiera/LV
A.J. Grainger; Leeds/UK
C.R. Krestan; Vienna/AT
E. Llopis; Valencia/ES
G. Mantzikopoulos; Athens/GR
C.W.A. Pfirrmann; Zurich/CH
M. Reijnierse; Leiden/NL

Neuro

The ESR would like to thank ESNR for their cooperation on this subcommittee

Chairman:
A. Rossi; Genoa/IT

Members:
F. Barkhof; Amsterdam/NL
M. Essig; Heidelberg/DE
B. Gómez-Ansón; Barcelona/ES
I. Saatci; Ankara/TR
M. Sasiadek; Wrocław/PL
T. Stosic-Opincal; Belgrade/RS
J.W.M. van Goethem; Antwerp/BE
P. Vilela; Almada/PT

Physics in Radiology

The ESR would like to thank EFOMP for their cooperation on this subcommittee

Chairman:
E. Atalar; Ankara/TR

Members:
H. Bosmans; Leuven/BE
E. Guibelalde; Madrid/ES
O. Speck; Magdeburg/DE
D.G. Sutton; Dundee/UK
M. Tosetti; Pisa/IT
J.N. Vassileva; Sofia/BG
R. Wirestam; Lund/SE

Radiographers

The ESR would like to thank ISRRT for their cooperation on this subcommittee

Chairmen:
M. Golebiowski; Warsaw/PL
A. Hartvig Sode; Odense/DK

Members:
B.T. Andersson; Lund/SE
S. Braico; Rome/IT
P. Gerson; Paris/FR
D. Pekarovic; Ljubljana/SI
K. Sigurdardottir; Møsfellbaer/IS
C. Vândulek; Kaposvár/HU

Pediatric

The ESR would like to thank ESPR for their cooperation on this subcommittee

Chairman:
M.I. Argyropoulou; Ioannina/GR

Members:
J.-F. Chatel; Bordeaux/FR
M. Haliloglu; Ankara/TR
O.E. Olsen; London/UK
M. Riccabona; Graz/AT
S. Ryan; Dublin/IE
G. Staatz; Mainz/DE
R.R. van Rijn; Amsterdam/NL
E. Vázquez; Barcelona/ES

Vascular

The ESR would like to thank CIRSE for their cooperation on this subcommittee

Chairman:
C. Loewe; Vienna/AT

Members:
E. Brountzos; Athens/GR
A. Cieszanowski; Warsaw/PL
M.W. de Haan; Maastricht/NL
F. Fanelli; Rome/IT
L. Lönn; Copenhagen/DK
Z. Morvay; Szeged/HU
T. Pfammatter; Zurich/CH
F. Thony; Grenoble/FR

Pediatric

The ESR would like to thank ESPR for their cooperation on this subcommittee

Chairman:
M.I. Argyropoulou; Ioannina/GR

Members:
J.-F. Chatel; Bordeaux/FR
M. Haliloglu; Ankara/TR
O.E. Olsen; London/UK
M. Riccabona; Graz/AT
S. Ryan; Dublin/IE
G. Staatz; Mainz/DE
R.R. van Rijn; Amsterdam/NL
E. Vázquez; Barcelona/ES

Vascular

The ESR would like to thank CIRSE for their cooperation on this subcommittee

Chairman:
C. Loewe; Vienna/AT

Members:
E. Brountzos; Athens/GR
A. Cieszanowski; Warsaw/PL
M.W. de Haan; Maastricht/NL
F. Fanelli; Rome/IT
L. Lönn; Copenhagen/DK
Z. Morvay; Szeged/HU
T. Pfammatter; Zurich/CH
F. Thony; Grenoble/FR
ECR 2010
Topic Coordinators

Categorical Courses

Radiology of the Spine 2010
M.M. Thurnher; Vienna/AT

Radiology in Abdominal Emergencies
B. Hamm; Berlin/DE
P. Rogalla; Toronto, ON/CA

Imaging in Lung Diseases
M. Rémy-Jardin; Lille/FR

Mini Courses

Organs from A to Z: Liver
C. Bartolozzi; Pisa/IT

Extremity Joint MRI
M. Zanetti; Zurich/CH

Multidisciplinary Sessions

Managing Patients with Cancer
J. Cáceres; Barcelona/ES
R.H. Reznek; London/UK

E³ – European Excellence in Education

Foundation Course: Head and Neck Radiology
R. Hermans; Leuven/BE

Interactive Teaching Sessions
J. Vilar; Valencia/ES

Hands-on Workshops

Post-Processing of CT and MRI in Stroke Patients
J. Fiehler; Hamburg/DE

Cardiac CT Post-Processing and Analysis
N.R. Mollet; Rotterdam/NL
W.J. Niessen; Rotterdam/NL

Musculoskeletal US: Hand and Wrist, Foot and Ankle
E.G. McNally; Oxford/UK

3rd Workstation Face-Off Session

H.-C. Becker; Munich/DE
A. Graser; Munich/DE
“Reliability has top priority with me.”

Hitachi Real-time Tissue Elastography (HI-RTE)

HI-RTE is an exciting innovation in ultrasound imaging which allows assessment and real-time colour display of tissue elasticity. With Hitachi’s pioneering technology now adding a quantitative dimension – the technique has revolutionised the detection and visualisation of malignant disease and offers increased accuracy for tissue sampling in clinical areas such as the breast, prostate, thyroid and pancreas, and many more. For more information visit www.HI-RTE.com

HI-RTE – Supporting Diagnostic Confidence.

Don’t miss our ECR Lunch Symposium on HI-RTE (Hitachi Real-time Tissue Elastography) – Saturday, March 6, 2010

Hitachi Medical Systems Europe Holding AG · Sumpfstrasse 13 · CH-6300 Zug
www.hitachi-medical-systems.com
Please note the new congress dates:

**Thursday** March 4 to **Monday** March 8.

**ECR 2010**
European Congress of Radiology
March 4–8. Vienna / Austria

The annual meeting of myESR.org