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DEAR FELLOW MEMBERS, COLLEAGUES, AND FRIENDS,

On behalf of the Executive Board of the International Society for Strategic Studies in Radiology, it is my great pleasure to welcome you to the 11th Biennial International Symposium of our Society, August 27–29, 2015, in Amsterdam, the Netherlands. I am extremely pleased that the Executive Board of IS3R has chosen the capital of my country as the venue of our meeting as I feel that this vibrant city with its international flair combining history and tradition with extreme tolerance and unconventional thinking fits perfectly with the aims of our Society and with the atmosphere of our meetings.

The program of this year’s symposium is outstanding. I am extremely grateful to Ralph Weissleder and all the members of the Program Committee for including truly timely and stimulating topics. The large number of panel discussions will enable interactive exchange of opinions between our distinguished members and our industrial partners. It is this exchange to which we are particularly looking forward as it brings a very special flavor to our meetings: the interaction between professionals and companies involved in the field of imaging with the intention to improve the health and well-being of our patients. On behalf of our entire society, I would like to thank our corporate members for their support and active participation.

In addition to the program-related interaction, I hope that participants will benefit from the possibility to establish new and intensify old relationships, to start new and expand old friendships, and to experience stimulating conversations in a relaxed environment. But I also hope that all attendees will take advantage of Dutch hospitality and of the social events that offer a small taste of the history of Amsterdam as well as providing some food for thought. During the past two years the IS3R has implemented a number of new activities: an “Interim Meeting” was held in December 2014 in Chicago revisiting the developments in our field. This may be the start of an increasingly intense dialogue over the coming years. At the 2015 International Symposium, we, for the first time, welcome a group of young leaders, who we hope will boldly and resolutely guide our profession into a challenging but very promising future. I hope that the information received in our meetings and the contacts with our members and partners from industry will spur their careers so that they may indeed play a meaningful role during the years to come.

As my tenure as President of the IS3R is coming to an end, I would like to express my gratitude to all members of the Executive Board for their support and hard work. A special word of thanks goes to Hedi Hricak, our Past President, on whose wisdom I could always rely with trust and confidence. I would like to congratulate Jonathan Lewin, our incoming President, and wish him a successful term. I am convinced that under his expert and dedicated guidance the IS3R will continue to flourish as a unique platform for high-level strategic exchange in Medical Imaging.

Best wishes,

GABRIEL KRESTIN, MD, PhD
IS3R President
Dear Colleagues,

This year’s symposium will focus on three distinct areas: imaging and molecular therapeutics, information technology and standards in radiology. These areas were chosen by the Program Committee as they will likely change our specialty over the years to come. Session 1 focuses on “imaging in the molecular era” where molecular diagnostics and targeted therapeutics are ever more pervasive. The session also encompasses discussions on unique growth opportunities and barriers to commercialization. Session 2 focuses on clinical applications of PET imaging technologies and their different challenges in penetrating the market while session 3 addresses changes and opportunities in healthcare informatics, clinical decision support and next generation information technologies in radiology. Finally, session 4 focuses on diverse restructuring efforts in and affecting radiology as well as the need for more rigorous standards. We hope that you are as excited by these topics as we are as we look forward to engaging discussions.

Two keynote lectures will be presented by distinguished experts to lay the foundation for continued conversations on the future of healthcare, global changes and challenges and scientific opportunities. A hallmark of our meetings is time for panels and interactive discussions to facilitate the exchange of ideas. We have tailored the program to ensure that there is sufficient time after each session for these discussions. As in the past, we will prepare a summary of the meeting outcomes which will be distributed to our members.

We would like to thank the entire Program Committee for its tireless efforts in organizing this year’s meeting. Together, we would also like to thank the ISR office staff and the rest of the ISR board for their support in preparing for the meeting. Last but not least, we would like to thank all the invited speakers, moderators, and panelists for their invaluable contributions. It is their input that will hopefully make this meeting a huge success. We look forward to welcoming you in Amsterdam.

With best regards,

Ralph Weissleder, MD, PhD  Gabriel Krestin, MD, PhD  Hedvig Hricak, MD, PhD
Chair of the Program Committee  Co-Chair of the Program Committee  President and local host of the Program Committee
Mission of the IS³R

The International Society for Strategic Studies in Radiology is a non-political, not-for-profit organization whose purpose is to define and investigate strategic, scientific and economic issues of global importance to the field of radiology.

By forming a partnership between academia and industry, the Society seeks to anticipate national and global developments in radiology and allied fields, define areas of common interest to both partners, and encourage cooperation. It aims to communicate important issues to radiologists, physicians in other medical fields, industry and governments, and to influence healthcare management and the flow of financial and human resources into the scientific and strategic fields most likely to advance biomedical imaging and patient care.

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Elias Zerhouni (Baltimore/US)

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Hiroshi Honda (Fukuoka/JP)
Jonathan S. Lewin (Baltimore/US)

Administration

IS³R – EUROPEAN OFFICE
Society and Symposium Secretariat
Monika Hierath & Katharina Krischak
Neutorgasse 9/2, 1010 Vienna, AUSTRIA
Phone: +43-1-533-4064-20
Fax: +43-1-535-7041
E-mail: office@is3r.org

IS³R – US OFFICE
Society Secretariat
Pamela F. Mechler
1891 Preston White Drive
Reston, VA 20191, USA
Phone: +1-703-716-7545
Fax: +1-703-716-4487
E-mail: USoffice@is3r.org

www.is3r.org
Dr. Hans G. Ringertz will be awarded the 2015 IS3R Gold Medal at the 11th Biennial Symposium.

Dr. Ringertz began his studies in 1958 in biophysics research; earned his M.D. in 1964 and his PhD in biophysics in 1969. He held the position of Associate Professor in biophysics from 1969 to 1973 and in diagnostic radiology from 1973 to 1983. Dr. Ringertz served as Professor of radiology at the Karolinska Institute from 1984 to 2006 before being named Professor Emeritus in 2006; a position he continues to hold. During his tenure at Karolinska Institute he held the following hospital positions: Assistant Head of Paediatric Radiology at Karolinska 1973-77; Head of Radiology, Sachs Paediatric Hospital Stockholm 1977-83; Chairman, Diagnostic Radiology, Huddinge University Hospital 1984-87 and Karolinska Hospital 1987-2006. From 2006 to 2013 he was Professor and Chairman of the Board for the Center for Medical Imaging Science and Visualization, Linkoping University. Since 2013 he has served as a Consulting Professor at the Department of Radiology, Stanford University.

Dr. Ringertz has also been recognized as a Fellow in Pediatric Cardiac Imaging at UCSF in 1975; a visiting Professor responsible for pediatric MRI at UCSF 1983-84; a visiting Professor at Stanford University 2004-2012; co-director of the Strategic Center for Biomedical Imaging at Stanford 2007-2010; and Adjunct Professor of Radiology at UCSF 1984-2009 and Michigan State since 1991.

Dr. Ringertz is the author of 240 scientific articles and six books. He served as a permanent member of the Nobel Assembly for Physiology and Medicine from 1986 to 2006 and held the positions of President Elect and President in 2002 and 2003. He was a Trustee of the Nobel Foundation from 2002 to 2007. He was a member of the International Commission on Radiological Protection, committee 3, Medicine from 1992 to 2013. Dr. Ringertz is an honorary member of 15 national and regional radiological societies, including the Society for Pediatric Radiology and the European Society of Paediatric Radiology, and an honorary fellow of four Colleges. He has been awarded Gold Medals from Tokyo University, Japan, the European Society of Radiology, and the Asian Oceanian Society of Radiology.

Dr. James H. Thrall will be awarded the 2015 IS3R Gold Medal at the 11th Biennial Symposium.

Dr. Thrall served as Chairman of the Department of Radiology, Massachusetts General Hospital (MGH) and as the Juan M. Taveras Professor of Radiology at Harvard Medical School (HMS) from 1988 until 2013. He continues his service at MGH and HMS as Chairman Emeritus and as the Distinguished Taveras Professor of Radiology.

Dr. Thrall received his M.D. degree from the University of Michigan in 1968 and trained in Radiology and Nuclear Medicine at the Walter Reed Army Medical Center, Washington, D.C. where he also held the position of Assistant Chief of Nuclear Medicine for two years before returning to the University of Michigan in 1975 as an Assistant Professor. He was promoted to Professor of Internal Medicine and Radiology in 1981. He joined the staff of the Henry Ford Hospital as Chairman of Radiology from 1983 until 1988.

Dr. Thrall has held the positions of President, American Roentgen Ray Society and Chairman, Board of Chancellors and President, American College of Radiology (ACR). He served on the Board of Trustees of the Research and Education Foundation of the Radiological Society of North America, the Board of Directors of the Academy of Radiology Research, the Executive Council of the American Roentgen Ray Society, the Board of Trustees of the Society of Nuclear Medicine, the Board of Councilors of the Society of Chiefs of Academic Radiology Departments and the Board of Chancellors of the ACR.

Dr. Thrall is an elected member of the Institute of Medicine (IOM) of the National Academies of the United States. He has served on the Advisory Committee to the Director of the National Institutes of Health (NIH) and the National Advisory Council of the NIBIB. He is a Fellow of the ACR and has received the Gold Medals of the American Roentgen Ray Society, the Radiological Society of North America, the Association of University Radiologists and the American College of Radiology.

Dr. Thrall holds the positions of Chairman of the Board of Directors for WorldCare Limited and Mobile Aspects Incorporated.

Internationally, Dr. Thrall has served on the Board of Directors of the International Society of Radiology and currently serves on the Executive Board of the International Society for Strategic Studies in Radiology.

Dr. Thrall is an Honorary Member of the French Society of Radiology and the European Society of Radiology and an Honorary Fellow of the Royal College of Radiologists of the United Kingdom. He received the Beclère Medal from the International Society of Radiology.

Dr. Thrall is an author of over 350 scientific publications, perspectives and reviews and is the founder and Editor of the Requisites in Radiology textbook series.
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<tr>
<th>Time</th>
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<tr>
<td>07:00</td>
<td>Breakfast (Admiralty)</td>
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<tr>
<td>07:30</td>
<td>Registration</td>
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<tr>
<td>08:30</td>
<td>Welcome and Opening Remarks</td>
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<td>09:00</td>
<td><strong>KEYNOTE ADDRESS 1</strong></td>
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<td>09:45</td>
<td><strong>SESSION I: MOLECULAR THERAPIES AND IMAGING</strong></td>
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<td>10:25</td>
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<td><strong>SESSION I (CON.): MOLECULAR THERAPIES AND IMAGING</strong></td>
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<td>Lunch (Admiralty)</td>
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<td>PANEL DISCUSSION: COMPANION IMAGING DIAGNOSTICS (CID)</td>
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<td><strong>SESSION II: PET TECHNOLOGIES, MRI-PET</strong></td>
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<td>16:00</td>
<td>IS’R GENERAL ASSEMBLY (members only)</td>
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<td>PANEL DISCUSSION: NEXT GEN INFORMATICS AND CLINICAL DECISION SUPPORT</td>
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<td>15:15</td>
<td><strong>SESSION IV: STANDARDS AND CHANGES IN RADIOLOGY</strong></td>
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<td>Social Event at National Maritime Museum</td>
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<td>PANEL DISCUSSION: STANDARDIZATION OF IMAGING BIOMARKERS ACROSS DIFFERENT VENDORS</td>
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<td>12:30</td>
<td><strong>SUMMARY and CLOSING</strong></td>
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<td>13:00</td>
<td>Farewell Lunch (Admiralty)</td>
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*All sessions take place in the Council Chamber.*
Thursday, August 27

OPENING SESSION

08:30  Opening Remarks and Welcome
09:00  Keynote address: The future of health-care from company perspective
F. van Houten

SESSION I: MOLECULAR THERAPIES AND IMAGING
Chairs: B. Hamm, H. Honda

09:45  The growing field of theranostics and companion imaging diagnostics
M. Schwaiger
10:05  Precision Health: The Baseline Study
S. Gambhir
10:25  Break
10:55  Interventional approaches for molecular testing
R. Weissleder
11:15  Imaging in drug development: patient selection or efficacy
H. Hricak
11:35  Imaging and in vitro biomarkers: challenges and opportunities for integrated diagnostics (academic perspective)
G. Krestin
11:55  Lunch

13:00  PANEL DISCUSSION: COMPANION IMAGING DIAGNOSTICS (CID)
Chairs: O. Clément, B. Hillman
a. Is there a business for CID and how do we get them reimbursed?
J. Debatin
b. CID development from a pharma company perspective
M. Mintun
c. CID development from a diagnostics company perspective
A. Spinazzi
d. CID development from a diagnostics company perspective
E. Lancelot
e. CID development from an equipment manufacturer perspective
R. Mather
f. NIH perspectives
R. Pettigrew

14:00  Break

SESSION II: PET TECHNOLOGIES, MRI-PET
Chairs: O. Ratib, C. Meltzer, P.-L. Khong

14:30  What are the niches for MRI-PET?
G. von Schulthess
14:45  What are the European challenges for PET (incl. regulatory hurdles for new tracers)?
C. Claussen
15:00  PET neuroincubator model – enabling the field by making PET tracers available through a self-sustaining initiative
G. Brophy
15:15  Fifteen years after the introduction of PET/CT: the Siemens experience
W. Märzendorfer
15:30  Fifteen years after the introduction of PET/CT: the Toshiba experience
R. Mather
15:45  Fifteen years after the introduction of PET/CT: the Phillips experience
H. Pien

16:00  Adjourn

16:00  ISIR GENERAL ASSEMBLY
(MEMBERS ONLY)

16:00  ISIR GENERAL ASSEMBLY
(MEMBERS ONLY)

19:00  SOCIAL EVENT at Rosarium
Meeting point for bus transport in hotel lobby at 18:15
Friday, August 28

**SESSION III: HEALTHCARE IT**
Chairs: M. Reiser, P. Aspelin, R. Garcia-Monaco

08:30  Update on clinical decision support
       J. Brink

08:50  How will “big data” affect radiology (research/analytics)?
       R. Arenson

09:10  What does image mining offer? Why should we care?
       T. Grist

09:30  How will Apple and Google health-care entries change our space?
       J. Lewin

09:50  Opportunities for business analytics software
       D. Enzmann

10:10  Large scale, vendor neutral solutions
       M. Prokop

10:30  Break

11:00  PANEL DISCUSSION: NEXT GEN INFORMATICS AND CLINICAL DECISION SUPPORT
       Chairs: V. Jackson, S. Schönberg

   1. What’s on the horizon beyond PACS?
      a. Cloud Imaging enabling breakthrough analytics and boundaryless collaboration
         J. De Witte
      b. New IT developments
         G. Sorensen

   2. What are the opportunities and barriers to broad adoption of clinical decision support?
      S. Seltzer, L. Donoso, G. Frija

12:00  Lunch

13:00  3. What are the challenges developing/implementing Next Generation IT?
       W. Kalender, M. Graif

       4. Digital connectivity and big data for standardised high quality outcomes and efficient care delivery
       D. Moulavasilis

14:00  KEYNOTE ADDRESS: PHENOTYPING OF GENETIC DISORDERS USING IN VIVO IMAGING
       J. Penninger

14:45  Break

15:15  PANEL DISCUSSION 1: CHANGING TIMES OF ACADEMIC/INDUSTRY RELATIONSHIPS
       Chairs: N. Dunnick, B. Brkljacic, S. Ternovoy

   a. How are the relationships changing?
      P. Grenier
   b. What has worked and what hasn’t?
      N. Peic
   c. New models (industry perspective: Siemens)
      B. Montag
   d. New models (industry perspective: Philips)
      D. Olego
   e. New models (academic perspective Europe)
      C. Catalano
   f. New models (academic perspective Russia)
      V. Sinitsyn

16:45  PANEL DISCUSSION 2: NON-MEDICAL SUPPORT
       Chairs: L. Bonomo, B. Choi, H. Gharbi

   a. Who/what are the drivers (expand access and decrease costs)
      S. Golding
   b. Can computers be a radiologist’s assistant (clinical decision support software for neuroradiology; a start-up perspective)?
      R. Bryan
   c. Outsourcing to other countries
      A. Dixon
   d. Physician extenders
      K. Soyebi
   e. Back to Basics: IQ, Apps and Automation
      Y. Wedmid

17:45  Adjourn

19:30  SOCIAL EVENT at National Maritime Museum
      Boat will depart from Sofitel Legend The Grand at 18:30
Saturday, August 29

**SESSION IV (CON.): STANDARDS AND CHANGES IN RADIOLOGY**
*Chairs: C. Herold, S. Baum*

08:30  Partnering and interdisciplinary interactions in radiology (departments vs. service lines/centers) and the importance of multidisciplinary conferences
W. Bradley

08:50  Conflict of interest and compliance. How does it work with increasing pressure to enter academic/private sector relationships?
H. Kressel

09:10  External factors in finance affecting radiology utilization
B. McNeil

09:30  ACOs in the US (i.e. population health management); Imaging 3.0 (value vs. volume).
J. Thrall

09:50  Companies buying hospitals and practices: what is happening in Europe?
A. Palkó

10:10  Rising cost of imaging and equipment. How to control costs
G. Rubin

10:30  Break

11:00  PANEL DISCUSSION 3: STANDARDIZATION OF IMAGING BIOMARKERS ACROSS DIFFERENT VENDORS
*Chairs: J. Dai, D. Le Bihan, M. Fuchsjäger*

   a. FDA requirements for quantitative biomarker approval
      D. Sullivan

   b. How do we implement standardized biomarkers
      M. Schnall

   c. Technology pre-requisites for Imaging Biomarkers: State-of-the-art today and future directions
      B. Ohnesorge

12:30  SUMMARY and CLOSING
H. Ringertz, R. Weissleder, G. Krestin

13:00  FAREWELL LUNCH
Sofitel Legend The Grand is a five-star hotel in the heart of the city offering a unique historical ambiance. From a 15th-century convent to royal lodgings to Dutch Admiralty headquarters to the city hall of Amsterdam, the hotel boasts a rich history. The venue is within walking distance of Amsterdam’s major landmarks, including the Van Gogh Museum, the Royal Palace, Anne Frank’s House, and the new Hermitage Amsterdam.
**Certificate of Attendance**

Participants who would like to receive a certificate certifying their attendance at the symposium are encouraged to request one from the IS3R office per email after the event.

**Credit Cards/Currency Exchange**

The hotel reception provides currency exchange up to €500. The closest exchange office is located at Amsterdam Central Station (10 min walk). The nearest ATM can be found in Dam Square (2 min walk). Major Credit Cards are accepted.

**Insurance**

Neither the IS3R nor the symposium organizers can accept liability for personal injury, or loss/damage to property, personal or otherwise, belonging to meeting participants or accompanying persons, either during or as a result of the symposium or during all tours or their stay in Amsterdam. Participants and accompanying persons should ensure that their own personal health, accident and/or travel insurance are up-to-date and valid for use in Amsterdam.

**Meals**

Buffet breakfast is included at the Sofitel Legend The Grand in the Admiralty Room. Business lunch buffet and coffee breaks for all participants will be provided. Thank you for your understanding that the IS3R does not provide lunch and coffee breaks for accompanying persons.

**Official Language**

English (no translation of the meeting will be provided).

**Recording**

Audio or video recording any part of the symposium without prior express permission is prohibited.

**Registration**

Staff at the symposium registration desk will be available on Wednesday evening from 15:00–19:00, as well as during the symposium hours from Thursday to Saturday. They will assist you with local information for sightseeing in Amsterdam, booking optional tours, or any questions regarding your accommodations. The registration desk is located outside the main lecture hall.

**Smoking Policy**

The symposium meeting sessions are non-smoking. However, smoking is permitted in the hotel’s cigar lounge.

**Speakers’ Desk**

Speakers are kindly requested to upload their presentation at the Speakers’ Desk located in the Bourgomaaster Chamber close to the main lecture hall at least 90 minutes before the session starts. At the Speakers’ Desk, participants are moreover asked to complete a conflict of interest form and sign a presentation release consent form for archiving purposes and use in the protected members area in pdf format.

**Practical Information**

**Social Evening Events**

**WEDNESDAY 19:00–20:30.**

Welcome reception at the Sofitel Legend The Grand. Drinks and light hors d’oeuvres will be served in the Admiralty Room and the courtyard.

Dress code: Smart casual

**THURSDAY at 19:00**

Cocktails and dinner will be held at Rosarium, which is located in the middle of the green environment of the beautiful Amstelpark in the south of Amsterdam. The restaurant is known for its innovative cuisine and superb atmosphere. The comfortable and modern interior and the splendid view of the wonderful rose garden allow for an exceptional dining experience.

Dress code: Business casual attire, jacket not required

Meeting point for bus transport in hotel lobby at 18:15

**FRIDAY at 19:30**

The IS3R Gold Medal Dinner will be held at the National Maritime Museum. The reception at the museum will be preceded by a boat ride along the 17th-century canals of Amsterdam. Located at the waterfront, the museum is housed in a former naval storehouse constructed in 1656 and is a reminder of how significantly Dutch culture has been shaped by the sea. Today, the architecture blends historic architecture with contemporary features such as the magnificent inner courtyard with its spectacular glass roof while retaining all the maritime allure of days gone by.

Dress code: Dinner attire, jacket required

Boat will depart from Sofitel Legend The Grand at 18:30

*Please note that pre-registration to the Thursday and Friday social events was required. If your plans have changed, kindly notify the registration desk at your earliest convenience.*
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Philips Healthcare
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HYLOMIDIC

TIME MEDICAL SYSTEMS

SILVER
Agfa-Gevaert, N.V.
Carestream Health
Elekta Instrument AB
Sirtex Medical Europe GmbH

AGFA

CARESTREAM

ELEKTA

SIRTEX
LIST OF PARTICIPANTS

Bibb Allen  
Chairman, Board of Chancellors  
American College of Radiology  
Reston, VA/US

Ronald Arenson  
Alexander R. Margulis Distinguished Professor and Chairman, Department of Radiology and Biomedical Imaging  
University of California, San Francisco  
San Francisco, CA/US

Peter Aspelin  
Professor, Department of Radiology  
Karolinska Institute  
Stockholm/SE

Peter Baierl  
Executive Director  
European Society of Radiology (ESR)  
Vienna/AT

Sébastien Ballet  
Head of Drug Discovery  
Guerbet  
Aulnay-sous-Bois/FR

Thomas Balzer  
VP, Head Medical and Clinical Affairs Radiology  
Bayer HealthCare Medical Care  
 Whippany, NJ/US

Stanley Baum  
Professor of Radiology, Emeritus Chairman of Radiology  
University of Pennsylvania  
Philadelphia, PA/US

Guy Blomfield  
Chief Executive Officer  
Alliance Medical Group  
London/UK

Lorenzo Bonomo  
Professor of Radiology  
Università Cattolica Sacro Cuore  
Rome/IT

Eudes Bouvet-Welby  
Marketing Product Manager EMEA  
Sirtex Medical Europe GmbH  
Bonn/DE

William G. Bradley  
Professor and Chairman  
University of California, San Diego  
San Diego, CA/US

James A. Brink  
Radiologist-in-Chief, Juan M. Taveras Professor of Radiology  
Massachusetts General Hospital, Harvard Medical School  
Boston, MA/US

Boris Brkljacic  
Professor and Chairman, Department of Radiology  
Vice-dean, University of Zagreb School of Medicine  
University Hospital “Dubrava” Zagreb/HR

Ger Brophy  
Chief Technology Officer, Life Sciences  
GE Healthcare  
Amersham/UK

R. Nick Bryan  
Emeritus Professor of Radiology  
University of Pennsylvania  
Philadelphia, PA/US

Rob Cascella  
Executive Vice President, CEO Diagnostic Imaging  
Royal Philips  
Andover, MA/US and Amsterdam/NL

Carlo Catalano  
Department of Radiology  
Sapienza University of Rome  
Rome/IT

Giovanni Cerri  
Professor and Chairman, Department of Radiology  
University of São Paulo  
São Paulo/BR

Byung Ihn Choi  
Professor, Department of Radiology  
Seoul National University Hospital  
Seoul/KR

Claus D. Claussen  
Emeritus Professor of Radiology  
Eberhard-Karls-Universität Tübingen  
Tübingen/DE

Olivier Clément  
Professor and Chairman of the Imaging Department  
Hôpital Européen Georges Pompidou, Université René Descartes Paris  
Paris/FR

Jian-Ping Dai  
Professor and Chairman of Radiology  
Beijing Tian Tan Hospital  
Beijing/CN

Jörg F. Debatin  
Vice President  
Chief Technology and Medical Officer  
GE Healthcare  
Waukesha, WI/US

Marc Dewey  
Heisenberg Professor of Radiology  
Charité – Universitätsmedizin Berlin  
Berlin/DE

Jan De Witte  
President and CEO, Healthcare IT  
GE Healthcare  
Buc/FR

Adrian K. Dixon  
Emeritus Professor of Radiology, Master of Peterhouse, University of Cambridge  
Cambridge/UK

Luis Donoso  
Director, Diagnostic Imaging Department  
Hospital Clinic, University of Barcelona  
Barcelona/ES
**LIST OF PARTICIPANTS**

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Institution/University</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>N. Reed Dunnick</td>
<td>Fred Jenner Hodges Professor and Chair, Department of Radiology</td>
<td>University of Michigan</td>
<td>Ann Arbor, MI/US</td>
</tr>
<tr>
<td>Dieter R. Enzmann</td>
<td>Leo G. Rigler Chair and Distinguished Professor</td>
<td>University of California, Los Angeles</td>
<td>Los Angeles, CA/US</td>
</tr>
<tr>
<td>Xiaoyuan Feng</td>
<td>Chairman, Department of Radiology, Huashan Hospital, Immediate Past President of Chinese Society of Radiology</td>
<td>Fudan University</td>
<td>Shanghai/CN</td>
</tr>
<tr>
<td>Jürgen Feuerstein</td>
<td>Managing Director</td>
<td>b.e.imaging GmbH</td>
<td>Baden-Baden/DE</td>
</tr>
<tr>
<td>Lori Fontaine</td>
<td>Vice President, Clinical Affairs</td>
<td>Hologic, Inc.</td>
<td>Marlborough, MA/US</td>
</tr>
<tr>
<td>Micol Fornaroli</td>
<td>Chief Strategy Officer</td>
<td>Bracco Imaging SpA</td>
<td>Milan/IT</td>
</tr>
<tr>
<td>Guy Frija</td>
<td>Professor and Consultant, Imaging Department</td>
<td>Hôpital Européen Georges Pompidou, Université René Descartes Paris</td>
<td>Paris/FR</td>
</tr>
<tr>
<td>Michael Fuchsänger</td>
<td>Professor of Radiology, Head of Division of General Radiology</td>
<td>Medical University Graz</td>
<td>Graz/AT</td>
</tr>
<tr>
<td>Sanjiv Sam Gambhir</td>
<td>Professor and Chair, Department of Radiology</td>
<td>Stanford University School of Medicine</td>
<td>Stanford, CA/US</td>
</tr>
<tr>
<td>Ricardo D. Garcia-Monaco</td>
<td>Professor and Chairman, Department of Radiology</td>
<td>Hospital Italiano de Buenos Aires</td>
<td>Buenos Aires/AR</td>
</tr>
<tr>
<td>Jonas Gårding</td>
<td>Director Research &amp; Physics, Neuroscience</td>
<td>Elekta Instrument AB</td>
<td>Stockholm/SE</td>
</tr>
<tr>
<td>Hassen A. Gharbi</td>
<td>Professor of Biophysics and Radiology</td>
<td>Immediate Past President of the World Federation for Ultrasound in Medicine and Biology (WFUMB)</td>
<td>Tunis/TN</td>
</tr>
<tr>
<td>Stephen Golding</td>
<td>Previously Chairman of Radiology</td>
<td>Oxford University Hospitals</td>
<td>Oxford/UK</td>
</tr>
<tr>
<td>Moshe Graif</td>
<td>Chair, Department of Medical Imaging</td>
<td>The Tel Aviv Sourasky Medical Centre</td>
<td>Tel Aviv/IL</td>
</tr>
<tr>
<td>Philippe A. Grenier</td>
<td>Professor and Chairman of Radiology</td>
<td>Pitié-Salpêtrière Hospital and University Pierre &amp; Marie Curie</td>
<td>Paris/FR</td>
</tr>
<tr>
<td>Thomas M. Grist</td>
<td>Professor and Chair, Department of Radiology</td>
<td>University of Wisconsin</td>
<td>Madison, WI/US</td>
</tr>
<tr>
<td>Rolf W. Günther</td>
<td>Distinguished Professor</td>
<td>Charité, University Hospital, Institute of Radiology</td>
<td>Berlin/DE</td>
</tr>
<tr>
<td>Micheal Haimour</td>
<td>General Manager Global Partnership Programs</td>
<td>GE Healthcare</td>
<td>Waukesha, WI/US</td>
</tr>
<tr>
<td>Bernd K. Hamm</td>
<td>Professor and Chair, Department of Radiology</td>
<td>Charité; Humboldt - Universität zu Berlin and Freie Universität Berlin</td>
<td>Berlin/DE</td>
</tr>
<tr>
<td>Kevin Harris</td>
<td>Chief Executive officer</td>
<td>CureMetrix</td>
<td>San Diego, CA/US</td>
</tr>
<tr>
<td>Christian J. Herold</td>
<td>Professor of Radiology and Chairman, Department of Biomedical Imaging and Image-Guided Therapy</td>
<td>Medical University of Vienna</td>
<td>Vienna/AT</td>
</tr>
<tr>
<td>Bruce J. Hillman</td>
<td>Professor of Radiology and Medical Imaging and Public Health Sciences</td>
<td>Editor-in-Chief, Journal of the American College of Radiology</td>
<td>University of Virginia Charlottesville, VA/US</td>
</tr>
<tr>
<td>Mark Holmshaw</td>
<td>Director, Vice President Sales, Marketing and Service Europe</td>
<td>Toshiba Medical Systems Europe</td>
<td>Zoetermeer/NL</td>
</tr>
<tr>
<td>Hiroshi Honda</td>
<td>Professor and Chairman, Department of Radiology, Graduate School of Medical Sciences</td>
<td>Kyushu University</td>
<td>Fukuoka/JP</td>
</tr>
<tr>
<td>Frans van Houten</td>
<td>Chief Executive Officer</td>
<td>Royal Philips</td>
<td>Amsterdam/NL</td>
</tr>
<tr>
<td>Hedvig Hricak</td>
<td>Chairman, Department of Radiology</td>
<td>Carroll and Milton Petrie Chair</td>
<td>New York, NY/US</td>
</tr>
<tr>
<td>Dr. Hedvig Hricak</td>
<td>Professor, Radiology, Head of Division of Radiology</td>
<td>Stanford University</td>
<td>Stanford, CA/US</td>
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<tr>
<td>Rowland Illing</td>
<td>Chief Medical Officer</td>
<td>Affidea</td>
<td>London/UK</td>
</tr>
<tr>
<td>Valerie P. Jackson</td>
<td>Executive Director</td>
<td>The American Board of Radiology</td>
<td>Tucson, AZ/US</td>
</tr>
<tr>
<td>James Jay</td>
<td>Global Vice President, Imaging IT Solutions</td>
<td>Agfa HealthCare</td>
<td>Elmwood Park, NJ/US</td>
</tr>
<tr>
<td>Zhengyu Jin</td>
<td>Chair, Department of Radiology</td>
<td>Peking Union Medical College Hospital</td>
<td>Beijing/CN</td>
</tr>
<tr>
<td>Arthur Kaindl</td>
<td>HC IM SY CEO, Imaging and Therapy Systems, Syngo</td>
<td>Siemens Healthcare GmbH</td>
<td>Erlangen/DE</td>
</tr>
<tr>
<td>Willi A. Kalender</td>
<td>Professor and Chairman, Institute of Medical Physics</td>
<td>University of Erlangen</td>
<td>Erlangen/DE</td>
</tr>
<tr>
<td>Karim Karti</td>
<td>VP &amp; Chief Marketing Officer</td>
<td>GE Healthcare</td>
<td>UK</td>
</tr>
<tr>
<td>Pek-Lan Khong</td>
<td>Professor and Head, Department of Radiology</td>
<td>The University of Hong Kong, Queen Mary Hospital</td>
<td>Hong Kong/CN</td>
</tr>
<tr>
<td>Keiji Kobashi</td>
<td>Chief Researcher, Research &amp; Development Group</td>
<td>Hitachi, Ltd.</td>
<td>Tokyo/JP</td>
</tr>
<tr>
<td>Herbert Y. Kressel</td>
<td>Miriam H. Stoneman Professor of Radiology, Editor of RADIOLOGY</td>
<td>Harvard Medical School, Radiological Society of North America</td>
<td>Boston, MA/US</td>
</tr>
<tr>
<td>Gabriel P. Krestin</td>
<td>Professor and Chair, Department of Radiology</td>
<td>Erasmus University Medical Center</td>
<td>Rotterdam/NL</td>
</tr>
<tr>
<td>Eric Lancelot</td>
<td>Medical and Regulatory Affairs – Europe Manager</td>
<td>Guerbet</td>
<td>Roissy CDG Cedex/FR</td>
</tr>
<tr>
<td>Denis Le Bihan</td>
<td>Director</td>
<td>NeuroSpin</td>
<td>Gif/Yvette/FR</td>
</tr>
<tr>
<td>Jonathan S. Lewin</td>
<td>Senior Vice President, Integrated Healthcare Delivery</td>
<td>Professor and Chairman, Russell H. Morgan</td>
<td>Johns Hopkins Medical School, Baltimore, MD/US</td>
</tr>
<tr>
<td>Q. Y. Ma</td>
<td>Chairman and Chief Executive Officer</td>
<td>Time Medical Systems</td>
<td></td>
</tr>
<tr>
<td>Rich Mather</td>
<td>Senior Director Global Clinical Research</td>
<td>Toshiba Medical Research Institute USA</td>
<td>Newport Beach, CA/US</td>
</tr>
<tr>
<td>Walter Märzendorfer</td>
<td>CEO, Computed Tomography &amp; Radiation Oncology</td>
<td>Siemens Healthcare</td>
<td>Erlangen/DE</td>
</tr>
<tr>
<td>Maryanne McHugh</td>
<td>Global Strategic Advisor</td>
<td>Toshiba Corporation Healthcare Company</td>
<td>Tokyo/JP</td>
</tr>
<tr>
<td>Barbara J. McNeil</td>
<td>Professor of Radiology</td>
<td>Professor and Chair, Department of Health Care Policy</td>
<td>Harvard Medical School, Boston, MA/US</td>
</tr>
<tr>
<td>Carolyn C. Meltzer</td>
<td>William P. Timmie Professor and Chair of Radiology and Imaging Sciences, Associate Dean for Research</td>
<td>Emory University, School of Medicine, Atlanta, GA/US</td>
<td></td>
</tr>
<tr>
<td>Mark A. Mintun</td>
<td>President &amp; Chief Medical Officer</td>
<td>Avid Radiopharmaceuticals, Inc.</td>
<td>Philadelphia, PA/US</td>
</tr>
<tr>
<td>Bernd Montag</td>
<td>CEO Healthcare</td>
<td>Siemens Healthcare GmbH</td>
<td>Erlangen/DE</td>
</tr>
<tr>
<td>Dimitris Moulavasilis</td>
<td>Chief Executive Officer</td>
<td>Affidea</td>
<td>Budapest/HU</td>
</tr>
<tr>
<td>Charles Niehaus</td>
<td>Chief Medical Officer</td>
<td>Alliance Medical Group</td>
<td>London/UK</td>
</tr>
<tr>
<td>Loren T. Niklason</td>
<td>Vice President, Imaging Clinical Research</td>
<td>Hologic, Inc.</td>
<td>Bedford, MA/US</td>
</tr>
<tr>
<td>Bernd Ohnesorge</td>
<td>CEO Business Unit Magnetic Resonance</td>
<td>Siemens Healthcare GmbH</td>
<td>Erlangen/DE</td>
</tr>
<tr>
<td>Diego Olego</td>
<td>Head of Technology and R&amp;D Management, Innovation, Senior Vice President</td>
<td>Philips Healthcare</td>
<td>Andover, MA/US</td>
</tr>
</tbody>
</table>
LIST OF PARTICIPANTS

Noboyuki Osakabe
Chief Technology Officer, Healthcare Company
Hitachi, Ltd.
Tokyo/JP

András Palkó
Chairman and Head of Department of Radiology
University of Szeged
Szeged/HU

Norbert J. Pelc
Professor of Bioengineering and Radiology, Chair of Bioengineering
Stanford University Medical Center
Stanford, CA/US

Josef Penninger
Scientific Director
IMBA – Institute of Molecular Biotechnology of the Austrian Academy of Sciences
Vienna/AUT

Roderic I. Pettigrew
Director
National Institute of Biomedical Imaging and Bioengineering
Bethesda, MD/US

Homer H. Pien
Senior Vice President for Lead Innovations and Chief Technology Officer Imaging Systems
Royal Philips
Andover, MA/US

Mathias Prokop
Professor and Chairman, Department of Radiology
Radboud University Medical Centre
Nijmegen/NL

Eckhard Puchert
Head of SBU Radiology
Bayer HealthCare Medical Care
Berlin/DE

Osman Ratib
Professor and Head of Nuclear Medicine and Molecular Imaging, Dept. of Medical Imaging and Information Sciences
University Hospital of Geneva
Geneva/CH

Maximilian F. Reiser
Dean of the Medical Faculty, Director of the Institute of Clinical Radiology
Ludwig-Maximilians University Hospital, Campus Grosshadern
Munich/DE

Hans G. Ringertz
Consulting Professor of Radiology
Stanford University Medical Center
Stanford, CA/US

Geoffrey D. Rubin
George Geller Professor of Radiology and Biomedical Engineering
Duke University School of Medicine
Chapel Hill, NC/US

Amit M. Saidane
Associate Professor, Department of Radiology and Imaging Sciences
Emory University School of Medicine
Atlanta, GA/US

Mitchell D. Schnall
Eugene P. Pendergrass Professor of Radiology, Chairman Department of Radiology
University of Pennsylvania
Philadelphia, PA/US

Stefan O. Schönberg
Director, Department of Clinical Radiology and Nuclear Medicine
University Medical Centre Mannheim
Mannheim/DE

Markus Schweiger
Professor and Director, Department of Nuclear Medicine
Technische Universität München
Munich/DE

Steven E. Seltzer
Professor, Department of Radiology
Harvard Medical School
Boston, MA/US

Valentin Sintsyn
Chief, Department of Radiology
Federal Center of Medicine and Rehabilitation
Moscow/RU

Kofoworola O. Soyebi
Senior Lecturer & Consultant Radiologist
College of Medicine, University of Lagos & Lagos University Teaching Hospital
Lagos/NGA

Gregory Sorensen
President and CEO
Siemens Healthcare, North America
Malvern, PA/US

Alberto Spinazzi
Senior Vice President, Global Medical and Regulatory Affairs
Bracco Diagnostics, Inc.
Monroe Township, NJ/US

Jacob (Bram) Stolk
VP and General Manager, Global Research GE Healthcare
Waukesha, WI/US

Kazuro Sugimura
Professor, Department of Radiology
Kobe University Graduate School of Medicine
Kobe/JP

Hisashi Tachizaki
General Manager, Center for Medical Research & Development
Toshiba Medical Systems Corporation
Tochigi /JP

Sergey Ternovoy
Academician RAS
Professor and Chairman, Department of Radiology
I.M. Sechenov First Moscow State Medical University
Moscow/RU
LIST OF PARTICIPANTS

William T. Thorwarth
Chief Executive Officer
American College of Radiology
Reston, VA/US

James H. Thrall
Chairman Emeritus, Department of Radiology
Massachusetts General Hospital
Boston, MA/US

Gustav K. von Schulthess
Professor, Chairman and Director emeritus
Dept. Med. Radiology and Nuclear Medicine
Delegate for Special Tasks
University Hospital Zurich
Zurich/CH

Yuri Wedmid
Senior Vice President Business Development
Time Medical Systems
US

Ralph Weissleder
Thrall Family Professor of Radiology and Professor of Systems Biology
Director, Center for Systems Biology
Massachusetts General Hospital Boston and Harvard Medical School
Boston, MA/US

Huadan Xue
Associate Professor and Assistant Director, Department of Radiology
Peking Union Medical College Hospital
Beijing/CN