



# Re-Inventing Radiology in a Digital and Molecular Age

S C I E N T I F I C   P R O G R A M

AUGUST 25 - 27, 2005

# Symposium Venue

## THE FAIRMONT COPLEY PLAZA

138 St. James Avenue  
Boston, Massachusetts, 02116, USA  
Tel: +1-617-267-5300 Fax: +1-617-267-7668

E-mail: [boston@fairmont.com](mailto:boston@fairmont.com)  
Web: <http://www.fairmont.com/copleyplaza/>

Since its opening in 1912, the Fairmont Copley Plaza has been known as an architectural landmark, standing alongside two other architectural jewels around the square, the Boston Public Library and Trinity Church. Over the last century, much of the classical architecture and décor have been preserved, combining elements of French and Venetian Renaissance, and including the famous back-to-back "P" monogram seen through the hotel. From the very moment guests step into the Fairmont Copley Plaza, they experience the hospitality of a forgotten era.

## OFFICIAL LANGUAGE

English (no translation of the meeting will be provided)

## SMOKING POLICY

The symposium is non-smoking, and smoking is prohibited in most public venues in Boston.

## FLOOR PLAN





## Table of Contents

|    |                                |
|----|--------------------------------|
| 02 | Venue and Floorplan            |
| 04 | About the IS <sup>3</sup> R    |
| 05 | Letter from the President      |
| 06 | Practical Information          |
| 07 | Schedule At-a-Glance           |
| 08 | Scientific Program Schedule    |
| 11 | List of Participants           |
| 14 | IS <sup>3</sup> R Organization |

## About the IS<sup>3</sup>R

### **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. The Society aims to foresee national and global developments in radiology and allied fields, and to strategically communicate important issues to radiologists, physicians in other medical fields, industry and governments. Its strategic partnership with industry creates important avenues of cooperation and common engagement. IS<sup>3</sup>R can thus envision plans for actively influencing research, teaching and clinical practice now and in the future, and to prepare radiologists, their partners, and their clients for future developments. The Society works to influence the flow of capital and investment into the most scientific and strategic fields, and to influence health care politics for the benefit of radiology, its patients and customers.

## IS<sup>3</sup>R Executive Board

### **Gary M. Glazer, MD**

President

### **Hans G. Ringertz, MD, PhD**

Past President

Nominating and Membership Committee Chair

### **Guy G. Frija, MD**

President-Elect

### **Ronald L. Arenson, MD**

Vice President

### **Christian J. Herold, MD**

Secretary

By-laws and Rules Committee Chair

### **James H. Thrall, MD**

Treasurer

### **Alexander R. Margulis, MD, DSc(hc)**

Founding President

Corporate Advisory Chair

### **Gabriel P. Krestin, MD, PhD**

Publications Committee Chair

### **Members**

Stephen J. Golding, FRCR

Hedvig Hricak, MD, PhD

Maximilian Reiser, MD

Lenny K.A. Tan, MD

Gustav K. von Schulthess, MD, PhD

## 2005 Program Committee

### **James H. Thrall, Chairman**

Boston, Massachusetts, USA

### **Ronald L. Arenson**

San Francisco, California, USA

### **Guy G. Frija**

Paris, France

### **Gary M. Glazer**

Stanford, California, USA

## President's Foreward



Dear Participants,

On behalf of IS<sup>3</sup>R, I welcome you to Boston for our 6th bi-annual symposium.

I want to thank our Founding President, and my friend and mentor, Alex Margulis, for helping to create and nurture a global organization of leaders in Radiology that has now survived infancy and grown into a vigorous 11-year old. The past year has brought many changes to the IS<sup>3</sup>R including expanded membership, which includes leaders in allied disciplines, publication of the IS<sup>3</sup>R history and mission in Radiology, and a commitment to produce a white paper based on the Boston meeting. I want to thank the members of IS<sup>3</sup>R who have devoted time and energy to make the organization grow.

What I have enjoyed most about the IS<sup>3</sup>R is the forum it provides for stimulating and informative discussions with peers, in an environment that is open, intimate, and collegial. Many global friendships and collaborations have resulted from the IS<sup>3</sup>R meetings. Although most of us meet over the course of a year at major meetings, the scale of IS<sup>3</sup>R and the structure of the scientific and social programs provide a comfortable milieu for us to get to know each other better. To those of you attending IS<sup>3</sup>R for the first time, I very much hope that you will find the organization to be friendly and intellectually stimulating.

As we have matured as an organization, we have begun to transition from an internally focused Society, to one that has an external focus as well. That commitment to disseminate our deliberations widely will be enhanced by this meeting and a subsequent white paper. Jim Thrall has done a spectacular job in focusing the meeting on "Reinventing Radiology in a Digital and Molecular Age." He has also used exquisite taste, and perhaps some arm-twisting, to mine the Harvard and Boston environment in search of exceptional talent to speak at our symposium. He has also managed to attract major governmental figures including the former Secretary of Health and Human Services in the United States, Tommy Thompson, to Boston. Finally we are delighted that one of our own, Elias Zerhouni, will again share his thoughts concerning strategic directions of the NIH.

The added ingredient of your active participation in the Boston meeting should complete the recipe for the Society's success. Enjoy!!

Gary M. Glazer  
President, ISSSR

# Practical Information

## EXHIBITION

No trade exhibits are scheduled to be displayed in conjunction with this year's symposium.

## CREDIT CARDS/CURRENCY EXCHANGE

The reception desk at the Fairmont Copley Plaza is able to cash traveller's checks for you; the nearest banking establishment and automated teller machine (ATM) is two blocks away near the train station on Dartmouth Street. Major credit cards (Visa, MasterCard) are accepted by nearly all establishments in the area.

## INSURANCE

The IS<sup>3</sup>R 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 Boston. Participants and accompanying persons should assure that their own personal health, accident and/or travel insurance are up-to-date and valid for use in the United States.

## CME CREDIT

None of the scientific or educational sessions of this year's symposium has been approved for continuing medical education credit.

## CERTIFICATE OF ATTENDANCE

Participants who would like to receive a certificate verifying their attendance at the symposium are encouraged to request one from the Registration desk (located outside of the meeting room) before adjournment on Saturday. Certificates will be mailed following the symposium.

## MEALS

Continental breakfast and lunch will be served in the Ballroom Foyer across the rostrum from the meeting sessions. Continental breakfast for attendees is available beginning at 6:45 am. Coffee breaks will be served

to participants on each day of the symposium and attendees are invited to luncheon with colleagues on Thursday and Friday. Symposium participants and their guests are welcome and encouraged to attend the dinner banquets on Thursday and Friday evenings.

## RECORDING

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

## REGISTRATION

Staff at the registration desk will be available each day Thursday-Saturday during symposium hours. They are there to assist you with reservations, finding local venues, booking optional tours, or to help you with any challenges with your accommodations or travel arrangements.

## LOCATION

### **Fairmont Copley Plaza**

138 St. James Avenue  
Boston, Massachusetts, 02116, USA  
Tel: +1-617-267-5300  
Fax: +1-617-267-7668  
Web: <http://www.fairmont.com/copleyplaza/>

## HERTZ RENT-A-CAR

To take advantage of special rates for rental cars in Boston up to one week before and after the Symposium, call Meeting Services at 1-800-654-2240 and mention the ISSSR, CV# 01SY0165 or book online with the CV code. You may pickup and/or return your car at either of these locations in Boston:

### **Boston Logan International Airport**

207 Porter Street  
Open 24 Hours, 7 Days

### **Back Bay Station Amtrak**

145 Dartmouth Street (Near Copley Place)  
Open Sunday-Thursday: 7:00am – 7:00pm, Friday:  
7:00am – 8:00pm, and Saturday: 7:00am – 6:00pm.

# Program Overview

## THURSDAY, AUGUST 25

- 7:00 am *Continental Breakfast and Registration*  
Ballroom Foyer
- 8:00 **Welcome and Introductions**  
Grand Ballroom
- 8:20 **Demographics Revisited: Is There Still a Manpower Shortage**  
Grand Ballroom
- 9:10 **Globalization in Radiology**  
Grand Ballroom  
**KEYNOTE: GLOBALIZATION IN HEALTH CARE**  
(Thompson)
- 10:15 *Coffee Break*  
Ballroom Foyer
- 10:45 **INDUSTRY PANEL: GLOBALIZATION IN INDUSTRY**  
Grand Ballroom
- 12:15 pm *Lunch Break*  
Ballroom Foyer
- 1:30 **Re-inventing Radiology in the Digital Age**  
Grand Ballroom
- 2:45 *Coffee Break*  
Ballroom Foyer
- 3:15 **Re-inventing Radiology in the Digital Age (cont.)**  
Grand Ballroom
- 4:00 **INDUSTRY PANEL: INFORMATION AND COMPUTER SYSTEMS**  
Grand Ballroom
- 5:00 **Strategic Minutes**  
Grand Ballroom
- 5:20 *Adjourn*
- 7:15 *Opening Banquet*  
Top of the Hub, Prudential Tower

## FRIDAY, AUGUST 26

- 7:00 am *Continental Breakfast*  
Ballroom Foyer
- 8:00 **Quality and Safety in Radiology**  
Grand Ballroom  
**KEYNOTE: THE NEW IMPERATIVE FOR QUALITY AND SAFETY IN RADIOLOGY** (Hillman)
- 9:30 **PANEL DISCUSSION: CLINICAL PERSPECTIVES ON QUALITY AND SAFETY**  
Grand Ballroom
- 10:00 *Coffee Break*  
Ballroom Foyer

- 10:30 **MANUFACTURERS' PANEL: INDUSTRIAL INITIATIVES IN QUALITY**  
Grand Ballroom
- 11:30 **KEYNOTE: STRATEGIC DIRECTIONS FOR THE NIH** (Zerhouni)  
Grand Ballroom
- 12:15 pm *Lunch Break*  
Ballroom Foyer
- 1:30 **Re-inventing Radiology in the Molecular Age**  
Grand Ballroom  
**KEYNOTE: GENETICS AND GENOMICS IN CLINICAL MEDICINE** (Kucherlapati)
- 2:55 *Coffee Break*  
Ballroom Foyer
- 3:30 **Re-inventing Radiology in the Molecular Age**  
Grand Ballroom
- 4:00 **PHARMACEUTICAL COMPANY PANEL: STRATEGIES FOR DEVELOPMENT OF MOLECULAR IMAGING**  
Grand Ballroom
- 5:00 **Strategic Minutes**  
Grand Ballroom
- 5:20 *Adjourn*
- 5:30 **General Assembly of the ISSSR** (Members Only)
- 7:30 *Closing Reception and Dinner*  
Oval Room

## SATURDAY, AUGUST 27

- 7:00 am *Continental Breakfast*  
Ballroom Foyer
- 8:00 **Imaging Systems and Clinical Innovation: New Directions**  
Grand Ballroom
- 9:15 **The Academic Research Agenda**  
Ballroom Foyer
- 10:00 *Coffee Break*  
Ballroom Foyer
- 10:30 **The Future of Radiology Education**  
Grand Ballroom
- 11:25 **Meeting Summary**  
Grand Ballroom
- 11:50 **Closing Remarks**  
Grand Ballroom
- 12:00 pm *Adjourn*

Full Program Schedule begins on next page.

# Program Schedule

## THURSDAY, AUGUST 25

7:00 am *Continental Breakfast and Registration*

8:00 **Welcome to Boston**  
James H. Thrall, MD – Program Chairman

8:05 **Introduction to the ISSSR Program**  
Gary M. Glazer, MD – President, ISSSR

### DEMOGRAPHICS REVISITED: IS THERE STILL A MANPOWER SHORTAGE?

Moderators: Stanley Baum, MD, and  
James H. Thrall, MD

8:20 **Asia** – Lenny K.A. Tan, MD

8:30 **Europe** – Maximillian Reiser, MD

8:40 **USA** – C. Douglas Maynard, MD

8:50 **ACR** – Jonathan H. Sunshine, PhD

### GLOBALIZATION IN RADIOLOGY

Moderators: Peter Aspelin, MD, PhD and  
Alexander R. Margulis, MD, DSc(hc)

9:10 **Keynote Address: Globalization in Health Care**  
Tommy G. Thompson

9:40 **International Teleradiology: Professional Practice Across Borders**  
Europe – Iain W. McCall, MD  
USA – Sanjay Saini, MD

10:15 *Coffee Break*

10:45 **Industry Panel:**  
**Globalization in Industry – Benefits to Companies and Customers**  
**General Electric Healthcare** – Joseph M. Hogan  
**Siemens Medical Solutions** – Erich R. Reinhardt, PhD  
**Schering AG** – Günter Stock, MD, PhD  
**Bracco Diagnostics, Inc.** – Carlo Medici  
**Eastman Kodak Corporation** – Kevin Hobert  
**Agfa-Gevaert, NV** – Philippe Houssiau  
**Philips Medical Systems** – Jouko A. Karvinen

12:15 pm *Lunch Break*

## RE-INVENTING RADIOLOGY IN THE DIGITAL AGE

Moderators: Rolf Günther, MD and  
Adrian K. Dixon, MD

1:30 **Work Process Redesign with PACS: Chairman's Perspective**  
Hedvig Hricak, MD, PhD

2:00 **Redesigning the Radiology Reporting Process**  
Eliot L. Siegel, MD

2:15 **Decision Support**  
Daniel I. Rosenthal, MD, FACR

2:30 **Data Mining**  
Keith J. Dreyer, MD, PhD

2:45 *Coffee Break*

3:15 **Image Post-processing: What Applications will Benefit?**  
Elliot K. Fishman, MD

3:30 **Computer-Aided Diagnosis: Where will it be in Five Years?**  
Kunio Doi, PhD

3:45 **Evidence-Based Radiology**  
Ramin Khorasani, MD, MPH

4:00 **Industry Panel:**  
**Information and Computer Systems**  
Moderator: Nicholas Gourtsoyiannis, MD  
**Agfa-Gevaert, NV** – Marcel Swennenhuis  
**General Electric Healthcare** – Vishal Wanchoo  
**E-Z-Em, Inc.** – Brad S. Schreck  
**Eastman-Kodak Company** – Michael W. Jackman, MBA  
**Philips Medical Systems** – David Rollo, MD, PhD

5:00 **Strategic Minutes**  
Moderator: Guy G. Frija, MD  
G. Frija, G. Krestin, S. Swensen

5:20 *Adjourn*

7:15 *Opening Banquet*  
Top of the Hub, Prudential Tower  
(Transportation will be provided from the Fairmont beginning at 7:00 pm.)

## FRIDAY, AUGUST 26

7:00 am *Continental Breakfast*

### QUALITY AND SAFETY IN RADIOLOGY

Moderator: Barbara J. McNeil, MD, PhD

8:00 **Keynote Address: The New Imperative for Quality and Safety in Radiology**

Bruce J. Hillman, MD

8:30 **Hospital Perspectives on Quality and Safety**

Gregg S. Meyer, MD, MSc

9:00 **Radiology Departmental Perspectives on Quality and Safety**

Christian J. Herold, MD

9:30 **Panel Discussion: Clinical Perspectives on Quality and Safety**

Adrian K. Dixon, MD

Dieter Enzmann, MD

R. Nick Bryan, MD, PhD

William G. Bradley, MD, PhD, FACR

Valentin E. Sinitsyn, MD

10:00 *Coffee Break*

10:30 **Manufacturers' Panel:**

**Industrial Initiatives in Quality**

Moderators: N. Reed Dunnick, MD and Valentin E. Sinitsyn, MD

**General Electric Healthcare** – Peter McCabe

**Siemens Medical Solutions** – Hermann Requardt

**E-Z-Em, Inc.** – Anthony Lombardo

**Acist Medical Systems** – Al Salaabi

**Philips Medical Systems** – David Rollo, MD, PhD

11:30 **Keynote Address:**

**Strategic Directions for the NIH**

Elias A. Zerhouni, MD

12:15pm *Lunch Break*

### RE-INVENTING RADIOLOGY IN THE MOLECULAR AGE

Moderators: R. Nick Bryan, MD, PhD and

Gustav K. von Schulthess, MD, PhD

1:30 **Keynote Address:**

**Genetics and Genomics in Clinical Medicine**

Raju Kucherlapati, PhD

2:15 **Nanotechnology Concepts**

Ralph Weissleder, MD, PhD

2:35 **Clinical Applications in Molecular Imaging**

King C. Li, MD, MBA

2:55 *Coffee Break*

3:30 **Strategies for Platform Development in Molecular Imaging**

**Chemistry Platforms** – Lee Josephson, PhD

**Imaging Platforms** – Willi A. Kalender, PhD

4:00 **Pharmaceutical Company Panel: Strategies for Development of Molecular Imaging Agents**

**Bracco Diagnostics** – Michael F. Tweedle, PhD

**Siemens Medical Solutions** – Heinrich Kolem, PhD

**Schering AG** – Matthias Bräutigam, MD, PhD

**Laboratoire Guerbet** – Bruno Bonnemain

**Philips Medical Systems** – Timothy Irish

5:00 **Strategic Minutes**

Moderator: Pierre Schnyder, MD

C. Ravin, P. Schnyder, S. Seltzer

5:20 *Adjourn*

5:30 **GENERAL ASSEMBLY OF THE ISSR**

(Members Only)

7:30 *Closing Reception and Dinner*

Oval Room, Fairmont Copley Plaza



## SATURDAY, AUGUST 27

7:00 am *Continental Breakfast*

### **IMAGING SYSTEMS AND CLINICAL INNOVATION: NEW DIRECTIONS**

Moderators: Stephen J. Golding, FRCR and  
Dieter Enzmann, MD

8:00 ***Computed Tomography: 4-16-64  
Slice CT – Differences in Clinical Impact***  
Roberto Passariello, MD

8:15 ***MRI*** – Stephen J. Golding, FRCR

8:30 ***PET*** – Markus Schwaiger, MD

8:45 ***Discussion***

### **THE ACADEMIC RESEARCH AGENDA**

Moderator: Gabriel P. Krestin, MD, PhD

9:15 ***Establishment of the European Institute for  
Biomedical Imaging Research (EIBIR)***  
Gabriel Krestin, MD, PhD

9:30 ***Characteristics of Academic Departments of  
Radiology in the United States***  
Stanley Baum, MD

10:00 *Coffee Break*

### **THE FUTURE OF RADIOLOGY EDUCATION**

Moderator: Janet Husband, FRCR, FRCP

10:30 ***Training Residents in the Digital Age***  
Ronald L. Arenson, MD  
Claus D. Claussen, MD

10:55 ***Curriculum and Methods for Teaching  
Medical Students in the Digital Age***  
Robert A. Novelline, MD

11:10 ***Discussion***

11:25 ***Summary***  
Hans G. Ringertz, MD, PhD

11:50 ***Closing Remarks:  
Plans for White Paper***  
Gary M. Glazer, MD

12:00 pm *Adjourn*

# List of Participants

**Ronald L. Arenson, MD**

University of California,  
San Francisco  
San Francisco, California, USA

**Robert Aromando**

Bracco Diagnostics, Inc.  
Princeton, New Jersey, USA

**Peter Aspelin, MD, PhD**

Huddinge University Hospital  
Karolinska Institute  
Stockholm, Sweden

**Stanley Baum, MD**

Academic Radiology/University of  
Pennsylvania  
Philadelphia, Pennsylvania, USA

**Bruno Bonnemain**

Laboratoire Guerbet  
Paris, France

**William G. Bradley, MD, PhD,  
FACR**

University of California, San Diego  
San Diego, California, USA

**Matthias Bräutigam, MD, PhD**

Schering AG  
Berlin, Germany

**R. Nick Bryan, MD, PhD**

University of Pennsylvania  
Philadelphia, Pennsylvania, USA

**Terry Bunge**

Acist Medical Systems, A Bracco  
Group Company  
Princeton, New Jersey, USA

**Valtero Canepa**

Bracco Internacional  
Manno, Switzerland

**Robert Carretta, MD**

Mallinckrodt Medical, Inc.  
(Tyco Healthcare)  
Hazelwood, Missouri, USA

**Claus D. Claussen, MD**

University Hospital – Tübingen  
Tübingen, Germany

**Philippe Decazes**

Laboratoire Guerbet, S.A.  
Paris, France

**Adrian K. Dixon, MD**

Addenbrooke's Hospital  
Cambridge, England, UK

**Kunio Doi, PhD**

University of Chicago  
Chicago, Illinois, USA

**Karin Dorrepaal, MD**

Schering AG  
Berlin, Germany

**Keith J. Dreyer, MD, PhD**

Harvard Medical School and  
Massachusetts General Hospital  
Boston, Massachusetts, USA

**N. Reed Dunnick, MD**

University of Michigan Health  
System  
Ann Arbor, Michigan, USA

**Dieter Enzmann, MD**

University of California Los Angeles  
School of Medicine  
Los Angeles, California, USA

**Elliot K. Fishman, MD**

Johns Hopkins University  
Owings Mills, Maryland, USA

**Guy G. Frija, MD**

French Society of Radiology  
Paris, France

**Gary M. Glazer, MD**

Stanford University School  
of Medicine  
Stanford, California, USA

**Stephen J. Golding, FRCR**

John Radcliffe Hospital,  
University of Oxford  
Oxford, England, UK

**Nicholas Gourtsoyiannis, MD**

University Hospital of Iraklion  
Iraklion, Crete, Greece

**Philippe A. Grenier, MD**

Service Central de Radiologie,  
Hopital de la Pitie-Salpetriere  
Paris, France

**Robert I. Grossman, MD**

New York University  
School of Medicine  
New York, New York, USA

**Rolf Günther, MD**

Clinic for Diagnostic Radiology  
Aachen, Germany

**Christian J. Herold, MD**

University of Vienna General Hospital  
Vienna, Austria

**Bruce J. Hillman, MD**

University of Virginia  
Charlottesville, Virginia, USA

**Kevin Hobert, BS**

Eastman-Kodak Corporation  
Rochester, New York, USA

## List of Participants *continued*

**Joseph M. Hogan**

General Electric Healthcare  
Milwaukee, Wisconsin, USA

**Philippe Houssiau**

Agfa-Gevaert, NV  
Mortsel, Belgium

**Hedvig Hricak, MD, PhD**

Memorial Sloan-Kettering Cancer Center  
New York, New York, USA

**Janet Husband, FRCR, FRCP**

Royal Marsden Hospital  
Surrey, England, UK

**Timothy Irish**

Philips Medical Systems  
Andover, Massachusetts, USA

**Michael W. Jackman, MBA**

Eastman-Kodak Corporation  
Rochester, New York, USA

**Lee Josephson, PhD**

Massachusetts General Hospital  
Charlestown, Massachusetts, USA

**Willi A. Kalender, PhD**

University of Erlangen-Nürnberg  
Erlangen, Germany

**Jouko A. Karvinen**

Philips Medical Systems  
Andover, Massachusetts, USA

**Ramin Khorasani, MD, MPH**

Brigham & Women's Hospital  
Boston, Massachusetts, USA

**Heinrich Kolem, PhD**

Siemens Medical Solutions  
Erlangen, Germany

**Gabriel P. Krestin, MD, PhD**

Erasmus Medical Center  
Rotterdam, Netherlands

**Raju Kucherlapati, MD**

Harvard-Partners Center for Genetics  
and Genomics  
Boston, Massachusetts, USA

**King C. Li, MD, MBA**

National Institutes of Health  
Bethesda, Maryland, USA

**Peter Loescher**

General Electric Healthcare Bio-Sciences  
Buckinghamshire, UK

**Anthony Lombardo**

E-Z-Em, Inc.  
Lake Success, New York, USA

**Alexander R. Margulis, MD, DSc(hc)**

Cornell University, Weill Medical College  
New York, New York, USA

**C. Douglas Maynard, MD**

Wake Forest University School of  
Medicine  
Winston-Salem, North Carolina, USA

**Peter McCabe, BSME**

General Electric Healthcare  
Milwaukee, Wisconsin, USA

**Iain W. McCall, MD**

Robert Jones and Agnes Hunt  
Orthopaedic Hospital  
Shropshire, England, UK

**Barbara J. McNeil, MD, PhD**

Harvard Medical School  
Boston, Massachusetts, USA

**Carlo Medici**

Bracco Diagnostics, Inc.  
Princeton, New Jersey, USA

**Gregg S. Meyer, MD, MSc**

Massachusetts General Hospital  
Boston, Massachusetts, USA

**Jay D. Miller**

Vital Images, Inc.  
Minnetonka, Minnesota, USA

**Robert A. Novelline, MD**

Massachusetts General Hospital,  
Harvard Medical School  
Boston, Massachusetts, USA

**Diego Olego**

Philips Medical Systems  
Andover, Massachusetts, USA

**Roberto Passariello, MD**

University of Rome La Sapienza  
Rome, Italy

**Daniel L. Peters**

GE Healthcare  
Princeton, New Jersey, USA

**Joseph A. Pierro, MD**

Mallinckrodt Medical, Inc.  
(Tyco Healthcare)  
Hazelwood, Missouri, USA

**Robert Pryor**

Agfa HealthCare Americas  
Greenville, South Carolina, USA

**Carl E. Ravin, MD**

Duke University Medical Center  
Durham, North Carolina, USA

**Erich R. Reinhardt, PhD**

Siemens Medical Solutions  
Erlangen, Germany

**Maximilian Reiser, MD**

Ludwig Maximilians University  
Munich, Germany

**Hermann Requardt**

Siemens Medical Solutions  
Erlangen, Germany

**Hans G. Ringertz, MD, PhD**

Karolinska Hospital  
Stockholm, Sweden

**David Rollo, MD, PhD**

Philips Medical Systems  
Milpitas, California, USA

**H. Michael Rook, PhD**

Schering AG - SBU Diagnostics  
Berlin, Germany

**Daniel I. Rosenthal, MD, FACR**

Harvard Medical School  
Boston, Massachusetts, USA

**Al Saalabi**

Acist Medical Systems, A Bracco  
Group Company  
Princeton, New Jersey, USA

**Sanjay Saini, MD**

Massachusetts General Hospital  
Boston, Massachusetts, USA

**Pierre Schnyder, MD**

University Hospital Vaudois  
Lausanne, Switzerland

**Brad S. Schreck**

E-Z-Em, Inc.  
Lake Success, New York, USA

**Markus Schwaiger, MD**

Technical University of Munich  
Munich, Germany

**Steven M. Seltzer, MD**

Brigham and Women's Hospital  
Boston, Massachusetts, USA

**Eliot L. Siegel, MD**

University of Maryland, Baltimore  
Baltimore, Maryland, USA

**Valentin E. Sinitsyn, MD**

Cardiology Research Center  
Moscow, Russia

**Howard Stern**

E-Z-EM, Inc.  
Westbury, New York, USA

**Günter Stock, MD, PhD**

Schering AG  
Berlin, Germany

**Jonathan H. Sunshine, PhD**

American College of Radiology  
Reston, Virginia, USA

**Marcel Swennenhuis**

Agfa-Gevaert, NV  
Mortsel, Belgium

**Stephen J. Swensen, MD**

Mayo Clinic  
Rochester, Minnesota, USA

**Lenny K.A. Tan, MD**

National University of Singapore  
Singapore, Singapore

**Sergey K. Ternovoy, MD**

Cardiology Research Complex  
Moscow Medical Academy  
Moscow, Russia

**Tommy G. Thompson**

Former Secretary of Health and  
Human Services  
Washington, DC, USA

**James H. Thrall, MD**

Harvard Medical School &  
Massachusetts General Hospital  
Boston, Massachusetts, USA

**Michael F. Tweedle, PhD**

Bracco Research USA, Inc.  
Princeton, New Jersey, USA

**Gustav K. von Schulthess, MD, PhD**

University of Zurich Hospital  
Zurich, Switzerland

**Vishal Wanchoo**

General Electric Healthcare  
Milwaukee, Wisconsin, USA

**Ralph Weissleder, MD, PhD**

Massachusetts General Hospital  
Boston, Massachusetts, USA

**Susan A. Wood, PhD**

Vital Images  
Minnetonka, Minnesota, USA

**Elias A. Zerhouni, MD**

National Institutes of Health  
Bethesda, Maryland, USA

# Organization

## BY - LAWS AND RULES COMMITTEE

Christian J. Herold, Chair  
N. Reed Dunnick  
Stephen J. Golding  
H. Dirk Sostman  
Yasuhito Sasaki

## NOMINATING AND MEMBERSHIP COMMITTEE

Hans G. Ringertz, Chair  
Ron L. Arenson  
Guy G. Frija  
Hedvig Hricak  
Kuni Ohtomo  
Lenny K.A. Tan  
Gary M. Glazer (ex officio)

## PUBLICATIONS COMMITTEE

Gabriel P. Krestin, Chair  
N. Reed Dunnick  
Janet Husband  
Kuni Ohtomo  
Maximilian Reiser  
Stephen J. Swensen  
Lenny K.A. Tan  
Gustav K. von Schulthess

## CORPORATE ADVISORY BOARD

Alexander R. Margulis, MD, DSc(hc), Chair  
Gary M. Glazer, Co-Chair  
Guy G. Frija, Co-Chair  
Ronald L. Arenson  
N. Reed Dunnick  
Gabriel P. Krestin  
Hironobu Nakamura  
James H. Thrall  
Karl-Jürgen Wolf

## ADMINISTRATION

### ISSSR – USA

Symposium Secretariat  
3333 California Street, Suite 375  
San Francisco, California, 94118, USA  
Tymothi Peters, Director of Administration  
Tel: +1-415/476-5636  
Fax: +1-415/476-9213  
E-mail: TymPeters@is3r.org

### ISSSR – Europe

Society Secretariat  
Neutorgasse, 9/2A  
A-1020 Vienna, Austria  
Brigitte Lindlbauer, Vice-Director of Administration  
Tel: +43-1/533 4064  
Fax: +43-1/533 4064 9  
E-mail: BrigitteLindlbauer@is3r.org

[www.is3r.org](http://www.is3r.org)

# Notes

---



[www.is3r.org](http://www.is3r.org)