Letter from the President

As you are now all aware, the 2007 Annual Meeting will take place in Berlin, not in Barcelona as originally planned. The change in venue was endorsed by the Board of Trustees, following intense discussions involving the ISMRM Central Office in Berkeley and the leadership of the ESMRMB. The circumstances leading to our decision to move the meeting from Barcelona were summarized by our Executive Director, Roberta Kravitz, in her e-mail distributed to the membership on 6 July 2006. I would like to compliment Roberta and her staff, the ISMRM Executive Committee and Board of Trustees, and Professors Gabriel Krestin and Sebastian Cerdan of ESMRMB for their prompt and efficient management of the situation. Within three weeks of first hearing of the developing situation in Barcelona, the change in venue to Berlin had been ratified by the Board and negotiated with the new host city by ISMRM Central Office. The Executive Committee and I felt that we should take this opportunity to inform the membership, by way of the President’s letter, about the details surrounding the move and to focus attention on the ever-evolving challenges of site selection for our Annual Meeting.

Hard on the heels of another record-breaking annual meeting in Seattle came the news that there was a problem with the planning of the 2007 meeting in Barcelona. ISMRM Central Office in Berkeley discovered that the ‘Construmat’ Trade Show had exercised an option to hold its bi-annual meeting in Barcelona the same week as ours. The Executive Committee and I felt that we should take this opportunity to inform the membership, by way of the President’s letter, about the details surrounding the move and to focus attention on the ever-evolving challenges of site selection for our Annual Meeting.

The Construmat show and our meeting were scheduled for different convention centers, and Barcelona could have hosted both events simultaneously. The danger foreseen by our Central Office is that competition for hotel rooms would drive up prices for our members and could severely impact the availability of rooms. Also, the influx of up to 250,000 people would increase competition for restaurant seating and recreational activities. The only way we could guarantee the availability of hotel space would be to block book (with pre-payment) up to three times as many hotel rooms as normal. The financial exposure of the Society could run into millions of dollars. The Board felt that this risk was unacceptable and made a decision to change the date and/or location of the 2007 meeting. Initially, we looked into options for staying in Barcelona and changing the dates of the meeting. However, no other contiguous week long period was available within a four-month time.
Close consideration was given to Madrid, Stockholm, and Berlin; cities known to have the infrastructure to host a meeting such as ours. The Central Office staff worked busily with key contacts in these cities and reported their findings to the Board. The Board authorized the Central Office to pursue negotiations with Berlin, having confirmed that the new venue and dates were acceptable to our corporate members, exhibitors, and sponsors. The response of the city of Berlin and of our corporate members and sponsors was fantastic. In part because we had been there before in 1992, much of the organizational infrastructure is already well-established. And, of course, Berlin is an historic international city with outstanding facilities and a host of recreational activities and places of interest. We were fortunate to enlist the help of Professor Bernd Hamm of Berlin’s famous Charité Hospital to chair the Local Organization Committee.

Preparations are already well underway for what we are confident will be a hugely successful meeting in a vibrant, exciting city. A summary of meeting highlights is presented by our AMPC chair, Prof. Georg Bongartz, in this issue of MR Pulse (see page 23). The new and expanded AMPC is responsible for all scientific and educational initiatives at our Annual Meeting. We anticipate record abstract submissions, and the AMPC has redesigned several aspects of the abstract submission categories. Our Plenary and Educational offerings are again first-rate, and we are honored to have Sir Peter Mansfield give his named lecture, and to have Prof. Hedvig Hricak give the Lauterbur Lecture. We are thrilled and relieved that the process of rearranging the meeting in Berlin has gone so smoothly.

The challenge posed by the necessity of changing venues at such short notice is not one we would have wished on ourselves. Indeed, we would have been more than happy with a smooth, uneventful path to our planned meeting in beautiful Barcelona. Nonetheless, managing the change was thought-provoking and informative, forcing us as it did to reflect on our overall philosophy and procedures for site selection. Our current procedure for choosing a venue for our annual meeting is at the same time highly structured and somewhat arbitrary. Each year, the meetings coordination committee (MCC), who are appointed by the incoming President, with the assistance of the Central Office, is charged with reviewing proposals from a list of potential candidate cities. The MCC presents its recommendations to the Board of Trustees, which has responsibility for making the final decision. There are specific attributes of the city which the MCC considers in its deliberations, such as geographic location (meant to reflect the international nature of our society), accessibility, meeting infrastructure (including the convention center facilities, convenience, cost, and quality of hotel accommodation, restaurants, and leisure activities), and overall appeal. Finding a unique city each year which full’s these requirements is not a trivial task and, as our meeting grows in size and complexity, it’s becoming more difficult. Add to this the fact that sites are typically chosen seven years in advance of the meeting and it becomes clear that uncertainties can creep in.

One of our predecessor societies, the SMRM, had a tradition of alternating the annual meeting among three sites; New York, San Francisco, and a variable non-U.S. city. As the society became more formally international, there was a mandate to decrease the emphasis on U.S. cities in favor of a more global representation. At the same time, the annual meeting grew rapidly, such that the meeting facilities in the NY and San Francisco locations were no longer large enough. Thus, the ‘pick a city’ era began in earnest. Having served on the MCC and having been involved in discussions about site selection for many years, I have often felt that the process is complex and unpredictable.

The members of the MCC try to put themselves in the position of the membership at large in weighing one venue against another. Unfortunately, it can be very difficult for the MCC to predict how well an untested venue will work out or will appeal to the membership at large. Furthermore, by the time the meeting comes around, the composition of the MCC who proposed the site is a dim and distant memory! The record shows that successive MCCs, together with the respective Boards and Central Office, have done an excellent job to date. Looking to the future, however, with the continued growth and globalization of our society, the number of cities with reliably adequate facilities and infrastructure is limited. Hence, we are already noting some short-term ‘repeats,’ such as Honolulu, Toronto, and now Berlin.

In summary, our recent experiences with site selection for our annual meeting suggest that:

1. The size of our meeting dictates that only a limited number of prime cities globally will have the facilities to host us.

2. We must, as emphasized in our strategic plan, maintain an equitable international representation in the locations of our meetings, reflecting the composition of our membership and strategic growth initiatives.

3. Host cities pay more attention and offer more incentives for recurring business than for a once-only visit.

In view of the above, there is a case to be made for considering a structure whereby we rotate our annual meeting among the top 5-6 venues globally. These cities would be chosen carefully with regard to the guidelines we already follow and to the strategic plan. Such a structure would maintain the year-to-year variety in meeting venue, while greatly simplifying the planning process. With this simplification should come significant savings in time, overhead, effort, and money for the Society, together with more predictable and
manageable circumstances during the week of our meeting.

Over the coming months, the Executive Committee, the Board, and the Central Office will consider the implications of any proposed changes to our site selection process. Simultaneously, we would greatly appreciate your input and comments. Please contact us through our Executive Director, Roberta Kravitz, at roberta@ismrm.org.

Ours is largely a volunteer organization, whose members donate their time, knowledge, and skills without financial reward to support the activities and goals of the Society. The officers, Board members, committee members, educators, and volunteers who serve our society and who respond enthusiastically when asked for their help are an inspiration. If we had to pay you what your time is worth, we couldn’t afford it. On behalf of the Society, I thank you all sincerely. Also, special mention is due to Georg Bongartz and Kim Butts, who with the members of the AMPC, have worked tirelessly to put together an outstanding meeting for 2007.

In closing, I would like to express my sincere thanks to Roberta Kravitz, our Executive Director, and to her outstanding staff at Central Office in Berkeley, who continue to work around the clock on behalf of our members. The skill and dedication they bring to the job makes it possible for us not only to accomplish what we plan, but also to deal with the unexpected. In today’s world, these are essential survival skills!

I look forward to seeing you all in Berlin.

— J. Paul Finn
President, ISMRM

Message from the Executive Director

Dear ISMRM Members,

The decision to move our meeting from Barcelona, although essential, was a difficult one. As Dr. Finn explained in his letter to you in this issue of MR Pulse, the issues were complex, and the only alternative, if the decision had been made to maintain our advertised dates in Barcelona, exposed the ISMRM to unprecedented and unacceptable financial liability. We are extremely pleased that the City of Berlin was able to offer us a viable alternative, and we look forward to returning to Berlin 15 years later for the ISMRM-ESMRMB Joint Annual Meeting. Please be sure to read the reflections of Ian Young, SMRM President in 1992, and Ian Smith and Felix Wehrli, co-chairs of the 1992 Scientific Program Committee, in this issue of MR Pulse.

Berlin has undergone some dramatic changes over the years, as has our program and organization. We look forward to our return in 2007.

I want to thank the ISMRM Executive Committee and the Board of Trustees for responding so quickly to my concerns as the situation became clear in Barcelona, as well as the ESMRMB Board, under the leadership of Prof. Krestin. I want to thank my staff, particularly Katie Simmons, ISMRM Director of Meetings, who worked tirelessly for me to secure the information we needed to present viable alternatives to our leadership. And I want to thank Paul Finn, our President, Jeff Duerk, our President-Elect, Georg Bongartz, Annual Meeting Program Committee Chair, and Sebastian Cerdan, Local Organizing Committee Chair, for their clear-eyed, composed leadership as we worked ourselves through this situation. I would also like to acknowledge and thank Monika Hierath, ESMRMB Executive Director, who reacted so quickly and graciously, providing the much-needed support and assistance necessary for this decision to be made.

As you can imagine, it has been a very busy summer for the Central Office staff, as everyone has worked extremely hard to switch our long-standing focus on Barcelona to Berlin. We are currently finalizing hotel contracts and working with our vendors at the ICC-Berlin to insure that your experience is a seamless and positive one. I am very pleased to report that we have stayed from our timeline only modestly. Our abstract submission site opened for submissions only one day later than the anticipated 31 August 2006 date, opening on 1 September 2006, and our online housing we anticipate opening in October, representing only a one-month delay. Please monitor our Web site frequently, as we will be posting information as we receive it, rather than waiting for publication of our main meeting brochure. We do plan to post to each of you our brochure, which is currently in production, and anticipate this will be mailed by the end of October.

In the midst of our post-Seattle activity and working on a change of venue for our 2007 meeting, the office continues to work on a record number of workshops planned for the next six months. We have a Cancer workshop in the Poconos in October, Spectroscopy in Virginia in November, and Molecular and Cellular Imaging on a cruise ship in February as well as the MR Physics & Techniques for Clinicians in breath-taking Lake Louise, Alberta, Canada. Moving forward, we have Non-Cartesian MRI in beautiful Sedona, Arizona, at the end of February, and High Field MR at the popular facility Asilomar in Pacific Grove, California, in March. All the organizers of these programs have worked extremely hard to bring to you extremely dynamic programs, and we encourage each of you to take some time to review the menu available to you on our Web site (http://www.ismrm.org/workshops). We hope you will join us for one or more of these
upcoming events.

This summer Anselm Engle joined the Central Office staff as our meetings assistant, to work with Katie Simmons, our Director of Meetings. In addition, we welcomed Tamara Bell, who will be working as our education coordinator with Bob Goldstein and Jennifer Olson. This August, Amanda Knapp, our previous education coordinator, informed us she was going back to school to secure her Masters in Health Services. Though extremely sad to lose Amanda, we are extremely happy that she wishes to continue her education and wish her only the best. Both Tamara and Anselm are recent graduates of the University of California, Davis, and we look forward to a long-standing work relationship with both and anticipate that they will prove to be invaluable assets to the Central Office team. You can read a bit more about both on page 18 of this issue of MR Pulse.

There are always challenges that we face in organizing our meetings in today's world, and I have said for a long time that this business is all about crisis management, and the level of success achieved is determined by how well one responds. This summer I have added to this “thought”; that the level of success achieved is determined not only by how well one responds, but by the strength of the framework of the organization and the commitment of its members. All of us here at the Central Office are extremely fortunate, thankful, and honored to work for an association of members so committed, within the guidelines of an organization so well-constructed.

If you have any questions or need assistance, please do not hesitate to contact us. We are here to assist you.

— Roberta A. Kravitz
Executive Director

Report from the Treasurer
Report Based on Unaudited Financial Statements to September 30, 2005

Financial Position:
The ISMRM was in good financial position at the end of FY 2005 with Total Liabilities and Net Assets of $4,474,092. Current Assets of $1,632,864 included $630,645 in Cash, $501,713 in Short Term Investments, $104,738 in Accounts Receivable, and $395,768 in Prepaid Expenses. Non Current Assets were $2,841,228, comprised of $2,762,733 in Long Term Investments, $65,789 in Net Fixed Assets, and $12,706 in Deposits.

Total Liabilities were $748,531. Net Assets included Unrestricted Assets of $1,539,419 available for operations, $1,850,000 designated for operating emergencies and $115,301 designated for scientific and educational programs. Total Net Assets were $3,725,561.

Revenue and Expenditures, and Budget Comparison:
At the end of fiscal year 2005, the ISMRM had $4,181,988 in Total Revenue from its operations. Budgeted Revenue was $3,831,108. The ISMRM had $4,598,844 in Total Expenses. Budgeted Expenses were $4,520,721. Total Other Revenue to the Society amounted to $595,382, which included $289,731 in Unallocated Funds from Corporate Members, $101,228 in Interest and Dividends, $124,916 in Realized Gains on Investments, and $80,186 in Unrealized Gains on Investments. The budgeted amount for Total Other Revenue was $303,546. Taking Other Revenue into account, the Net Income to the Society for FY 2005 was $178,526. The budgeted Net Loss to the Society was $386,067.

The ISMRM achieved $969,542 in Membership fees. Total budgeted Membership revenue was $930,000. The Society achieved Meeting Revenues of $2,122,872; the budgeted Meeting Revenues were $2,112,872. The Society achieved Meeting Revenues were $2,122,872; the budgeted Meeting Revenues were $2,112,872. The budgeted Meeting Revenues were $2,122,872; the budgeted Meeting Revenues were $2,112,872. Expenses for the meeting in Miami were $1,840,840; the budgeted amount was $2,094,938. The Net Income for the Meeting was $282,032. The budgeted deficit for the Meeting was $116,238. Total Revenue for Stipends and Awards was $150,267, the amount budgeted was $143,750. The Total Expenses for Stipends and Awards was $334,604. The amount budgeted was $385,143. In FY 2005, $150,000 was budgeted to be withdrawn from the Designated Reserve for Science and Education Programs to fund Student Stipends/Awards.

The Society is in good financial shape. The financial results are positive when compared to the budget for FY 2005. The ISMRM continues to rely heavily on corporate sponsors and benefited from substantial gains on investments in FY 2005 to reduce the gap in expenses and revenues.

As a result of the increasing costs for the annual meeting, in FY 2006 it was decided transfer $350,000 from the Unrestricted Assets available for operations in order to increase the amount designated for operating emergencies from $1,850,000 to $2,100,000.

— Roxanne Deslauriers
ISMRM Treasurer
The ISMRM Workshop on Real-Time MRI: dynamic interactive imaging and its applications, was held on 23-24 February 2006, in sunny Santa Monica, California. The meeting drew 120 participants from 10 countries, with physicians comprising 25% and trainees comprising 25%. The meeting consisted of five scientific sessions, a vendor panel, and a future horizons session. There were fifteen invited lectures, and 43 proffered papers (10 talks, 33 posters). Moderated discussions were a lively and important part of each session.

The first day was focused on technology, with scientific sessions covering System Infrastructure, which examined hardware and software requirements and platforms that have evolved at different institutions; Pulse Sequences, which examined the efficiency and artifact behavior of sampling schemes and the adaptation of scans based on navigators, external sensors, and novel forms of operator input; and Acceleration, which examined highly parallel imaging, temporal acceleration, and strategic under-sampling for improving speed. The day ended with a Vendor Panel, where representatives from GE, Philips, and Siemens presented detailed views of their real-time MRI product pipeline and tools available for researchers.

The second day was focused on applications, with scientific sessions covering Diagnostic Applications, which examined cardiac, functional, and fetal diagnostic applications of real-time MRI; and Interventional Applications, which examined the prospects of guiding cardiovascular, abdominal, and neurological interventions using real-time MRI. The workshop ended with a Future Horizons session, where the attendees divided into three breakout groups discussing future technical issues, diagnostic applications, and interventional applications.

Physicists, clinicians, and manufacturers have demonstrated a great deal of interest in real-time interactive MRI, and modern scanners are capable of performing real-time imaging (fast gradients, parallel imaging capability, real-time reconstruction). The adoption of real-time MRI into clinical routine was found to be limited because 1) MRI is complicated to use compared to modalities like X-ray fluoroscopy, and current user interfaces are cumbersome, 2) the full flexibility of MRI is not yet exploited in real-time, e.g. instant sequence switching to achieve...
different types of image contrast, 3) there is a lack of safe disposables for performing interventions, i.e. catheters and guidewires, and 4) several “ultra-fast” imaging techniques do not produce consistent image quality in patients. In terms of hardware, there was a great deal of interest in large 32+ channel coil arrays, as well as short magnets that are now being developed. Conventional microcomputers have proved sufficient for real-time reconstruction, except in specific applications (e.g. non-Cartesian parallel imaging). While many slice-positioning devices have failed in the past, promising results were shown using a 3D-mouse. In terms of acquisition, steady-state free precession (SSFP) and fast gradient echo (FGRE) are the primary sequences used. 2DFT acquisitions with parallel imaging have produced the most consistent image quality (compared to spiral or echo-planar acquisitions).

Diagnostic cardiac imaging is a major motivating application because many cardiac patients have difficulty with breath holding and arrhythmias are extremely common (≥ 20%). Real-time MRI has proved useful for ventricular function, localizing scan planes, and visualization of flow abnormalities, and can have an important role in stress imaging (high frame rates, and more frequent arrhythmia) with 3D coverage or slice following do deal with the lack of breath holding. Real-time functional MRI has been aided by the emergence of several packages for real-time fMRI reconstruction, which has led to higher success rates in fMRI studies (with feedback to the operator if data is inconclusive) and experiments in biofeedback (with direct visual feedback to the scan subject). Fetal imaging is another motivating application because the motion is not typically controllable. In fetal neurological studies, accurate capture of scan planes (e.g. sagittal midline) are virtually impossible without real-time imaging (with steady-state fast spin-echo). Abdominal and gastrointestinal imaging (Crohn’s disease, aspiration, etc.), uterine imaging, and joint motion are also compelling applications for real-time MRI.

Cardiovascular interventions including those for electrophysiology, regenerative medicine, and revascularization are limited by the lack of MR-compatible specialized devices. Meanwhile, substantial progress is being made merging prior MR data with X-ray guidance of such procedures. The challenge in body interventions such as liver lesion ablation and prostate biopsy is to translate success at low fields to more open 1.5T systems where the opportunity for increased spatial and/or temporal resolution will facilitate more interactive procedure guidance. An externally focused ultrasound method for neurological interventions was described where the challenges include accurate temperature measurement with sufficient spatial and temporal resolution to facilitate image-guided control of the heating. Technical innovations included automatic coil selection based on catheter position and a multi-coil design at the catheter tip to facilitate forward-looking imaging to guide the crossing of vascular occlusions.

Feedback from participants suggested that the experience was educational, speakers were excellent, and there was a substantial amount of productive discussion both on-line and off-line. Submitted abstracts included videos that are part of the on-line syllabus (http://www.ismrm.org/workshops/Real_Time06).

We give special thanks to Katie Simmons, Bob Goldstein, Roberta Kravitz, Sally Moran, and the ISMRM staff for their considerable efforts in making this workshop a success. We also gratefully acknowledge the financial sponsors of ISMRM, as well as GE, Philips, and Siemens, who provided supplemental sponsorship for the Workshop on Real-Time MRI.

—Krishna Nayak, Peter Börnert, Oliver Heid, John Pauly, Graham Wright

Workshop Organizing Committee

Flow and Motion

Attendees view posters during the ISMRM Workshop on Flow and Motion: Imaging Assessment of Cardiovascular and Tissue Mechanics.

The 2006 ISMRM Flow and Motion workshop, “Flow and Motion: Imaging Assessment of Cardiovascular and Tissue Mechanics,” was held on 14-16 July 2006 in New York, New York. Several flow and motion workshops have been held since the earliest SMRM flow workshop, held in Philadelphia in 1989. The 2006 meeting was broken into three focused sessions, on consecutive days: (1) “Quantitative Flow with MRI” (with sessions on Imaging Methods, Analysis Methods and Applications), (2) “Quantitative Cardiac Function” (with sessions on Cardiac MRI and Analysis Methods, Imaging and Modeling, and Applications), and (3) “MR Elastography” (with sessions on Background, Methods, and Applications). Each of the focused sessions combined invited overview...
talks with proffered papers and posters, as well as roundtable discussions to permit the speakers and audience to explore issues in more depth. The broad range of topics covered was presented by 28 invited speakers, with 37 proffered papers and 22 posters. The invited and proffered presentations covered a broad range of basic and applied aspects of the assessment of flow and motion in MRI, including both technical and clinical perspectives.

The area of flow measurement with MRI, the principal focus of previous workshops, has experienced a recent increase in interest with the development of new ways to speed up the acquisition and visualization of the large data sets involved, which was reflected in several presentations that incorporated dramatic displays of complicated vascular flow fields. There was an expanded focus on quantitative cardiac function studies this year, with consideration of the relative advantages of different approaches to doing them, including non-MRI. New to the workshop this year was a full day focused on the basics and initial applications of the still-evolving area of MR elastography. There was much enthusiasm among the participants in what was effectively the first international meeting focused on this area, with much sharing of information and ideas and distribution of an analysis software package for elastography developed at the Mayo Clinic.

Many other important issues also were presented and discussed. The syllabus is available from ISMRM (http://www.ismrn.org). The organizers of the 2006 Meeting were Leon Axel (Chair), Richard Ehman, Vinay Pai, Paul E. Summers, and Han Wen. Abstracts were evaluated in a blind review by the organizers. They were supported by the outstanding efforts of the ISMRM staff. Bob Goldstein, Roberta Kravitz, and Katie Simmons deserve special mention because of their considerable efforts to make this well-attended (about 150 participants) workshop such a wonderful success.

- Dr. Leon Axel
Workshop Chair

Flow and Motion workshop participants during the general session in the Farkas Auditorium of New York University Medical Center.
2006 Poster Award Winners

Engineering

1ST PLACE ........................................ PROGRAM NO. 2573
Head RF Coil Design with Surface Current Density
Optimization for SENSE Imaging
L Tugan Muftuler¹, Gang Chen¹, Orhan Nalcioglu¹
¹University of California, Irvine, California, USA

2ND PLACE ........................................ PROGRAM NO. 2039
Simultaneous B1+ Homogenisation and SAR Hotspot
Suppression by a Phased Array MR Transmit Coil
C.A.T. van den Berg¹, B. van den Bergen¹, H. Kroeze¹, L.W. Bartels¹, J.J.W. Lagendijk¹
¹University Medical Centre, Utrecht, Netherlands

3RD PLACE ........................................ PROGRAM NO. 2026
A Low Input Impedance MRI Preamplifier Using a Purely
Capacitive Feedback Network
Ralph Oppelt¹, Markus Vester¹
¹Siemens AG, Erlangen, Germany

HONORABLE MENTION ....................... PROGRAM NO. 1365
Practical Implementation of the Stream Function Method
for Design of Arbitrary-Geometry Gradient Coils
Rostislav A. Lemdiasov¹, Reinhold Ludwig²
¹Insight Neuroimaging Systems, Worcester, Massachusetts, USA;
²Worcester Polytechnic Institute, Worcester, Massachusetts, USA

Neuroimaging

1ST PLACE ........................................ PROGRAM NO. 2336
Anorexigenic Gut Hormone Oxyntomodulin Modulates
Manganese-Enhanced MRI Signal in the Mouse
Hypothalamus
Owais Bashir Chaudhri³, Yu-Ting Kuo², James R. C. Parkinson¹,
Amy H. Herlihy¹, Jimmy D. Bell¹, Sarah A. Stanley¹, Mohammad A. Ghatel¹, Stephen R. Bloom¹
¹Imperial College London, Hammersmith Hospital, London, UK;
²MRC Clinical Sciences Centre, Imperial College London,
Hammersmith Hospital, London, UK

2ND PLACE ........................................ PROGRAM NO. 3387
Cerebral Blood Flow and Arterial Transit Time
Measurements in Patients with Chronic Occlusive
Cerebrovascular Disease Using Continuous Arterial Spin
Labeling on 3T-MR: Correlative Study with C02 PET
Examination
Hirohiko Kimura¹, Hiroyuki Kanasawa¹, Tatsuro Tsuchida¹,
Yoshiharu Yonekura¹, Harumi Itoh¹
¹University of Fukui, Fukui, Japan; ²GE Medical Systems,
Tokyo, Japan

3RD PLACE ........................................ PROGRAM NO. 933
Longitudinal Study of the Development of Beta-Amyloid
Plaque Burden in a Transgenic Mouse Model of Alzheimer’s
Disease, Using In Vivo Magnetic Resonance Imaging
Niels Braakman¹, Jörg Matysik¹, Sjoerd G. van Duinen², Fons
Verbeek¹, Reinhard Schliebs¹, Huub J. M. de Groot¹, Alia Alia¹,
¹Leiden University, Leiden, Netherlands; ²Leiden University
Medical Center, Leiden, Netherlands; ³University of Leipzig,
Leipzig, Germany

HONORABLE MENTION ....................... PROGRAM NO. 934
In Vivo Quantification of Neuronal Degeneration in the
G93A-SOD1 Transgenic Mouse Model of ALS by T2 Mapping
Heiko G. Niessen¹, Frank Angenstein¹, Kerstin Sander²,
Hans-Jochen Heinze¹, Henning Scheich², Stefan Vielhaber¹
¹University of Magdeburg, Magdeburg, LSA, Germany; ²Leibniz
Institute for Neurobiology, Magdeburg, LSA, Germany

Diffusion

1ST PLACE ........................................ PROGRAM NO. 1078
Combined DTI Fiber Tracking and Histological 3D Atlas
Mapping of Sensorimotor, Associative and Limbic Cortico –
Striatal Circuits
Saâd Jbabdi¹, Eric Bardinet², Habib Benali¹, Didier Dormont³,
Kamil Uğurbil¹, Jérôme Yelnik⁴, Stéphane Lehéry¹,²,³
¹Inserm/UPMC, Paris, France; ²CNRS, Paris, France; ³University
of Minnesota, Minneapolis, Minnesota, USA; ⁴Inserm, Paris,
France

2ND PLACE ........................................ PROGRAM NO. 1029
Landmark Guided Spatial Normalization of Diffusion
Tensor Images in the Presence of Large Deformations
Ragini Verma¹, Christos Davatzikos¹
¹University of Pennsylvania, Philadelphia, Pennsylvania, USA

See Poster Award Winners page 9
2ND PLACE .............................. PROGRAM NO. 1055
High Resolution DTI of Localized Volume, Using 3D
Singleshot Stimulated EPI
Eun-Kee Jeong¹, Seong-Eun Kim¹, Eugene G. Khomovskii²,
Dennis L. Parker¹,
¹University of Utah, Salt Lake City, Utah, USA

2ND PLACE .............................. PROGRAM NO. 1612
A Finite Difference Model of Diffusion Applied to Ischemia
Kevin D. Harkins¹, Jean-Philippe Galons¹, Timothy W. Secomb¹,
Joe L. Divijak¹, Theodore P. Trouard¹,
¹University of Arizona, Tucson, Arizona, USA

2ND PLACE .............................. PROGRAM NO. 2124
Distinct Characteristics of Brain Activity in Cat V1 and LGN
in Response to Flicking and Grating Visual Stimuli: A fMRI
Study at 9.4T
Xiao-Hong Zhu¹, Nanyin Zhang¹, Yi Zhang¹, Wei Chen¹,
¹CMRR, Department of Radiology, University of Minnesota
Medical School, Minneapolis, Minnesota, USA

3RD PLACE .............................. PROGRAM NO. 1158
Imaging RCBF Changes in Response to Insulin-Induced
Hypoglycemia at 3T Using Three-Coil CASL
Edward J. Auerbach¹, Jyothi P. Rao¹, Kamil Ugurbil¹, Elizabeth
R. Seagrist¹,
¹University of Minnesota, Minneapolis, Minnesota, USA

HONORABLE MENTION ............... PROGRAM NO. 1154
Spatial Non-Uniformity of the CBF Response to
Sevoflurane: Implications for fMRI
Maolin Qiu¹, Ramachandran Ramani², R Todd Constable³,
¹Yale University School of Medicine, New Haven, Connecticut,
USA; ²Yale University School of Medicine, New Haven,
Connecticut, USA

Cardiovascular

1ST PLACE .............................. PROGRAM NO. 1929
Fresh Blood Imaging (FBI) of Peripheral Arteries:
Comparison with 16-Detector Row CT Angiography
Katsumi Nakamura¹, Kiyomi Kuroki¹, Akiyoshi Yamamoto¹,
Akihiro Hiramine¹, Mitsue Miyazaki¹, Yuka Matsufuji²,
¹Tobata Kyoritsu Hospital, Kitakyushu, Fukuoka, Japan;
²Toshiba America Medical Systems, Rolling Meadows, Illinois,
USA; ³Toshiba Medical Systems Co., Fukuoka, Japan

2ND PLACE .............................. PROGRAM NO. 1172
Rate of Myocardial Contrast Enhancement with
Extracellular Contrast Agent and Relationship to Perfusion
Reserve
Michael Jerosch-Herold¹,², Naveen S. Murthy², Carsten
Rickers²,³, Arthur E. Stillman²,³,
¹Oregon Health & Science University, Portland, Oregon,
USA; ²University of Minnesota, Minneapolis, Minnesota,
USA; ³University of Kiel, Kiel, Schleswig-Holstein, Germany;
Cleveland Clinic Foundation, Cleveland, Ohio, USA

3RD PLACE .............................. PROGRAM NO. 1898
Variable Density Excitation Pulses in One-Shot Fourier
Velocity Encoding for Valve Flow Imaging
Daeho Lee¹, Julie Camille DiCarlo¹, Adam Bruce Kerr¹, Juan
Manuel Santos¹, John Mark Pauly¹,
¹Stanford University, Stanford, California, USA

Body

1ST PLACE .............................. PROGRAM NO. 1312
Time Dependence of 3He Diffusion in the Human Lung:
Measurement in the Long-Time Regime Using Stimulated
Echoes
Chengbo Wang¹, Grady W. Miller¹, Talissa A. Altes¹,², Eduard E.
de Lange¹, John P. Mugler¹,
¹University of Virginia, Charlottesville, Virginia, USA;
²Children’s Hospital of Philadelphia, Philadelphia,
Pennsylvania, USA

2ND PLACE .............................. PROGRAM NO. 3311
Quantitation of Hepatic Steatosis in Oncologic Patients
Using a Fast Dual-Echo Dixon Technique
Madelyn P. Vuong¹, Haesun Choi¹, Asif Rashid¹, Lyle D.
Broemeling¹, Jean N. Vauthey¹, Jingfei Ma¹,
¹MD Anderson Cancer Center, Houston, Texas, USA

3RD PLACE .............................. PROGRAM NO. 2981
TSE with Average Specific Phase Encoding Ordering for
Motion Artifact Suppression
Ling Zhang¹,², Eugene G. Khomovskii², Junyu Guo¹,², Dennis L.
Parker²,
¹University of Utah, Salt Lake City, Utah, USA; ²Utah Center for
Advanced Imaging Research, Salt Lake City, Utah, USA

See Poster Award Winners page 10
Poster Award Winners

HONORABLE MENTION ............................... PROGRAM NO. 3323
Prostate Cancer Screening: The Clinical Value of Diffusion-Weighted Imaging and Dynamic MR Imaging
Akira Tanimoto1, Jun Nakashima1, Hiroshi Shinmoto1, Shigeo Okuda1, Sachio Kuribayashi1
1Keio University School of Medicine, Tokyo, Japan

1ST PLACE ............................................ PROGRAM NO. 1743
Tumor-Antigen Targeted Imaging of Pancreatic Adenocarcinoma
Zdravka Medarova1, Wellington Pham1, Young Kim1, Guoping Dai1, Anna Moore1
1Massachusetts General Hospital, Charlestown, Massachusetts, USA

Cancer

1ST PLACE ............................................ PROGRAM NO. 1743
Tumor-Antigen Targeted Imaging of Pancreatic Adenocarcinoma
Zdravka Medarova1, Wellington Pham1, Young Kim1, Guoping Dai1, Anna Moore1
1Massachusetts General Hospital, Charlestown, Massachusetts, USA

2ND PLACE ........................................... PROGRAM NO. 2914
Nonlinear Correction of Arterial Input Function Measured with Spoiled Gradient Echo Sequences
Matthias C. Schabel1
1University of Utah, Salt Lake City, Utah, USA

3RD PLACE .......................................... PROGRAM NO. 3356
Phased-Array Coil for Image-Guided Treatment of Occlusive Arterial Disease
Kevan James Thompson Anderson1, John J. Graham2, General Leung1, Nigel R. Munce1, Alexander J. Dick2, Graham A. Wright1
1University of Toronto, Toronto, Ontario, Canada; 2Sunnybrook and Women’s College Health Sciences Centre, Toronto, Ontario, Canada

HONORABLE MENTION ............................... PROGRAM NO. 3323
Prostate Cancer Screening: The Clinical Value of Diffusion-Weighted Imaging and Dynamic MR Imaging
Akira Tanimoto1, Jun Nakashima1, Hiroshi Shinmoto1, Shigeo Okuda1, Sachio Kuribayashi1
1Keio University School of Medicine, Tokyo, Japan

1ST PLACE ............................................ PROGRAM NO. 1260
In Vivo 19F MRS and 19F 2D-CSI Investigation of a Fluorine Labeled 2-Nitroimidazole (TF-MISO). A Potential Functional Reporter of Hypoxia in Solid Tumors
Daniel Procissi1,2, Filip Claas1, Jacek Koziorowski1, Paul Burgman1, Cornelia Matei1, Sunitha Thakur1, Clifton Ling1, Jason A. Koutcher1
1Memorial Sloan Kettering Cancer Center, New York, New York, USA; 2California Institute of Technology, Pasadena, California, USA

HONORABLE MENTION ............................... PROGRAM NO. 2923
MR Perfusion and 1H Spectroscopic Imaging in the Longitudinal Evaluation of Brain Tumor Angiogenesis
Narasimha Shastry Akella1, Steven D. Buchthal1, Louis Burt Nabors1, Jan A. den Hollander1
1University of Alabama at Birmingham, Birmingham, Alabama, USA

Interventional

1ST PLACE ............................................ PROGRAM NO. 1439
Three-Dimensional MR Tracking of Convective Therapy Distribution in Prostate
Anil Shetty1, Roger J. Stafford1, Andrew M. Elliott1, Wes Kassouf1, Gordon A. Brown1, Louis L. Pisters1, L Clifton Stephens1, Peggy T. Tinkey1, Luc Bidaut1, John D. Hazle1
1The University of Texas M.D.Anderson Cancer Center, Houston, Texas, USA

2ND PLACE ........................................... PROGRAM NO. 2460
The Use of Coil Sensitivity Variations in the Read-Direction for Improved Parallel Imaging
Felix Breuer1, Martin Blaimer1, Nicole Seiberlich1, Mark Griswold1, Peter Jakob1
1University of Würzburg, Würzburg, Germany; 2University Hospitals of Cleveland, Cleveland, Ohio, USA

Data Processing

1ST PLACE ............................................ PROGRAM NO. 2482
MRI Detection of Glycogen (GlycoCEST)
Craig K. Jones1,2, Jimin Ren1, Craig Malloy1, A Dean Sherry1, Peter C. M. van Zijl1,2
1Kennedy Krieger Institute, Baltimore, Maryland, USA; 2Johns Hopkins University School of Medicine, Baltimore, Maryland, USA; 3University of Texas Southwestern Medical Center, Dallas, Texas, USA

2ND PLACE ........................................... PROGRAM NO. 2460
The Use of Coil Sensitivity Variations in the Read-Direction for Improved Parallel Imaging
Felix Breuer1, Martin Blaimer1, Nicole Seiberlich1, Mark Griswold1, Peter Jakob1
1University of Würzburg, Würzburg, Germany; 2University Hospitals of Cleveland, Cleveland, Ohio, USA

See Poster Award Winners page 11
3RD PLACE ........................................... PROGRAM NO. 3033
Fast, Accurate and Precise B1 Mapping In Vivo Using the 180 Null Signal
Nicholas G. Dowell1, Paul S. Tofts1
1University College London, London, UK

HONORABLE MENTION ....................... PROGRAM NO. 2939
Colored Noise and Effective Resolution: Data Considerations for Non-Uniform K-Space Sampling Reconstructions
Rexford Newbould1, Chunlei Liu1, Roland Bammer1
1Stanford University, Stanford, California, USA

Other Techniques and Applications
1ST PLACE ............................................ PROGRAM NO. 1281
Potentiation of Cyclophosphamide Chemotherapy Using the Antiangiogenic Drug Thalidomide: Importance of Optimal Scheduling to Exploit the Normalization Window of the Tumor Vasculature
Jerome Segers1, Vincent Difazio2, Reginald Ansiaux1, Philippe Martinive1, Olivier Feron1, Pierre Walleracq2, Bernard Gallez1
1UCL, Woluwe, Bruxelles, Belgium; 2Saint-Luc Hospital, Woluwe, Bruxelles, Belgium

2ND PLACE ........................................... PROGRAM NO. 2002
A Modified Golgi Impregnation Method for InVitro MR Microscopy
Xiaowei Zhang1, Russell E. Jacobs1
1California Institute of Technology, Pasadena, California, USA

3RD PLACE ........................................... PROGRAM NO. 1282
New Formulation of EPR Oxygen Sensors Dispersed in Thermo-Reversible Hydrogels
Mustapha Dinguizli1, Nelson Beghein1, Bernard Gallez1
1Université catholique de Louvain, Brussels, B, Belgium

HONORABLE MENTION ....................... PROGRAM NO. 1632
Isoflurane Strongly Affects the Diffusion of Intracellular Metabolites in the Brain, Revealing the Contribution of Subcellular Restriction to Metabolite ADC
Julien Valette1, Martine Guillermier2, Philippe Hantraye1,2, Gilles Bloch1, Vincent Lebon1
1CEA-SHJF, Orsay, France; 2URA CEA-CNRS 2210, Orsay, France

ISMRM 2006 Annual Meeting
Outstanding Teacher Awards
To recognize outstanding educational contributions to the ISMRM meeting, the Annual Meeting Program Committee acknowledges the highest rated speaker in each educational course. Recipients of these awards have been determined by the evaluation scores which attendees gave to the speakers.

We thank all our attendees who, with their responses, chose these outstanding teachers:

WEEKEND COURSES
MR Physics for Physicists
Klaas Pruessmann, Ph.D. (Zurich, Switzerland)

Clinical MRI: From Physical Principles to Practical Protocols
Martin J. Graves, M.Sc. (Cambridge, UK)

Advanced Body Imaging
Evan S. Siegelman, M.D. (Wynnewood, Pennsylvania, USA)

Quantitative Image and Data Analysis
David L. Buckley, Ph.D. (Manchester, England, UK)

Diffusion and Perfusion Methodology
Peter J. Basser, Ph.D. (Bethesda, Maryland, USA)

Molecular Imaging
Brian D. Ross, Ph.D. (Ann Arbor, Michigan, USA)

MR Spectroscopy in Clinical Practice
Jeffrey R. Alger, Ph.D. (Los Angeles, California, USA)

RF Systems Engineering
Mark A. Griswold, Ph.D. (Shaker Heights, Ohio, USA)

Experimental Methods in MR of Cancer
Brian D. Ross, Ph.D. (Ann Arbor, Michigan, USA)

Multi-Modal fMRI: Physiology, Acquisition, and Analysis
Robert W. Cox, Ph.D. (Bethesda, Maryland, USA)

Demystifying Biomedical MR Spectroscopy: Challenges, Advanced Concepts, and Applications
John Pauly, Ph.D. (Stanford, California, USA)

Musculoskeletal Imaging
Russell C. Fritz, M.D. (Mill Valley, California, USA)

Advanced Brain MR Imaging
Derek K. Jones (Cardiff, Wales, UK)

Cardiac MRI
Orlando Simonetti, Ph.D. (Columbus, Ohio, USA)

See Outstanding Teacher Awards page 12
The Society funded 745 participants to attend the 14th Scientific Meeting in Seattle, Washington. Their names and countries are listed below.

STUDENT STIPENDS

AUSTRALIA
Richard Masterton
Heath Pardoe
Hector Sanchez Lopez
Cavin Talbot
Adnan Trakic
Hua Wang
Lisa Willats

AUSTRIA
Martin Meyerspeer
Albrecht Schmid

BELGIUM
Evelyne Balteau
Alexander Leemans
Greetje Vanhoutte
Ruth Vreys

CANADA
Kevan Anderson
Robert Barry
Sonya Bells
Thor Bjarnason
Shannon Boucousis
Jennifer Campbell
Charmaine Chia
Brige Chugh
Andreu Costa
Josh de Bever
Tim DeVito
Sylvia Drabycz
Amir Eissa
Zhaoyang Fan
Akvla Feintuch
Rebecca Feldman
Chase Figley
John Graham
Parisa Jamali
Jayme Kosior
Robert Kosior
Adrian Kozik

2006 Stipend Programs

MORNING CATEGORICALS
Technical Advances in Body MR
Neil M. Rofsky, M.D. (Brookline, Maryland, USA)

Cardiovascular Imaging
David A. Bluemke, MD, Ph.D. (Baltimore, Maryland, USA)

Clinical DTI/PWI/fMRI
Soonmee Cha, M.D. (San Francisco, California, USA)
Mark J. Lowe, Ph.D. (Cleveland, Ohio, USA)

MR Hardware/Engineering
Douglas C. Noll, Ph.D. (Ann Arbor, Michigan, USA)

Human MRI and MRS at High Static Magnetic Fields: The Promise, the Challenges, the Solutions
Robin A. de Graaf, Ph.D. (New Haven, Connecticut, USA)

New Horizons in MSK MRI
Thaddeus Laird, M.D. (Reno, Nevada, USA)

Quantitative Neuro MRI
Gareth J. Barker, Ph.D. (London, UK)
Jacques-Donald Tournier, M.Sc. (Heidelberg West, Australia)

CLINICAL CATEGORICAL COURSES
Hot Topics in Clinical Practice: Neuroimaging and Body Imaging
Scott B. Reeder, M.D., Ph.D. (Middleton, Wisconsin, USA)

Body/Cardiovascular Imaging at 3T
Neil M. Rofsky, M.D. (Brookline, Massachusetts, USA)

Cardiovascular Imaging
J. Paul Finn, M.D. (Los Angeles, California, USA)

Stroke Imaging
Howard A. Rowley, M.D. (Madison, Wisconsin, USA)

Therapy Assessment
Johannes T. Deverhagen, M.Sc. (Columbus, Ohio, USA)

OTHER COURSES
MR Physics and Techniques for Clinicians
Walter Kucharczyk, M.D. (Toronto, Ontario, Canada)
(Dr. Kucharczyk would like to acknowledge the significant contributions of Dr. Donald B. Plewes to the development of this course.)

Clinical MRI Course - Body MR Problem Solving
Donald G. Mitchell, M.D. (Philadelphia, Pennsylvania, USA)
<table>
<thead>
<tr>
<th>Country</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>FINLAND</td>
<td>Riikka Immonen, Kimmo Jokivarsi, Eveliina Lammentausta, Timo Liimatainen</td>
</tr>
<tr>
<td>FRANCE</td>
<td>Sayed Naved Akhtar, K. A. Danishad, Ashish Gupta, Mohammad Haris, Omkar Ijare, Virendra Kumar, Sonja Saksena, Madhulika Srivastava, Richa Trivedi</td>
</tr>
<tr>
<td>FRANCE</td>
<td>Behnaz Goudarzi</td>
</tr>
<tr>
<td>ISRAEL</td>
<td>Amnon Bar-Shir, Atira Bick, Dina Carasso, Maya Dadiani, Yifat Edrei, Dorit Granot, Vicki Plaks, Galit Saar, Efrat Sasson-Sarig, Revital Shatkhash, Dan Stein, Yossi Yovel, Keren Ziv</td>
</tr>
<tr>
<td>ISRAEL</td>
<td>Marina Benito-Vicente, M. Margarida Julia-Sape, MariaRosa Quintero-Bernabeu, Tiago Rodrigues, Rui Simoes</td>
</tr>
<tr>
<td>SWITZERLAND</td>
<td>Kai Eberhardt, Susan Ghods, Anke Henning, Nicolas Kunz, Hongxia Lei, Jurek Massner, Ralf Mekle, Andrea Rutz, Eva Scheurer, Philipp Stämpfli, Rudolf von Heeswijk</td>
</tr>
</tbody>
</table>

See Stipend Recipients page 14
Modhurin Banerjee
Suchandrima Banerjee
Kestutis Barkauskas
Bradley Barnett
Adil Bashir
Jan Bauer
Yashar Behzadi
David Bennett
Govind Bhagavatheeshwaran
Himanshu Bhat
Arup Bhattacharya
Pratip Bhattacharya
Xiaoming Bi
Don Bigler
Megan Blackwell
Janet Blumenfeld
Louisa Bokacheva
Candice Bookwalter
Ethan Brodsky
Ryan Brown
Matthew Budde
Blake Cannon
Holly Canuto
Haihui Cao
S. Andrea Dunham
Kiarash Emami
Ahmed Fahmy
Xinhao Fan
Jonathan Farrell
Carissa Fonseca
Anna Freundlich
Refaat Gabr
Basavaraju Ganganna
Lan Ge
Nilesh Ghugre
Christopher Gielmi
Christian Graff
William Grissom
Minzhi Gui
Jun-Yu Guo
Xiaodong Guo
Clifton Haider
Justin Haldar
Andreana Haley
Mark Hamamura
Kathryn Hammond
Muhammad Haque
Yah-el Har-el
Xiang He
Robert Held
Tobias Henning
Chad Hicks
James Holmes
Xin Hong
Ching-Yi Hsieh
Houchun Hu
Peng Hu
Shuwen Hu
Shuning Huang
Susie Huang
Dongli Huo
El-Sayed Ibrahim
Isabelle Ilitis
Judy James
Guang Jia
Tao Jin
Catherine Jones
Sonial Josan
Youngkyoo Jung
Vinod Kaimal
Elena Kaye
Inas Khayal
Vyacheslav Khozikov
Sunheong Kim
Tae Kim
Taek Soon Kim
Yoon-Chul Kim
Jessica Klaers
Kevin Koch
Matthew Koff
Ioannis Koltenoglou
Arunark Kolipaka
Mayuresh Korgaonkar
Bryan Kressler
Sumati Krishnan
Roland Krug

Christina Malamateniou
Shahtian Malik
Helen Marshall
Stephen Mayhew
John McLean
Jennifer McNab
Keiko Miyazaki
David Morris
Karen Mullinger
Susana Munoz Maniega
M. Näräijäinen
Shahrumi Nadjati-Gilani
Nicholas Noble
Stephen Price
Sophie Riches
Caleb Roberts
Rebecca Samson
James Schroeder
Kiran Seunarine
Bhavana Solanki
Jennifer Stark
P. Clara Tan
Tjung Tang
Kevin Teh
Helen Troy
Damian Tyler
Wietse van der Zwaag
Rishma Vidyasagar
Laurence Vigon
Simon Walker-Samuel
Lauren Wallis
Neil Woodhouse
Peter Wright
Xiaomin Zhu

USA
Khaled Abd-Elmoniem
Roney Abraham
Ganesh Adluru
Sinyeob Ahn
Narasimha Akella
Can Akgun
Murat Aksoy
Vijayanan Alagappan
Ruqayyah Al-Hashem
Leonardo Angelone
Siamak Ardekani
Lori Arlinghaus
Arjun Arunachalam
Todd Atwood
Gautam Bahl
Tanvir Balg
Hyun-Man Baik
Priti Balchandani

S. Andrea Dunham
Kiarash Emami
Ahmed Fahmy
Xinhao Fan
Jonathan Farrell
Carissa Fonseca
Anna Freundlich
Refaat Gabr
Basavaraju Ganganna
Lan Ge
Nilesh Ghugre
Christopher Gielmi
Christian Graff
William Grissom
Minzhi Gui
Jun-Yu Guo
Xiaodong Guo
Clifton Haider
Justin Haldar
Andreana Haley
Mark Hamamura
Kathryn Hammond
Muhammad Haque
Yah-el Har-el
Xiang He
Robert Held
Tobias Henning
Chad Hicks
James Holmes
Xin Hong
Ching-Yi Hsieh
Houchun Hu
Peng Hu
Shuwen Hu
Shuning Huang
Susie Huang
Dongli Huo
El-Sayed Ibrahim
Isabelle Ilitis
Judy James
Guang Jia
Tao Jin
Catherine Jones
Sonial Josan
Youngkyoo Jung
Vinod Kaimal
Elena Kaye
Inas Khayal
Vyacheslav Khozikov
Sunheong Kim
Tae Kim
Taek Soon Kim
Yoon-Chul Kim
Jessica Klaers
Kevin Koch
Matthew Koff
Ioannis Koltenoglou
Arunark Kolipaka
Mayuresh Korgaonkar
Bryan Kressler
Sumati Krishnan
Roland Krug

Christine Kunesh
Peng Lai
Bennett Landman
Riccardo Lattanzi
George LeVerde
Jelena Lazovic-Stojkovic
Yuan Le
Hsu-Lei Lee
WonJe Lee
Lara Leoni
Yan Li
Yong Li
Zhihao Li
Zhiqiang Li
Joy Liu
Ruth Lim
Ai-Ling Lin
Fa-Hsuan Lin
Benjamin Liu
Eri Liu
Feng Liu
Jing Liu
Min Liu
Xiaoxi Liu
Xin Liu
Xiping Liu
Yinan Liu
Zhaozhu Liu
Landone Locke
Orlando Lopez
Wenmiao Lu
Janine Lupo
Jeremy Magland
Asif Mahmood
Silvia Mangia
Yogesh Mariappan
Jaime Mata
Erin McCormack
Mark Meadowcroft
Dionysios Mintzopoulos
Asht Mishra
Kishore Mogadakalala
Abbas Moghaddam
Catherine Moran
Iga Muradian
Hyokwon Nam
Roger Nana
Yutaka Natsuaki
Andrew Nencka
Anne Neubauer
Rexford Newbould
Jennifer Newton
Reza Nezafat
Rafael O’Halloran
Henry Ong
Joseph Osorio
Ricardo Otazo
Xiawei Ou
Esin Ozturk-Isik
Nathan Pack
Sait Kubilay Pakin
Li Pan

See Stipend Recipients page 15

Stipend Recipients from page 13
NEW ENTRANT STIPENDS

CANADA
Linda Andersen
Michael Hoff
GERMANY
Konstantinos Falaggis
Sabrina Harter
Matthias Honal
M. Raghava Jayachandra
Oliver Kraff
Marios Lopez Terrones
Florian Meise
Susanne Schnell
Felix Staehle
Frederik Testud
Prashanthi Vemuri
Keith Vogt
Nelly Volland
Cornelius Von Morze
Chengbo Wang
Chenyang Wang
Ping Wang
Yuenan Wang
Zhangwei Wang
Emily Waters
Andrew Wentland
Kathleen Williams
Walter Witschey
Suzanne Witt
Chung Ki Wong
Genevieve Wu
Minjie Wu
Dan Xu
Guofan Xu
Junqian Xu
Yiqun Xue
Naresh Yallapragada
Shaolin Yang
Furong Ye
Ping-Hong Yeh
Desmond Yeo
Meng Yin
Hon Yu
Jiangsheng Yu
Wafaa Zaaraoui
Haosen Zhang
Jian Zhang
Ling Zhang
Na Zhang
Yong Zhang
Zhenghui Zhang
Jia Zhong
Xiaodong Zhong
Xin Zhou
Lei Zhu
Mingming Zhu
Tong Zhu
Matthew Zierhut
William Zinnanti
Jin Zuo

INDIA
Getaneh Bayu
Anup Singh
Pratima Tripathi

IRELAND
Stephen Meredith

ISRAEL
Tamar Blumenfeld

S. AFRICA
Ernesta Meintjes

SINGAPORE
Philip Lee
Irvin The

TAIWAN
Kai-Yuan Chen
Su-Chin Chiu
Jia-Shuo Hsu
Shu-Ping Tsao

THE NETHERLANDS
Marlies Oostendorp
Muhammed Yildirim

UNITED KINGDOM
Gavin Kenny
Nurunisa Neyzi
Celine Quinsac
Jack Wells
Jingyi Xie
Sharon Balamoody
Kenneth Cheung

USA
Doney Abraham
Daniel Alica
Samuel Barnes
Joëlle Barral
Eric Beall
Karen Brown
Xin Chen
Carlo Ciulla
Zihong Fan
Lakshman Gollapalli
Patrick Goodwill
David Gultekin
Jeremiah Heilman
Andrew Holbrook
Verena Kallhoff
Maged Kamel
Ibrahim Khansa
Zhifeng Kou
Gautham Kuppampatti
Jefery Kusnadi
John Lackey
Deborah Langman
Gary Lee
Atul Maheshwari
Cynthia Massaad
Rajiv Menon
Helenna Nakama
Jaideep Neelavalli

Stipend Recipients
from page 14
New ISMRM Board Members

Vice President

Vivian S. Lee, M.D., Ph.D., is Professor and Vice-Chair of Research in the Department of Radiology at the New York University Medical Center in New York City. Dr. Lee earned her medical degree with honors at Harvard Medical School after receiving a Ph.D. in medical engineering at Oxford University, U.K. She completed her residency in diagnostic radiology at Duke University, where she served as Chief Resident, and her fellowship in body MRI at NYU. An NIH-funded investigator, her primary areas of interest are in functional body MRI, particularly using MRI to measure blood flow and function in the kidneys, and in cardiovascular disease. She has recently published a textbook, Cardiovascular MRI: Physical Principles to Practical Protocols (Lippincott 2006). Elected to the ISMRM Board of Trustees in 2002, Dr. Lee served as the Chair of the Scientific Program Committee for the 2005 ISMRM meeting in Miami, Florida, USA, which enjoyed record-setting attendance and the unveiling of initiatives including a week-long educational program for clinicians as well as a new research funding symposium. She has been a well-received lecturer in numerous educational courses over the years and received an ISMRM Outstanding Teacher Award in 2005. A huge fan of the Society, Dr. Lee particularly values the dialogue between basic scientists and clinicians at every Annual Meeting, seeing it as one of the most effective venues for accelerating the translation of scientific discovery to improved patient care. Other issues of particular interest for the Society include promoting the importance of MR research and its necessary funding, establishing the ISMRM’s role in setting educational standards in MR training, addressing potential needs of junior members in career development, and expansion of membership globally.

Board of Trustees:

Tim Leiner, M.D., Ph.D., is Assistant Professor of Cardiovascular MR Research at Maastricht University Hospital and the Cardiovascular Research Institute Maastricht (CARIM) in Maastricht, The Netherlands. After obtaining his Ph.D., he completed post-doctoral research fellowships at the Angiogenesis Research Center at Dartmouth Hitchcock Medical Center/Dartmouth Medical School in Hanover, NH, USA, and at the Cardiac MR Center at the Beth Israel Deaconess Medical Center/Harvard Medical School in Boston, MA, USA. Dr. Leiner’s present research interests center around the development and implementation of MR angiographic techniques for imaging peripheral arterial and coronary artery disease. His research projects include studies on imaging of the lower and upper extremity vasculature, the renal and coronary arteries, MR imaging of the coronary and carotid vessel wall, and MR imaging of neovascularure, in particular differentiation of arteriogenesis from angiogenesis. Dr. Leiner is a member of the ISMRM, ECR, RSNA, and AHA and has served as faculty member at the annual meetings of the ISMRM, ESMRMB, SCMR, ECR, and RSNA and has actively participated in the annual meetings of the Dutch Radiological Society. He is assistant editor of the ISMRM Pulse newsletter and will start to serve on the European Radiology Editorial Board in 2006. He also acts a reviewer for many international scientific journals in the fields of magnetic resonance imaging, radiology, vascular surgery, and cardiology. Dr. Leiner has authored over 100 peer-reviewed journal articles, book chapters and proffered contributions for international congresses, mainly the ISMRM.

Caroline Reinhold, M.D., M.Sc., is Professor and Chair of Research in the Department of Radiology at the McGill University Health Center. Dr. Reinhold is also director of MR imaging at the McGill University Health Center and holds cross appointments in the Departments of Obstetrics & Gynecology and Gastroenterology (Internal Medicine). Dr. Reinhold completed her residency in diagnostic radiology at McGill University, where she served as Chief Resident, and her fellowship in body MR / US at Yale University. Dr. Reinhold has been extensively involved with the ISMRM serving on the Education Committee from 2000-2003, the Scientific Program Committee from 2004-2005, the Annual Meeting Program Committee from 2005-present, and as a reviewer of abstracts. In her capacity as Body Imaging Coordinator for the 2006 and 2007 ISMRM Meetings, she will co-ordinate and optimize educational activities in Body MR throughout the Annual Meeting. Dr. Reinhold has contributed extensively to the education of body MRI both at a national and international level and has organized numerous courses on that topic (ISMRM, RSNA, ARRS, CAR). In addition, she has been a well-received lecturer in many educational courses over the years. For this effort, as well as her contribution to body MR research activities, she has received numerous awards including the Young Radiologist’s Award from the Canadian Society of Radiology. Her research contributions have been nationally funded (CIHR), and are focused on technique optimization and technology assessment in the areas of MR cholangiopancreatography and MR imaging of the female pelvis. She recently completed a Master’s Degree in Epidemiology & Biostatistics. Dr. Reinhold has co-edited two textbooks on body MRI, authored over 100 peer-reviewed journal articles, numerous book chapters, and proffered contributions for international congresses, including the ISMRM. Dr. Reinhold is strongly committed to the mission of the ISMRM, and believes this is an excellent venue to further communication between basic scientists and clinicians, thus accelerating implementation of novel MR techniques in the Clinic. Other interests include, establishing the ISMRM as a truly international society with widespread global representation, promoting the need for MR research, devising novel methods of MR education and establishing standards for MR training.
Penny Anne Gowland, Ph.D., is an MRI physicist working in a multidisciplinary academic environment, whose aim is to develop quantitative MRI techniques and apply them to answer biomedical questions. In particular, Dr. Gowland has worked in gastrointestinal physiology, fetal development, uterine function, fMRI methodology, and BOLD mechanisms. She also has a long-term interest in safety and the bioeffects of the magnetic fields associated with MRI. This has recently led her to become involved in campaigning to relax the regulations affecting MRI, and she played a role in changing the EU directive that would have limited the exposure of staff to high magnetic fields in Europe. Dr. Gowland feels the ISMRM does an absolutely excellent job in promoting communication within the MRI community and in providing a wide range of continuing education opportunities; however, she believes it could strengthen its role in providing advice to external bodies.

Frank R. Korosec, Ph.D., is a professor of Radiology and Medical Physics and Director of Research Resources at the University of Wisconsin – Madison, USA. He received his doctoral degree in Medical Physics from the University of Wisconsin – Madison in 1991. His thesis was on development of phase contrast and time-of-flight MR angiography techniques. His current research interests include MR angiography, fast imaging, and imaging of polarized helium-3. He has co-authored over 60 publications focusing mostly on novel MR angiographic imaging techniques and 7 book chapters on the basic principles of MRI and MRA. He is co-inventor on 9 patents, including one on TimeResolved Imaging of Contrast Kinetics (TRICKs). He has been a contributor to the ISMRM since 1990. He has co-organized the “MR Physics and Techniques for Clinicians” course for the annual ISMRM meeting since 1999, and he joined the Scientific Program Committee in 2004. He is a widely experienced presenter and educator, and has given many educational lectures internationally, including at meetings of the ISMRM, RSNA, and SCVIR. He has been on the scientific advisory board for several multi-center trials evaluating contrast-enhanced MRA. He is a reviewer for Journal of Magnetic Resonance Imaging and Magnetic Resonance in Medicine. In 2001 he organized, and in 2003 he was president of, the International Workshop on Magnetic Resonance Angiography. He believes that interdisciplinary collaborations between scientists and clinicians are crucial for the advancement of MRI, and that, to ensure the continued success of MRI, a strong emphasis should be placed on educating those who use it.
Meet the ISMRM Central Office

Robert Kravitz, Executive Director, has been with the ISMRM, in some form or another, since 1992. Starting out as temporary assistance at the Annual Meeting in 1992, she finally came on board full time in 1995. Since that time, she has wore many hats, so to speak, having served as Executive Assistant, Study Group Coordinator, Web Coordinator, Director of Study Groups and Electronic Communications, Director of Meetings and Electronic Communications, being promoted to her present position in 2005 as Executive Director. Roberta received her Bachelor of Arts degree in Government at St. Mary’s College of California, is an active member of PCMA (Professional Convention Management Association), ASAE (American Society of Association Executives), CESSE (Council of Engineering and Scientific Society Executives), and serves as both a member of the Hawaii’s Client Advisory Board and the Toronto Client Advisory Board. Roberta and her husband, John, have a daughter Teryn, a graduate of UC Davis with a degree in Wildlife Biology; a son Benjamin, who just recently graduated high school; and a daughter Megan, who is a very active senior in high school. Roberta is passionate about her family and her work, enjoys traveling, both for business and pleasure, and counts her blessings every day that she is able to work with such a dynamic group of people in the Central Office and for an membership so committed and involved with its professional association.

Jennifer Olson, Associate Executive Director, has worked for the ISMRM since 1987. At that time the Society office had only 2.5 full time equivalent (FTE) staff members and about 1,200 members. She began her career with the Society as an accountant, working part-time for the SMM and part-time for the Marin Symphony. She brought both non-profits into the computer age, setting up their accounting software. In October 1992, she was promoted to Assistant Director of SMM. Now working full-time for the Society, she assisted with the management of the operations of the business office, as well as directing all the activities of the Section for Magnetic Resonance Technologists (SMRT). Jennifer has lived in the San Francisco Bay Area for most of her life. She has four grown children: her daughter is a veterinarian technologist; her son is in his fifth year at Cal Poly, San Luis Obispo, majoring in mechanical engineering and physics; her two step-sons are in the construction business; and she has one beautiful, perfect, genius mechanical engineering and physics; her two step-sons are in the construction business; and she has one beautiful, perfect, genius

Mariam Barzin, Accountant, has been working with the ISMRM for seven years. She is married and has a son and daughter. Her son recently graduated college and her daughter is graduating this year. Born in Iran, Mariam moved with her family, to California 10 years ago. She has a BA degree in accounting. Mariam likes dancing, reading, gardening, and partying. Just a week into her new position as Education Coordinator, Tamara Bell is already dazzled by the complexity, nuance, and dedication the operation of ISMRM entails. Tamara's initial stupor is beginning to fade, and in its place a heavy dose of respect is forming for the committed efforts of the ISMRM staff. Before her employment at ISMRM, Tamara developed her appreciation for the international scene. Part of her education at University of California, Davis, included a year-long stint abroad where she attended university in Toulouse, France, and developed her French speaking skills. This experience left a deep impression on her. In an attempt to encourage others to seek an international perspective, Tamara interned at the Education Abroad Center in Davis. After graduating this past year with B.A.'s in Linguistics and French, Tamara was at a loss as to how to apply her useless degrees. By joining ISMRM, she hopes to have found their application. When not actively learning other languages (American Sign Language is next), Tamara enjoys wood-turning, traveling, writing, and water guns.

Mark A. Brown, Accounting Manager, joined the ISMRM family in August of 2005. He comes to the Society with over 20 years of diverse accounting experience in construction, engineering, government, and healthcare industries. Mark was born and brought up in Cleveland, Ohio, USA. He moved to Southern California in the late 70's and then transferred to the Bay Area in the 90's. Mark received his Bachelor of Arts degree in Management at St. Mary's College of California and an Associate of Arts degree in Accounting for Cerritos College. He enjoys traveling, meeting new people, listening to music, watching sports, playing with his computer, and trying to figure out ways to have more spare time.

Anselm Engle, Meetings Assistant, is still new to the ISMRM, having joined the crew in June of 2006. Prior to working at the ISMRM, Anselm was a student at the University of California at Davis, where he graduated with a double major in English and Medieval and Early Modern Studies. His theory is that he can sell any prospective employer he has a degree in writing and a degree in research, and thus can do anything. So far, his theory seems to be working, since he had only three days between graduation and starting at the ISMRM in which to pack up all his worldly possessions and move to the Bay Area. On one hand, office work is still new, but on the other, Anselm has worked as everything from an on-the-fly translator to ditch digger, as a research assistant in a microbiology laboratory to shop technician for a water filter company. He considers the office environment of the ISMRM to be nothing more than the logical progression of that. He may still be a bit dazed by the contrast between student and professional life, but is adjusting quite well, enjoys the ISMRM offices immensely, and is pleased to be working in the non-profit sector again. In his spare time, Anselm enjoys playing music, dancing, traveling, and exploring history by working with various historical reenactment
Bob Goldstein, Education Director, has worked at the ISMRM as Education Director since 1994. Born and brought up in New York City, Bob has lived in San Francisco since 1972, and with his partner Michael for 19 happy years. He has a MPH from the University of California, Berkeley, and a JD from Tulane University, New Orleans. A health educator by profession, his prior employment was with voluntary health agencies in the fields of respiratory disease, cancer, and arthritis. He enjoys bicycling, and is particularly proud of his daily commute to the upper reaches of Mt. Davidson, San Francisco’s tallest peak. Bob also loves trains, music (with a particular devotion to Gilbert and Sullivan), architecture, and cities (especially New York, New Orleans, and San Francisco, about all of which he is passionate).

In working at ISMRM, he has particularly enjoyed meeting members and working with interesting and friendly people from all over the world, as well as a staff that is like a family.

Kristina King, Membership Coordinator, joined the Society in October of 2000 as the Executive Assistant, a position she held for 3 years. In July of 2004 she took her current position. Kristina’s responsibilities at ISMRM include processing membership applications, issuing SMRT membership cards, and processing Student Stipend applications. She was born and raised in California and has lived in the Bay Area for 35 years. Kristina has a 17-year-old daughter who is involved in high school performing arts (choir and drama). Kristina’s interests include reading and spending time with friends and family.

Kailin Mardones, (pronounced Ky-Leen), Administrative Assistant, joined our staff in August 2005 and is commonly referred to as the “hub” of the office. She provides support to all departments and performs the procedural steps necessary to keep the office running smoothly.

When you call the office, you’ll most likely be greeted by Kailin. If you could not tell by her accent, Kailin is originally from the South American country of Chile. She moved to the USA by herself at the age of 21 and has lived here for almost nine years. She comes from a very creative family, which is where her great passion and appreciation for all kinds of art originated. Her favorite form of art in particular is glass blowing. When she is not busy enjoying the sights and sounds of her home city, San Francisco, you may find Kailin out on the dance floor of some of the city’s great nightclubs.

Sally Moran joined the ISMRM as Director of Electronic Communications in August of 2005. She is responsible for updating, maintaining, and adding to our Web site and list serves, creating electronic materials for our workshops and meetings, along with maintaining our computer network and database.

A native of Baltimore, Maryland, Sally was a partner in a computer service company located in Los Angeles prior to joining the ISMRM. A mother of two, one a recent college graduate and the other a college sophomore, she enjoys cooking and spending time with her family.

Anne Ornelas de Lemos, is Director of Membership, a native Californian, and has been with the Society since 2002. Her responsibilities include membership development, retention and recruitment; study group support; and organization of the student stipend program.

In January, Anne graduated from the University of Phoenix with her master’s degree in Organizational Management. She made the trip to Phoenix, Arizona, in July for the commencement exercises, amidst rare humidity.

As for hobbies, Anne enjoys playing Texas Hold’em Poker, reading for enjoyment instead of assigned readings, and getting back to fixing up her house.

Katie Simmons, Director of Meetings, has been with the ISMRM in various capacities since 2000; first as a temporary staff member in preparation for the Denver meeting, then as Meetings & Electronic Communications Coordinator under Roberta Kravitz, and now as Director of Meetings. Katie was born in San Francisco and has lived in the Bay Area for most of her life, except for the four years she spent in San Diego earning her degree from UCSD. When she is not in the office, Katie spends all of her time chasing after her toddler, Adela, who is the happy recipient of toys from various cities around the world Katie visits on ISMRM business. Katie, her husband, Rich, and Adela like to go hiking, camping, and boating on the weekends and continue to seek out new and fun places to explore as a family. Katie considers the ISMRM staff a second family and truly enjoys working for this outstanding organization and watching it grow through the years.

Sara Vasquez, Publications Coordinator, joined ISMRM in September 2005. She has a background in advertising writing and public relations and enjoys her duties at the Society as she oversees the designing and production of the Central Office’s print publications. This includes books, brochures, postcards, CDs, posters, advertisements, newsletters and SMRT’s two chief publications, Educational Seminars and Signals, in addition to many other projects.

When she’s not traveling during the weekends, Sara enjoys freelance writing for small newspapers, bicycling along some of the Bay Area’s abundant bike trails, and visiting some of San Francisco’s many street fairs throughout the summer. Sara also enjoys finding cash in the pockets of jackets she hasn’t worn for weeks, giving and receiving tacky gifts, and participating in chess competitions along the California Central Coast.
In 2007 ISMRM will meet in Berlin in very different circumstances from those which affected SMRM when it met in Berlin in 1992. Berlin then was still very much a divided city – though the Wall had already come down – with the drab, sour blackness of East Berlin contrasting with the bright, garishness of the western part. When we first planned a visit to Berlin for our Annual Meeting, the German Government was generous in its support and enthusiastic about anything that would help keep the isolated western enclave in the middle of Communist-dominated East Europe alive and functioning. However, between our committing to come and the actual date of the meeting, all that changed, and we were faced with a huge hole in our budget at the last minute as the Government contribution vanished. If it had not been for the support of Schering (who market in the USA as Berlex) and Siemens we would have had very real problems with the financial stability of the Society (SMRM). However, all ended well – we had the first Oxford lecture (which later evolved into the Lauterbur Lecture), and the Conference Center functioned exceptionally well, though it was at some distance from the majority of the hotels. A really first-rate subway system looked after that problem.

It was about that time that we began to think seriously about the possibility – and desirability – of merging the two parent Societies of ISMRM. What had been preliminary discussions during 1991-2 turned into real action in 1992-3, and, in some ways at least, Berlin 1992 was a catalyst for the events which followed. 1992 was the first MRI meeting in which our current Director (Roberta Kravitz) was involved, and it was the first meeting at which our previous Director (Jane Tiemann) was in charge. Circumstances had led the previous Director of SMRM to resign only a couple of months ahead of the Annual Meeting, and it is impossible to overstate the dynamism, skill, and professionalism with which Jane, and her very new team, took over a very rocky-looking ship and made it float and function. Roberta and her team will, I know, make Berlin 2007 even better than anything that has gone before. Berlin is a marvellous city, and when you, as an industrious ISMRM member, have a moment to spare, do look round it and sample its wealth of history – and archaeology, too. Ever ISMRM struggles in comparison with Nefertiti’s death mask (which is in one of the local museums)!

Enjoy!

—Ian Young
President SMRM 1991-92
I was actively involved in organizing this meeting since I was Secretary of the SMRM (as it was then known) and co-chairman of the programme committee with Felix Werli. It was a complicated business. We were co-hosting with the ESMRMB for the first time. The meeting was being planned for a Berlin divided by a nasty wall down the middle. Our meeting was to be in West Berlin, in fact the same site we shall have in 2007. It is a wonderful congress centre with an enormous capacity. The other side of the wall was a bit dreary. I knew it well since I had traveled to East Germany several times, including the ESMRMB meeting in 1989. Photo 1 shows “the Wall” right at the Brandenburg gate on the famous street Unter den Linden. Note the incredible graffiti – this is graffiti with meaning! In the picture are Stefan Neubauer, now a professor at Oxford, his wife Martine, our then soon-to-be-President Joanne Ingwall, now residing in both Boston and Southern California, John Saunders, now chief scientific officer of the MRI company IMRIS which sells intraoperative MRI’s, and a young man whose name I forget. West Berlin was a lively place. Much reconstruction had been done, and some souvenirs of WW II had been left, as seen in Photo 2. The “Memory Church” had been left just as it was at the end of the war, in stark contrast to the building in the background. Moving across the wall was another matter – Unter den Linden was beautifully rebuilt, including the Humboldt University, but several blocks behind it looked like the war had just ended, Photo 3. At the time of the negotiations for the site, Berlin was surrounded by a tightly controlled East Germany. The West Berlin government

Unbeknownst perhaps to the majority of ISMRM goers, SMRM (the present Society’s principal progenitor) held its annual meetings in the form of a three-year cycle New York, San Francisco, followed by what was called “off-shore” (the latter term bemused many of our European friends and the term was dropped once the “I” had been added to the SMRM acronym following the merger of SMRI and SMRM. The prior “off-shore” meeting was held in Amsterdam, Holland and although a success scientifically it caused the Society significant discomfort financially. The choice of Berlin as the place of the 1992 meeting elicited a great deal of excitement. Less than three years after the collapse of the wall that had divided the city for 44 years, the prospect for attendees to take a glimpse of former East Berlin was exciting. The consequences of the fall of the Iron Curtain a few years prior made the Society hopeful of opening the meeting to attendees from Eastern Europe. However, it was clear from the beginning that Berlin could not be a repeat of Amsterdam, at least not as far as the balance sheets were concerned. Roland Felix, Professor at the Charité Medical School in Berlin, volunteered to act as the local host, who was given the prestigious title of “Meeting President.” We knew the price tag of this event would be substantial but we had Roland’s assurances of pledges by the city government that would cover the intimidating cost of the convention center. It is perhaps fair to say Ian Smith, who had been appointed Program Chairman, and Ian Young, the 1991-92 SMRM President, were somewhat nervous. Would Roland be able to come through? Communication was not always smooth and lingering uncertainties remained. Ian Young decided to add me as Program Co-Chairman, the thought being that a native German speaker could perhaps help bridging communications gaps. The other Ian graciously accepted sharing the honor of running the meeting with a colleague he had known for two decades. The Program Committee convened in Zurich in the fall of 1991 to review mainly organizational issues but some questions and issues remained. To cut cost it was decided not to arrange for a bus service to ferry attendees from the many hotels spread all over the city to the Convention Center and back, a decision that unfortunately was reversed shortly before the start of the meeting.

The meeting, then held in August, was a roaring success, exceeding all expectations in terms of attendance and content, and this in spite of the soaring heat wave that struck Eastern Europe during precisely that week (39.8°C I recall and virtually no hotel had air conditioning). Among the highlights of the plenaries were a lecture by Jack Belliveau on the newly invented fMRI technique in a session on neurometabolism,
was very keen to bring meetings to their city to show how well it had recovered. We were in a great bargaining position. Thus we were able to obtain a grant of 400,000 German marks towards the cost of the meeting, a great start!

In the planning we were greatly helped by the radiologists of West Berlin who formed a local committee chaired by Roland Felix. They knew their way around. As we approached the year of the meeting, something magical happened: the Wall came down. As the time of our meeting approached, a renaissance of East Berlin took place. The Unter den Linden returned to its former role joining the east and west sides of the city. Schoenefeld airport, which had formerly served only East Berlin, opened to regular traffic. Mark Henkelman and I flew to that airport nonstop from Toronto – a lot easier than it was before. Now many people wanted to come to Berlin: it was the place to go. Consequently, we had a fantastic turnout, with many MR specialists from Eastern Europe attending for the first time. As a bargain hotel we used the former residence and training site for the STASI, the secret police of East Germany. Quite a change for the place!

Felix and I had a great time organizing the programme. An innovation we introduced was plenary lectures by physicians, who were not MR specialists, who told us what they felt they needed MRI to tell them – a pull instead of the usual push. This went over very well and led to many collaborations. The budget was tight but we avoided the financial loss that was then usual for meetings held outside North America.

And now we are coming back to Berlin in 2007. It will be wonderful to see what has been done all over the city. The local transportation system is incredibly efficient and there is so much to see and do. The new buildings will impress you, as will some of the historic sites. See you there!

—Ian C.P. Smith
SMRM Program Co-Chair, 1992

lectures by Mike Moseley and Bob Balaban on diffusion and magnetization transfer, respectively, in a session on novel contrast mechanisms. In terms of attendance and abstract presentations, the meeting set a new record (testimony are the nearly 5,000 pages of abstracts in three volumes).

The forthcoming 15th Meeting of the ISMRM has all the potential to surpass its predecessor in rejuvenated Berlin in every respect (except outside air temperature). We trust that Georg Bongartz and his extensive crew will put together an exciting meeting next May.

—Felix W. Wehrli
SMRM Program Co-Chair, 1992
News from the Annual Meeting Program Committee

In 2007, the Fifteenth Annual Meeting of the ISMRM (15th Annual Meeting) will again be a major Joint Meeting with the ESMRMB (24th Annual Meeting) and the SMRT (16th Annual Meeting), similar to the 2001 meeting in Glasgow. We are looking forward to a stimulating and successful meeting in Berlin, since all previous Joint Annual Meetings of the two major MR societies have proven successful with respect to attendance and abstract submissions.

The two previous Annual Meetings of the ISMRM (Miami Beach 2005 and Seattle 2006) broke all registration records and were rated successful by the attendees. Last year, David Norris and Leif Østergaard initiated a full integration of the scientific and educational programs under a single Annual Meeting Programme Committee (AMPC). The resulting program was better integrated throughout the entire meeting, offering broad programs for both basic scientists and clinicians throughout the week. Under the single committee structure, the Vice Chair is now responsible for the educational programme, while the Chair coordinates the entire meeting programme. This year, our Vice Chair, Kim Butts Pauly, is organizing the annual meeting educational activities and will become the AMPC Chair for 2008 (Toronto). Together with the whole of the AMPC, we are endeavouring to bring together an effective and rewarding conference.

With great pleasure I would like to announce that Sir Peter Mansfield has agreed to give his own honorary lecture, the Mansfield Lecture, on Monday morning, while Prof. Hedvig Hricak has accepted the invitation to give the Lauterbur Lecture on Thursday.

The Plenary sessions are an exciting range of broad topics:
- Frontiers in functional Neuro-Imaging
- Interventional MR – Already Clinical Reality?
- Monitoring Treatment Response
- High tech Approaches and Applications for MR Signal Transmission and Reception
- Hybrid - MR: Systems and Applications

The weekend educational programme will offer a variety of topics from clinical to advanced basic science. Morning categorical courses will be offered on the weekdays, as well as clinical categorical courses. The “unmet needs” - sessions, which were very well attended last year, will again find a place in the programme. Clinical tracks shall be easy to identify for the interested participants.

Posters will play an important role in the meeting, and the rooms assigned to this can be adapted to the number of accepted presentations. The ICC (International Conference Center) in Berlin offers incredible flexibility in this regard. In 2007 we will show more electronic posters, as this is already the standard format at ESMRMB meetings. A separate room will be reserved for the Electronic Poster Sessions in order to address the different exhibition needs.

The syllabus will be streamlined, and we will have more emphasis on the electronic documentation of the content of the congress. The video captures of educational and scientific presentations will be continued as at the previous congresses. Also, the programme book itself shall be refined, and the identification of suited educational and scientific programmes for the different groups of attendees shall be made as easy and comprehensive as possible.

For the first time, we invite the MR community to present artistic work, such as unpublished artifacts, poems, or humoristic contributions as posters. This exhibition, called ART 'N ARTIFACTS, will be on display in one of the central foyers of the ICC: I definitely hope this will attract and lure your creativity! Further explanations to this – and how to submit to this new event – will be available on the ISMRM Web site soon.

Finally: the change of the Congress Venue from Barcelona to Berlin seemed to be unlucky to all of us at first glance. And it is true: there is no Mediterranean Sea and no beach nearby – but Berlin has a lot to offer! It is a vibrant and dynamic city, a melting pot of many cultures. In addition, Berlin is very interesting by its own history, which was both horrible and splendid. Cultural offerings and shopping facilities, new and old architecture, huge central parks and broad avenues characterize the new and old German capital. I am sure you will enjoy your stay there!

–Georg Bongartz
AMPC Chair 2007
2007 Call for Papers

The Scientific Program Committee invites abstract submissions to be presented in oral sessions, as conventional posters and as electronic posters at the Joint Annual Meeting ISMRM-ESMRMB 2007. Submissions must contain new, previously unpublished material. All abstracts must be submitted electronically via the ISMRM Web site. No paper forms will be available. Any abstract submitted on paper will not be considered for review. The deadline for receipt of abstracts is 15 November 2006 - 23:59 US Eastern time.

A 100-word synopsis of each abstract must also be submitted. It should include a brief description of the problem, methods, results, and conclusions. It must include text only, with no equations or images and no references or citations to items described in the full abstract. To conserve space and provide authors greater opportunity to clarify their projects, the synopsis should NOT appear in the actual abstract submission.

The abstract should be submitted in a single-column format, according to the instructions found online. You will be able to compose your abstract and then upload it for submission. Detailed instructions for posting are available on the ISMRM Web site. All copyrights to accepted abstracts become the property of ISMRM. No proprietary information may be withheld by authors.

You may also receive submission information by calling, faxing, or writing to: International Society for Magnetic Resonance in Medicine 2118 Milvia Street, Suite 201, Berkeley, California 94704, USA Tel: +1 510 841 1899 Fax: +1 510 841 2340 E-mail: info@ismrm.org

The Proceedings will be published electronically only. The full text of all accepted abstracts will be available online two weeks before the meeting to pre-registered attendees only. If you wish to have access to the Proceedings before the meeting, you must pre-register.

Please note, it is the policy of the ISMRM to treat all submitted abstracts as confidential from the time of submission to the publication date.

2007 Call for Nominations

The Nominating Committee of the International Society for Magnetic Resonance in Medicine invites members of the Society to submit suggested nominations for the office of Vice President and for the four members of the Board of Trustees to be elected in 2007. These suggestions must be received by noon local time on 7 November 2006, at the Society’s Central Office. After this deadline, the Nominating Committee shall compile a list of not more than three nominees for each position on the ballot, including any nominees suggested by the Nominating Committee itself.

The nominees for the vacant positions will further be chosen to ensure the general balance in representation on the Board of Trustees of discipline and geographical distribution. This year, the nominees for the office of Vice President will be basic scientists. Nominations by members independently of the Nominating Committee shall require a petition of fifty (50) Full Members in good standing of the Society and must be received by midnight local time on 31 December 2006, and shall include the written agreement of the proposed candidate for his/her nomination, state the office for which such candidate is nominated, and a brief biography (single paragraph).

The nomination, and subsequent selection, of appropriate individuals who are willing to commit time and energy to the ongoing governance of the Society is critical to its future health. The general membership is encouraged to help in this task.

Suggested nominations should be submitted to:
Daniel K. Sodickson, M.D., Ph.D. Chair, Nominating Committee International Society for Magnetic Resonance in Medicine 2118 Milvia Street, Suite 201 Berkeley, CA 94704 USA Tel: +1 510 841 1899 Fax: +1 510 841 2340 E-mail: nominations@ismrm.org
2007 Young Investigator Awards Competition

The International Society for Magnetic Resonance in Medicine announces the competition for the Young Investigator Awards for the Joint Annual Meeting ISMRM-ESMRMB in Berlin, Germany, 19-25 May 2007. Two awards will be given, the W.S. Moore Award in Clinical Science and the I.I. Rabi Award in Basic Science.

The W.S. Moore Award is given for original clinical research in magnetic resonance. This includes studies of applications of established MR methodologies, using either human or animal subjects. Examples include manuscripts reporting new applications of MR contrast agents, optimization of scanning protocols, new clinical applications of MRI, or results of clinical trials.

The I.I. Rabi Award is given for original basic research in magnetic resonance, such as reports of new MR methodologies. The competition is open to clinical and basic scientists at the undergraduate, graduate, postgraduate, resident, and fellow levels working in MR research in academia, industry, or research institutions. Applicants must have had no more than the equivalent of five years’ full-time postdoctoral or post-residency research, as documented by a curriculum vitae and letter of confirmation from their supervisor, mentor, or department head.

To be considered for either award, the applicant must submit a single manuscript describing original work in the field of MR in medicine directly to one of the ISMRM journals (JMRI or MRM). Manuscripts previously submitted to either ISMRM journal, but not yet published, are eligible for consideration. All manuscripts submitted to either of the ISMRM journals will be reviewed for publication, whether or not chosen as a YIA finalist. The Young Investigator Awards Committee will select up to three finalists for each award. All abstracts will automatically be considered for the Joint Annual Meeting ISMRM-ESMRMB.

The winners will be selected on the basis of the scientific quality and originality of their abstracts, manuscripts, and presentations and will be named before the close of the Meeting.

HOW TO APPLY:
Applications must include the following:

• Complete manuscript, with images, typewritten and double-spaced throughout (including tables, footnotes, references, and figure captions), prepared on 8.5 x 11 in. or A4 paper format, with 1-in. or 2.5-cm margins on all sides. All pages should be numbered consecutively, including references, tables, and figure legends. Manuscript must be submitted electronically in doc or LaTex format to one of the ISMRM journals (W.S. Moore applicants should submit to the Journal of Magnetic Resonance Imaging, and I.I. Rabi applicants to Magnetic Resonance in Medicine). In addition, an electronic copy of the manuscript in pdf format must be submitted to the ISMRM Society office;

• A cover letter indicating that the applicant wishes to be considered for a YIA award submitted to the ISMRM Society office electronically in pdf format;

• A curriculum vitae submitted to the ISMRM Society office electronically in pdf format;

• A copy of the submitted abstract and receipt (tracking number) should be sent to the ISMRM Society office electronically;

• A statement from the applicant’s mentor, supervisor, or department head certifying the originality and independence of the work and that the applicant meets all the criteria for the competition. The statement should discuss the candidate’s specific contribution to the work with an estimate of the percentage of the contribution made by the candidate (which should be substantial). The statement should be submitted electronically in pdf format.

Note: The YIA Competition is completely separate from the Student Stipend Program. Any YIA applicant interested in the Student Stipend Program must apply to that program separately.

DEADLINES:
Manuscripts must be uploaded on the appropriate ISMRM Journal’s Web site no later than Wednesday, 1 November 2006.

Copy of manuscript, cover letter, curriculum vitae, abstract (with tracking number), and supervisor statement must be received electronically by the ISMRM Society office no later than Wednesday, 1 November 2006.

WHERE TO SUBMIT:
Manuscripts should be submitted following the guidelines for authors on the Journal Web sites, which can be accessed through http://www.ismrm.org/journals.htm

Copy of manuscript, cover letter, curriculum vitae, supervisor statement, and electronically submitted abstract with tracking number should be sent to the attention of:

Daniel K. Sodickson, M.D., Ph.D., Chair Subcommittee on Young Investigator Awards
YIA_07@ismrm.org
The theme for the 15th Annual Meeting of the Section for Magnetic Resonance Technologists (SMRT) held in Seattle, Washington, USA, 5-7 May 2006, was “Soaring to New Heights in MR Education” with the SMRT reporting over 300 attendees. The Program Committee, chaired by Todd Frederick, together with the Education Committee, chaired by Carolyn Bonaceto, presented an excellent program as was reflected in the very positive feedback obtained by the attendees.

The Annual Meeting events commenced Friday evening with the traditional Poster Tour. A total of 56 abstracts were reviewed and scored by the Education Committee and for the second year 36 posters, previously scored in digital format, were available for regulation size viewing. For the first time, electronically-submitted posters are now available on the SMRT Web site for SMRT members.

The educational sessions commenced on Saturday, with a number of 30-minute presentations on current and new applications. Presenters included MR clinicians and researchers as well as experienced and respected SMRT members. After a full day of continuing education activities, members were treated to the SMRT Past President’s Reception held at the Seattle Convention Center. We were also honored by having representatives from the ISMRM Board of Trustees attend the reception.

Spaced throughout the Saturday and Sunday programs were Technologist Proffered Papers. During the abstract submission process, authors may request to present orally, but the oral timeslots are awarded by the Program and Education Committees on the basis of the abstract’s score and topic.

In keeping with the SMRT’s mission of offering educational offerings worldwide, Marcromedia Flash was used for the first time. We thank all the presenters who released their presentations for the use of MRI technologist education. Plans are underway to offer the Seattle 2006 meeting for CE credit for technologists who were not able to attend the meeting. This offering will clearly enhance our membership offerings as well as attract new SMRT members.

This year, the Crues-Kressel Award was awarded to Maureen Hoo by Dr. Herb Kressel. Maureen has always been a key promoter of MRI educational opportunities for technologists worldwide.

The 2006 President’s Award based upon the highest scoring abstract was presented to Caron Murray of Sunnybrook and Women’s College of Health Sciences Centre, Toronto, Ontario, Canada. Caron’s work was entitled “Intermittent Fat Saturation and K-space Reordering in Breast MRI.”

The final awards, presented at the Business Meeting on Sunday included: Fellows of the Section awarded to Maureen Ainslie and Bobbie Burrow; also Anne Marie Sawyer received the Honorary Member award, and Julie Strandt-Peay received the Distinguished Service award.

For a complete list of awards given out during the SMRT Annual Meeting, please take a look at the most recent SMRT Signals Newsletter, number 57, now available on the ISMRM Web site: http://www.ismr.org/smrt/membersonly.htm.

The SMRT RCEEM status has proved very successful. The SMRT generates well over 50 educational activities and this status does allow a conservative cost savings to the SMRT as well the potential for additional revenue. ECE activities generated by the SMRT for CE credits include: Annual Meetings, Regional Meetings and the Home Study Program, as well as other functions that meet the criteria. The Home Study Program, under the guidance of the Publications Committee, continues its success by providing our members relevant reference material on new and current applications with self-assessment tests, which can be submitted for continuing education credits.

The SMRT Ad Hoc Committee for Education Standards, chaired by Luann Culbreth, held the first summit meeting on 8-9 May 2006 in Seattle to establish curriculum guidelines for the non-RT career pathway proposed by the American Registry of Radiologic Technology. The meeting was very successful as representatives from the Association of Educators in Radiological Sciences (AERS), The American Registry of Radiologic Technology (ARRT), The American Society of Radiologic Technology (ASRT) and the Joint Review Committee on Education in Radiology Technology (JRCERT) participated in this very important event. Work on the MRI curriculum guidelines is still underway and we plan to have the guidelines finalized by the end of 2006.

Membership in the SMRT has increased by 9% with just over 1800 members. The Membership Committee, chaired by Nancy Hill Beluk, is continuing to explore opportunities to increase membership. One method of recruitment continues to be through SMRT supported Regional Educational Seminars. Meeting locations scheduled for the 2006-2007 year include: Pittsburgh, South Carolina, Toronto, Australia, and New York. The SMRT is very fortunate to have newly-elected Policy Board member Wendy Strugnell organize an SMRT chapter in Australia and she has scheduled the first international SMRT Regional for 18-19 November 2006. The SMRT is continuing...
Passing of the gavel to the incoming SMRT President, Cindy Comeau, B.S., R.T. (N)(MR) (right) from the outgoing SMRT President, Karen Bove Bettis, R.T. (R)(MR) (left) at the SMRT 15th Annual Meeting in Seattle, Washington, USA.

I would like to thank everyone at the Central Office, the SMRT Executive Board, Committee Chairs and the SMRT members for their support. We are looking forward to working with Central Office as planning is well underway for the 2007 Annual Meetings of the ISMRM and SMRT in Berlin, Germany.

I invite all ISMRM members to visit the SMRT Web site to check out the benefits and educational offerings available to MR technologists. We would like to encourage ISMRM members to spread the word about the SMRT, or ask your technologist: “Are you a member of the SMRT?” Thanks ISMRM members!

– Cindy R. Comeau
SMRT President

ISMRM UPCOMING WORKSHOPS

**MR of Cancer: Frontiers in Metabolic, Molecular and Clinical Imaging**
13-16 October 2006
Pocono Manor, Pennsylvania, USA
http://www.ismrm.org/workshops/Cancer06

**Data Processing for MR Spectroscopy and Imaging**
11-13 November 2006
Airlie Foundation & Conference Center
Warrenton, Virginia, USA
http://www.ismrm.org/workshops/data/06

**Cruising into Molecular and Cellular Imaging**
4-9 February 2007
Rhapsody of the Seas by Royal Caribbean International
Western Caribbean Cruise from Galveston, Texas, USA to Cozumel, Mexico
http://www.ismrm.org/workshops

**MR Physics and Techniques for Clinicians**
11-15 February 2007
Fairmont Chateau Lake Louise
Lake Louise, Alberta, Canada
http://www.ismrm.org/workshops/MRPhysics

**Non-Cartesian MRI: Sampling Outside the Box**
25-28 February 2007
Enchantment Resort
Sedona, Arizona, USA
http://www.ismrm.org/workshops/Non_Cartesian_MRI

**Advances in High Field MR**
25-28 March 2007
Asilomar Conference Center
Pacific Grove, California, USA
http://www.ismrm.org/workshops/HighField
### Mark Your Calendar! ISMRM Important Dates

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<tr>
<td>13-16 October 2006</td>
<td>ISMRM Workshop on MR of Cancer: Frontiers in Metabolic, Molecular and Clinical Imaging Pocono Manor Golf Resort and Spa Pocono Manor, Pennsylvania, USA</td>
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<tr>
<td>1-15 February 2007</td>
<td>ISMRM Course on MR Physics and Techniques for Clinicians The Fairmont Chateau Lake Louise Lake Louise, Alberta, Canada</td>
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<td>1 November 2006</td>
<td>Deadline for 2007 Young Investigator Awards Competition</td>
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<tr>
<td>11-13 November 2006</td>
<td>ISMRM Workshop on Data Processing for MR Spectroscopy and Imaging Airlie Foundation and Conference Center Warrenton, Virginia, USA</td>
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<tr>
<td>25-28 February 2007</td>
<td>ISMRM Workshop on Non-Cartesian MRI Enchantment Resort Sedona, Arizona, USA</td>
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<tr>
<td>25-28 March 2007</td>
<td>ISMRM Workshop on Advances in High-Field MR Asilomar Conference Center Sedona, Arizona, USA</td>
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<td>15 November 2006</td>
<td>Abstract Deadline for Joint Annual Meeting ISMRM-ESMRMB</td>
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<tr>
<td>19-25 May 2007</td>
<td>Joint Annual Meeting ISMRM-ESMRMB 2007 Berlin, Germany</td>
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<tr>
<td>22 November 2006</td>
<td>Deadline for Educational and E.K. Zavoisky Stipend Awards</td>
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<tr>
<td>30 January 2007</td>
<td>Deadline for New Entrant Stipend Award</td>
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<tr>
<td>4-9 February 2007</td>
<td>ISMRM Workshop Cruising into Molecular and Cellular Imaging Rhapsody of the Seas by Royal Caribbean International Western Caribbean Cruise from Galveston, Texas, USA to Cozumel, Mexico</td>
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For more information on these and other events, visit us online: [http://www.ismrm.org](http://www.ismrm.org)