

Meet Your New SMRT President



"My goal is to be aware of each chair's ideas, deadlines and difficulties so that I can help them achieve their committee's goals."

Julia Lowe, B.S., R.T., (R)(MR)

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Signals: How did you first become interested in working in MRI?

As a student in radiologic science school a brief rotation through "specials" was required during clinical training. Most students preferred ultra sound or interventional radiography; I was the only student that was interested in MRI. I was fascinated by the concept of magnetic resonance imaging and had never been introduced to it before being a radiography student in 1988. The possibility of working with a machine that demonstrated its physical effects on our environment in such a huge way kept my interest alone. When I saw the quality of the images and that three dimensional images could be obtained I was hooked. Since then I have been continually impressed with the improvements in equipment and I look forward to future advances in the field.

Signals: What led you to become involved with the SMRT?

After working for several years as a clinical MRI technologist at Indiana University Medical Center I was hired to run the research magnet. Having a

new role as a research MR technologist gave me the opportunity to attend a professional MRI meeting and I attended the SMRT Annual Meeting in Philadelphia in 1999. That was my first experience with the organization. There I met [Anne Sawyer](#), [Julie Strandt-Peay](#), [John Koveleski](#), [Candi Roth](#), [Michael Kean](#) and other, now familiar, SMRT icons. But at that meeting they seemed to be just nice, normal people like me, and, they were there because they were involved in an organization to promote their profession. Historically, the officers and board members of the SMRT deserve a lot of credit for getting people like me more involved in the organization. This is due largely to the fact that they have always been very accessible to the general membership of the SMRT. Because of this inclusiveness, I was motivated and confident enough to write my first abstract and submit it to the 2000 SMRT Annual Meeting. While presenting my poster at that meeting I was asked by a few board members if I was interested in being nominated for the Policy Board. The board members made a genuine effort to get me

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involved in the governing level of the organization and I think that attitude of promoting involvement is very healthy for the organization. Since then I have learned that once you become involved with the SMRT, the opportunities are boundless and a person could spend their career right alongside the SMRT. In fact I can't imagine one without the other now.

Signals: Can you describe some of the activities you have participated in with the SMRT and how that experience will help your year as President?

I have had many different roles with the SMRT such as Education Chair, External Relations Chair and I have chaired SMRT Regional Educational Seminars. While all of these roles are demanding and equally rewarding, my role as External Relations Chair gave me the most insight for many reasons. In that position, the chair will liaise with other health care organizations in North America outside of the SMRT. I met other health care workers from a huge industry that have similar missions to the SMRT and I was able to learn a great deal by comparing our approaches. By networking with these groups in meetings such as the Health Professions Network, the Alliance for Quality Medical Imaging and Radiation Therapy and RSNA, I believe it helped me to better understand the goals of the SMRT as an organization and to understand how to communicate with the people that govern it.

Another aspect of being the External Relations chair is working closely with the Global Relations chair of the SMRT, who serves as a liaison with organizations outside of the SMRT in Europe, Asia and the rest of the world. Communicating



Past-President, Pamela Vincent presents the gavel to Julia Lowe, incoming SMRT President

with the Global Relations Chair about External Relations business underscored the differences in our societies across the world in how we educate, evaluate and certify our technologists or radiographers. This brought to my attention that, although the goals and intentions of the SMRT were to achieve international status, changes and input were needed to accomplish this. **Wendy Strugnell** was the Global Relations Chair while I was External Relations Chair and I believe that, due to her leadership in this role, these differences became clear to me. I would also like to recognize Wendy for becoming the first SMRT President from outside North America.

I think that there is a lot to be gained by stepping outside of our organization and looking in. I believe that the role of External Relations chair made me aware of what the SMRT goals are and how better to achieve them. All of these things have helped me to be more aware of the MR community as a whole.

Signals: What can you advise members who want to become more involved?

I hope members understand that we are an organization of technologists and radiographers that excel in our careers and are interested in advancing our education and technology. Getting involved in the SMRT is not hard to do. If you are a member and haven't yet attended a meeting, then go to a

Local Chapter, Regional or the Annual Meeting. If you are a member, volunteer to be a committee member, write an abstract or contribute to the Signals Newsletter, consider running for Policy Board. We are all members of this society and we share similar goals and we should drive the organization together.

Signals: What do you see as your vision or goal to expand or enhance the SMRT over the next year?

My principal goal in the next year is to improve communication within the Policy Board in an effort to accomplish our goals more effectively and in a shorter timeframe. I have arranged for the Executive Committee and the Policy Board Members to meet by teleconference on a more regular basis in order to help achieve this. With the Policy Board and the By-Laws committee, I plan to review and revise the SMRT By-Laws, which is a huge undertaking but will effectively guide our society more efficiently, transparently and with a more international vision. Each committee chair has as their responsibility and duties to help the SMRT function as a productive and growing society. My goal is to be aware of each chair's ideas, deadlines and difficulties so that I can help them achieve their committee's goals. With the leadership and enthusiasm of the committee chairs, Policy Board and Executive Board Members, I have every expectation that these goals will be met during my time as President. I look forward to working with the members of the SMRT Policy Board, the ISMRM and responding to and serving the members of the SMRT to help our society grow and be more effective at serving the needs of the MRI technologist membership. **S**



Editor's Letter

Julie Strandt-Peay, B.S.M., R.T., (R)(MR), FSMRT
Editor, Signals

"It is my pleasure to announce that beginning this year; Signals will no longer be limited to four quarterly issues per year."

Dear Readers,

This issue of Signals will bring you up to date with the exciting activities of the SMRT and the recent Annual Meeting in Stockholm, Sweden. We begin by meeting our new President, **Julia Lowe**, and hearing about her vision for the organization. Having completed another successful annual meeting, we have reports of the many committees involved in this effort. First we hear from 2010 Program Chair, **Michael Macilquham** as he walks us through the packed two day educational event. Long time members who have made significant contributions to the section have been recognized by receiving awards and we share in thanking them all for their work on behalf of the SMRT. Previous recipients who are listed in this issue, allow you to see firsthand the many dedicated individuals who have shaped the SMRT since the beginning nearly 20 years ago!

Maryann Blaine, 2010 Chair of the Education Committee presents those individuals who shared their work, time and talent for others at this annual meeting. The poster walking tour was again a well attended event with lots of interaction as pictured. Technologists and Radiographers who submitted in the clinical or research category were awarded for their toil and are recognized in Maryann's report.

One of the benefits for those attending the SMRT annual meeting is to be able to participate in the ISMRM/SMRT Joint



SECTION FOR MAGNETIC
RESONANCE TECHNOLOGISTS

Watch the
SMRT website for
Signals News!

Forum. This year Chair, **Ben Kennedy** and his panel presented: *Safe Exposure Limits for Staff and Patients*, a timely and well received program.


SMRT Secretary, **Vera Miller**, has prepared the report of the SMRT Annual Business meeting. A review of this report will provide pertinent information to keep abreast of the many, many ongoing activities. Past-President, **Pamela Vincent** serves as the Chair of the Nominations and Awards Committees. She invites members to consider who they would like to lead the SMRT into the future.

As the SMRT continues to reach more areas of the world, **Ashok Saraswat**, Chair of the Local Chapter Committee, reports how to begin a group in your area. Local chapters may conduct a region wide meeting and we see the results in the report from the newly formed Gulf Coast Chapter. Reports are included from Regional SMRT Educational Seminars held in California and South Carolina in the USA. Across the ocean, the Benelux SMRT Educational

Seminar has established annual success with its third meeting.

Educational opportunities are available from the SMRT in multiple formats. Editor, **Anne Sawyer** announces the latest version of the SMRT Educational Seminars Home Study Program. Be sure to check the web-site as well for continuing educational offerings. Rounding out this issue is a commentary from MRI Safety expert **Frank Shellock** as he addresses concerns to the FDA, that may have global considerations.

As Editor of Signals for the past several years, I have had the opportunity to help the publication evolve with the technology of the times. It is my pleasure to announce that beginning this year; Signals will no longer be limited to four quarterly issues per year. As with other worldwide publications that produce timely updates using internet web-based postings, Signals will evolve once again into news postings on the SMRT web-site. It is the intention that activities and photographs be posted sooner than quarter publication time lines, so that news is more current for you. We hope to make access easier and provide you with information that assists your professional development. As always, your suggestions, comments and feedback are welcome. You may contact me directly at: jpeay@wi.rr.com with Signals in the subject line or you may forward your comments to the SMRT office.

Thank you for your past support and happy reading! 



19th SMRT Annual Meeting Report

Michael Macilquham,
B.App.Sc., M.H.Sc., (MRI)
SMRT Chair, 2010 Program Committee

"This year's program set an attendance record for SMRT Annual Meetings, with over 420 MR technologists and radiographers present from around the world."

"MR Imaging Now and Into the Future"

Before 2010, most of us would never have heard of Eyjafjallajökull, the mostly-dormant, centuries-old volcano in Iceland. However, after it burst into life in mid-April, spewing millions of tons of ash into the atmosphere, and in the process closing down most of Europe's airspace in the lead-up to the ISMRM/SMRT Annual Meeting, many of those in attendance will never forget it! The on-again, off-again airspace issue dominated the thoughts of most for days prior to the meeting.

Thankfully, the 19th SMRT Annual Meeting was ultimately not affected. The meeting was held in Stockholmsmässan, at the International Fairs building in Stockholm, Sweden, 1-2 May 2010. This year's program set an attendance record for SMRT Annual Meetings, with over 420 MR technologists and radiographers present from around the world. The program was again structured into forums striving to balance the technical and radiological perspectives of MRI, as well as providing a look at some of the advances and new

techniques in the field.

On the opening Saturday, the meeting began with a welcome from the 2009-2010 SMRT President, **Pamela Vincent, MPA, R.T., (R)(M)(CT)(MR)**. Meeting announcements were made by the Program Chair, **Michael Macilquham** and then the meeting was underway. **Anne Sawyer, B.S., R.T., (R)(MR)**



Martin Graves, M.Sc.



A. Gregory Sorensen, M.D.



Stuart Crozier, Ph.D.

introduced the Physics and Technology Forum. **Martin Graves, M.Sc.**, started the day with an excellent visual presentation highlighting the generation and encoding of the MR signal. This was complimented by **A. Gregory Sorensen, M.D.'s**, topic, "From 3.0T to 7.0T," walking through the MR techniques and lessons learnt at 3.0T, and how these have progressed with the evolution of 7.0T systems. In a harmonizing presentation, **Stuart Crozier, Ph.D.** then discussed High Field RF Coils and where coil technology is taking us as magnetic field strength increases.

After a break, **Ashok Saraswat, M.S., BEd. R.T., (R)(MR)** introduced the MRI Safety Forum.

Franz Hebrank, Ph.D. presented on SAR, in a talk that gave guidance on how



Franz Hebrank, Ph.D.



Donald McRobbie, Ph.D.

to manage this concern for all MR users. **Donald McRobbie, Ph.D.** then gave a topical presentation on Time-Varying Magnetic Fields and Spatial Gradients. His presentation attracted many questions from the audience. Before lunch,

the SMRT Business Meeting was held. **Pamela Vincent, MPA, R.T., (R)(M)(CT)(MR)** discussed the current directions of the SMRT. The President's gavel was passed from **Pamela Vincent** to the 2010-2011 President, **Julia Lowe, B.S., R.T., (R)(MR)**. Julia spoke to the group regarding her vision for the SMRT and the challenges to be faced in the coming year. **Steve Shannon, R.T., (R)(MR)**, SMRT Treasurer then discussed the current SMRT financial situation and future prospects in giving value for money to our members whilst increasing revenue from sponsorship. **Charles Stanley, CRA,**

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R.T., (R)(CT)(MR), SMRT External Relations Co-chair discussed the SMRT's position as an Affiliated Section of the ISMRM. This was a valuable opportunity to provide information to our members in a concise manner, and a chance for the Policy Board and Executive Committee to be recognized by our professional community in attendance.

After lunch, **Stephen Darty, R.T., (N)(MR)** introduced the award receiving proffered papers from our inspiring colleagues



Adriane Komancsek

from around the world. This year's number of submissions was record breaking. Special congratulations to **Adriane Komancsek, Ph.D.**, who presented the President's Award paper "Measurement and Visualization of 4D Flow Characteristics in the Portal Venous System with 3T MRI Compared to Doppler US." For the first time, this forum also included a "SMRT Meets Scandinavia" presentation by **Titi Owman, R.T., (R)(CT)(MR)** who gave a light-hearted yet informative discussion

on how MRI is practiced by MR personnel in Scandinavia.



Harald Kramer, M.D.,



Dow-Mu Koh, M.D.

The Technical Updates forum, moderated by **J. Carol Lee, B.S., R.T., (R)(MR)(CT)** provided excellent presentations by **Harald Kramer, M.D.**, and **Dow-Mu Koh, M.D.**

who discussed Whole Body Imaging and Body Diffusion Weighted Imaging, respectively. Each had delegates taking many notes – always indicative of high quality talks.



Meng Law, M.D.



Amanda Wood, Ph. D.

Ph.D., who spoke on fMRI from Paradigm to Analysis, giving us a neuroscientist's perspective of what is required. **Joseph Castillo, BSc. MSc.**, finished the session with a discussion on Artifacts in Spine MRI.

Sunday morning was opened by the new 2010-2011 SMRT President, **Julia Lowe, B.S., R.T. (R)(CT)(MR)** and **Janice Fairhurst, B.S., R.T., (R)(MR)**



Michael Knopp, M.D., Ph.D.



Chris Kokkinos, B. Apps Sc.

The afternoon Neuro Forum, moderated by **Colleen A. Hammond, R.T., (R)(MR)** started with **Meng Law, M.D.** who gave an excellent presentation on DWI and PWI methods and techniques. This was well complimented by **Amanda Wood,**

Chris Kokkinos, B.App.Sc, Pg.Cert (MRI) on "Techniques to Optimize Breast MRI." This was followed by **Brian Hargreaves, Ph.D.**, who spoke about New Techniques for Breast MRI.

The Body MRI Forum was introduced by President-Elect, **Charles Stanley, CRA. R.T., (R)(CT)(MR)**. **Neil Rofsky, M.D.** presented on some of the common "Abdominal MR Artifacts". This was followed by **Rod Jones, DCR, (R), MSc (MRI)** presenting some excellent images and



Laurian Rohoman, R.T., (R) (MR), ACR

scan protocols for Pediatric Congenital Cardiac MRI, and also included practical examples of current work in the clinical environment.

Laurian Rohoman, R.T., (R)(MR), ACR then gave an educational presentation on Female Pelvic Imaging.

After lunch, **Maryann Blaine, MAT, B.S., R.T., (R)(MR)** introduced more inspiring proffered papers, followed by the Clinical Musculoskeletal Imaging Forum. **Garry Gold, M.D.** presented on "Musculoskeletal MR at 3.0T," focusing on clinical protocols used at his site. The session concluded with a fast-paced and thorough presentation by **Hollis Potter, M.D.** on cartilage imaging methods. Both topics gave valuable radiological perspective on fields which have had substantial technical advances in recent years.

The SMRT Awards Ceremony was presented by SMRT President, **Julia Lowe** as well as Program Chair, **Michael Macilquham** and Education Chair, **Maryann Blaine**. Awards were presented to the authors of the highest-scored paper


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and poster presentations. SMRT Awards were also granted to the following: The 2010 Crues-Kressel Award was presented to **John Posh, R.T., (R)/(MR)**, (not present), which is awarded for outstanding contributions to the education of magnetic resonance technologists. 2010 Fellow of the Section Awards were presented to **Cindy Comeau, B.S., R.T.(N) (MR)** and **Maureen Hood, MS, RN, R.T.(R) (MR)** in recognition of their significant and substantial contributions to the mission of the SMRT. The Distinguished Service Award was bestowed posthumously on **Denise Echelard, R.T., (R) (MR)**, in recognition of her outstanding contribution and service in the field of magnetic resonance. **William Faulkner, B.S., R.T., (R)/(MR)/(CT)** (not present)

received the SMRT Honorary Member Award, which is awarded in recognition of extraordinary achievement and an exceptional level of service and support for the section and the mission of the SMRT. Congratulations to these recipients for their well-earned recognition of their dedication and valuable contributions to the SMRT and worldwide MRI education.

Muriel Cockburn, DCR, B.Sc. (Hons) introduced the final forum on "Emerging Technologies", which was a very exciting look into the near future in clinical imaging. **Richard Ehman, M.D.**, presented on MR Elastography, highlighting the parallels between ultrasound methods with MR. **Arend Heerschap, Ph.D.** presented the latest in "Non-Neuro

Spectroscopy," focusing on spectroscopy of the prostate. The final lecture of the meeting was a phenomenal presentation by **Daniela Prayer, M.D.**, who discussed current "Fetal MR Techniques," demonstrating some excellent clinical examples of advanced neuro techniques being performed on fetuses still in-utero.

I would like to thank everyone who served on the Program and Education Committees for all the hard work over the last year. We hope that the meeting template demonstrated at the past two annual meetings provides a springboard for another excellent meeting in Montreal, Canada in 2011. We look forward to seeing everyone again next year! 



Betsy Sestina from the USA, left, and Titti Owman from Sweden share a lighter moment comparing MRI between the two countries.



President Julia Lowe, is pleased with the success of the 2010 Annual Meeting



John Totman was an active participant earning the second place research focus award for his paper, and subsequently assuming the duties as Chair of the Publications Committee



Michael Macilquhan (Program Chair) Maryann Maryann Blaine (Education Chair)



Left to right: Cindy Comeau, Julia Lowe, SMRT President, and Maureen Hood, SMRT Fellow Award recipients



The Crues-Kressel Award 2010 SMRT Award Recipient

John Posh, R.T., (R)(MR)
Bethlehem, Pennsylvania, USA

This award is presented for Outstanding Contributions to the Education of Magnetic Resonance Technologists.

John Posh graduated from the Radiography Program at Northampton Community College in Bethlehem, Pennsylvania, USA in 1987 and immediately entered the Advanced Imaging program at Johns Hopkins in Baltimore, Maryland, USA. He accepted a position at the Graduate Hospital in Philadelphia, Pennsylvania, USA and advanced from staff tech to Chief Tech and ultimately to Education Coordinator in charge of the clinical MRI Fellowship Program. During that time, John coordinated four NIH funded research projects on TMJ's, Airway Dysfunction, and Carpal Tunnel Syndrome, and three privately funded forensic imaging projects studying fatal gunshot wounds and Sudden Infant Death Syndrome or SIDS. At that same time, John was the primary instructor in MRI physics, procedures, and safety at the Cooper Hospital School of Advanced Imaging in Camden, New Jersey, USA. Since then, John has held

positions in Management, Research, and Veterinary Imaging but never stopped teaching. During the last 21 years, John has lectured extensively on numerous aspects of Clinical and Research MRI, Veterinary MRI, Forensics, and Paleoimaging. John is an adjunct lecturer and forensic research associate with the Bio-Anthropology Research Institute at Quinnipiac University in Hamden, Connecticut, USA and has been primary or co-author on 39 scientific presentations, several journal articles, and has contributed to 2 textbooks on Paleoimaging and Forensic Imaging. John has co-hosted 6 SMRT Regional meetings, and was a speaker at numerous more. As of September 2009, he has returned to teaching full time as Director of the MRI Fellowship Program at the University of Pennsylvania. [S]

Prior Crues Kressel Award Recipients

2009	Cindy Hipps
2008	Maureen Ainslie
2007	No award given
2006	Maureen Hood
2005	William Faulkner
2004	Luann Culbreth
2003	Gregory Brown
2002	No award given
2001	Anne Marie Sawyer
2000	Kelly Baron
1999	Charles Deschamps
1998	Emanuel Kanal
1997	Robin Greene-Avison
1996	Carolyn Roth
1995	Christine Harris
1994	Frank Sherlock
1993	Julie Strandt
1992	No award given
1991	John Crues, Herbert Kressel





Cindy R. Comeau,
B.S., R.T., (N)(MR)



Maureen N. Hood,
M.S., R.T., (R)(MR), R.N.

2010 Fellow of the Section Award

This award is given in recognition of significant contributions to the SMRT in fulfilling substantial contributions to its educational mission.

Cindy R. Comeau, B.S., R.T., (N)(MR). Since 1998 Cindy has been considered an internationally recognized expert in cardiovascular MRI and has trained applications specialists, MRI technologists/radiographers and physicians from around the world. In 1997 she became a member of the SMRT. In April 2001 Cindy was elected to serve on the SMRT Policy Board and received the President's Award for her Proffered Paper at the SMRT/BAMRR Joint Annual Meeting in Glasgow, Scotland. She was appointed the Regional Committee Chair in May 2002. Cindy has participated in numerous SMRT Annual Meetings as invited faculty, abstract presenter, and poster award winner. She was an invited speaker for the 2008 SMRT/ISMRM Joint Forum held in Toronto Canada and served as Co-chair for the SMRT/ISMRM Joint Forum held in Berlin, Germany in 2007. Since 1999, Cindy has volunteered her time to share her knowledge at numerous SMRT Regional Meetings and Chapter Meetings throughout United States and internationally.

She feels her greatest recognition of her knowledge came when she was requested to write a Cardiac SMRT Home Study Educational Seminar. She coordinated the content for Cardiovascular MRI: Update I released in June 2004 and she co-authored Cardiovascular MRI: Update II released June 2005. She has recently assisted in the content selection for a future Cardiac

MRI home study and will serve as the expert reviewer.

Cindy was the 2006-2007 SMRT President when she advocated continual development of electronic continuing education offerings to support a growing SMRT membership. As Past President she led a core group of MRI professionals in the completion of the 2008 MRI Curriculum Guide, a joint effort with the ARRT, ASRT and JRCERT organizations. In 2009 she guided the formation of the first New York/New Jersey Local SMRT Chapter. She strongly feels the SMRT will continue to grow in membership and she looks forward to serving in future SMRT educational activities globally.

Maureen N. Hood, M.S., R.T., (R)(MR), R.N., has been a member of the SMRT since 1992 when one of the first Regional Seminars was held in Seattle, Washington, USA. Maureen, better known as Mo, finds working in MR research and education to be a rewarding career. In 1998, Mo was elected to the SMRT Policy Board on which she served as the Chair of the Regionals Committee for two years. Subsequently, she was elected Chair of the External Relations Committee for a three year term, during which time the Global Relations sub-committee was formed to better serve our international community. She has served on many committees including the Recognized Continuing Education Evaluation Mechanism (RCEEM) application

committee which earned CE granting approval from the ARRT, paving the way for other countries to recognize the SMRT as a leader in MR education. Mo served as a question writer, literature reviewer and author for the SMRT Home Study program. She has also written many articles for the Signals newsletter and has helped to encourage the membership to get involved in allied health activities. Besides being involved in the annual meetings for years, she has also helped locally with several SMRT Regional meetings in the mid-Atlantic area. Mo has continued to be active and plans to stay involved in the SMRT to help encourage and mentor other MR professionals to become more involved in the SMRT. [S]

Prior Fellow of the Section Award Recipients	
2009	Gina Greenwood, Donna O'Brien
2008	Julia Lowe
2007	Greg Brown, Cindy Hipps
2006	Maureen Ainslie, Bobbie Burrow
2005	Michael Kean, Anne Marie Sawyer
2004	Heidi Berns, Carolyn Roth
2003	Robin Greene-Avison
2002	Kelly Baron, Julie Strandt-Peay
2001	Luann Culbreth, William Faulkner



2010 Distinguished Service Award


Denise Echelard R.T., (R)(MR)
(Posthumous)

This award is given to recognize outstanding contributions and extreme level of effort and service to the operation, effectiveness, and good reputation of the Section.

Denise Echelard R.T., (R)(MR) started her radiology career performing x-ray in Texas, USA and travelled to the northwest doing mobile CT and MRI. She worked in many hospitals and imaging centers in the Seattle area and worked at the University of Washington Research Center for 8 years. She spent the last years of her working life at the Seattle Cancer Care Alliance where her wonderful sense of humour and caring personality were great assets.

Denise was a dedicated member of

the SMRT and has left a legacy of two decades helping advance MRI technology and education in the Seattle area. She was a driving force behind every SMRT educational event held in the Northwest USA, and organised the 2008 Seattle SMRT Regional Seminar despite her ill health.

Denise's intelligence, commitment and professionalism were an inspiration to all her colleagues. The SMRT is extremely thankful for her years of dedicated service to the MRI community. 

Prior Distinguished Service Award Recipients	
2009	Bobbie Burrow
2008	Heidi Berns and Laurian Rohoman
2007	Julia Lowe
2006	Julie Strandt-Peay
2005	No award given
2004	Kelly Baron
2003	Richard Helsper
2002	Donna O'Brien




2010 Honorary Member Award

William Faulkner, B.S., R.T., (R)(MR)(CT)

This award is given to recognize extraordinary achievement and an exceptional level of service and support for the Section and mission of the SMRT.

William Faulkner, B.S., R.T., (R)(MR)(CT), is currently working as an independent consultant with his own company, providing MRI education and operations consulting. He has consulted for GE Medical Systems, ONI Medical Systems, MRI Devices, Bracco Diagnostics and other major MR vendors. He teaches a 4-day Basic MRI/Registry Review course at Chattanooga Imaging, a freestanding imaging center in Chattanooga where he also serves as their Director of Education, as well as basic and advanced courses for Philips Medical Systems. In November 2002, Bill was voted "Most Effective Radiologic Technologist Educator" by

on-line voting at AuntMinnie.com. He is a co-owner of OutSource, Inc., which also provides MRI education including Internet-based home study programs. Bill is the author of "Rad Techs Guide to MRI: Basic Physics, Instrumentation and Quality Control." He is the co-author of "Review Questions for MRI", "OPEN MRI", and "The Physics of Clinical MR Taught Through Images." Bill is an active member and Fellow of the Section for Magnetic Resonance Technologists (SMRT), the ISMRM Safety Committee and a member of the technical advisory board of the Institute for Magnetic Resonance Safety, Education, and Research. 

Prior SMRT Honorary Member Award Recipients	
2009	Herbert Y. Kressel
2008	No award given
2007	Michael Moseley
2006	Anne Marie Sawyer
2005	No award given
2004	Emanuel Kanal
2003	Frank Shellock
2002	Carolyn Roth



Education Committee Report

Maryann Blaine, MAT, BSRT(R)(MR)
Chair, 2010 Education Committee

"This year's Abstract Review Panel reviewed a record number of oral and poster abstracts to determine the President's Award, Proffered Paper and Poster Award recipients."

The 19th Annual SMRT Meeting, "MR Imaging Now and Into the Future," held in Stockholm, Sweden, was a record-breaking meeting with over 400 attendees. A thank you goes out to all those SMRT members who volunteered their time and shared their expertise to contribute to the success of this meeting. A major role of the Education Committee is the annual review of submitted abstracts. This year's Abstract Review Panel reviewed a record number of oral and poster abstracts to determine the President's Award, Proffered Paper and Poster Award recipients.

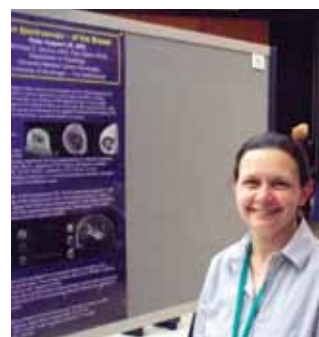
Attendees gathered Friday evening for the Poster Walking Tour and Reception. This event provided a venue for poster presentations, socializing, and networking. During this time the poster award recipients were introduced by [Maryann Blaine](#), Education Committee Chair, and [Michael Macilquham](#), Program Committee Chair; prior to providing a brief overview of their poster and answering any questions from the audience. In addition, most of the poster authors were available to answer questions about their work. The 19th Annual SMRT Meeting was off to a great start!

The Saturday session of the meeting included the presentation of the President's Award by Adriane Komancsek, titled "Measurement and Visualization of 4D Flow Characteristics in the Portal Venous System with 3T

MRI Compared to Doppler US." This presentation was followed by the 1st, 2nd, and 3rd place Research Focus Abstract presenters; [Sheryl Foster](#), [John Totman](#), and [Annette Merkle](#) respectively.

After lunch on Sunday, the 1st, 2nd, and 3rd place Clinical Focus Abstract presentations were given by [Joanne Donovan](#), [Sharmeen Joomun](#), and [Mark Smith](#) respectively. After completion of the Clinical MSK Imaging Forum, the SMRT Awards Presentation took place. During this time the President's Award Recipient, as well as the Proffered Paper and Poster Award Recipients were introduced by [Michael Macilquham](#), Program Committee Chair

and received their award from [Maryann Blaine](#), Education Committee Chair. (Please see page 11 for more information about these abstracts and authors.)



Maryann Blaine, Education Committee Chair organized the poster presentations

**Congratulations
to all the award
recipients, and a
thank you to all
the authors and
reviewers for your
dedication and
hard work.**

Congratulations to all the award recipients, and a thank you to all the authors and reviewers for your dedication and hard work. At this point it is important to note that we would like to make next year another record-breaking year for abstract submissions. Please consider submitting your work, and if you would like some assistance take advantage of our SMRT Abstract Mentorship Program. Details about this Program may be found on the SMRT Website.

As the objectives of the SMRT are to advance the education, training, and quality of MR technologists and radiographers world-wide, another role of the SMRT Education Committee is to work with the Program Committee

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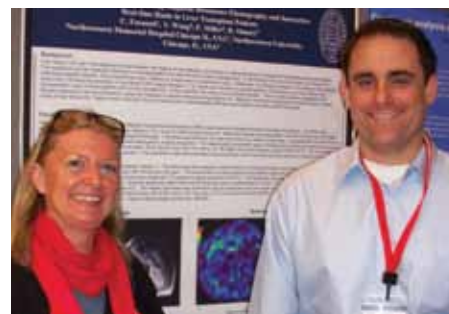
and the RCEEM Committee to provide continuing education for our members and the MR community. This year the SMRT Saturday and Sunday Sessions provided a total of 14.5 CE/CPD Hours, with the Joint Forum on Monday providing

an additional two hours for a total of 16.5 hours. In addition, a total of 36 hours of CE/CPD credit were approved through the RCEEM mechanism for the ISMRM-ESMRMB Joint Annual Meeting. Instructions regarding documentation

requirements for participants were included in meeting registration packets. The SMRT will continue to maintain this level of opportunity for attendees in future meetings. [S]



MR Technologists from the host country, Sweden, gather at the Poster Walking Tour: Titti Owman, Lund; Johan Kihlberg, Linköping; Annika Larsson, Sunderbyn; Bosse Ehnmark, Stockholm; Kirsí Turkulaine, Sunderbyn; Anna Lundström, Sunderbyn



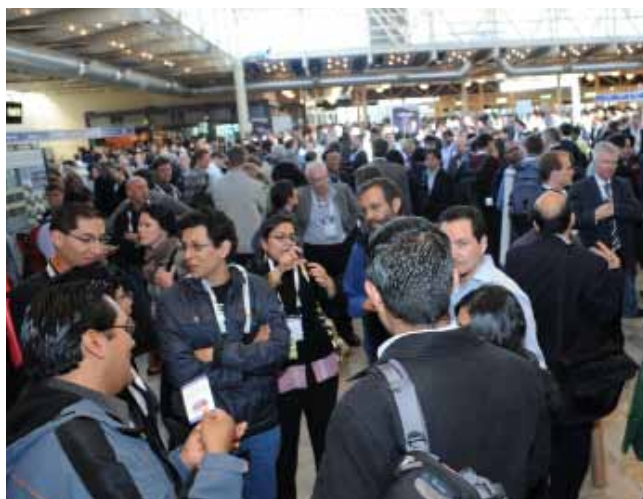
Titti Owman from Sweden greets Charles Fasanati, R.T., (R)(MR) who traveled from Chicago, Illinois, USA.



From left to right: Maureen Hood, Cindy Comeau, Vera Miller, Sonja Robb-Belville, Maryann Blaine and Janice Fairhurst enjoy the SMRT Annual Meeting



Sheryl Foster, MHS, (MRS)(MRI) presents the first place research focus paper



ISMRM/SMRT annual meeting attendees networking



ISMRM/SMRT Registration area in Stockholm, Sweden

2010 Proffered Paper and Poster Award Recipients

Clinical Focus Paper Award Recipients



1st Place

Evaluation of
AIDS Dementia
Complex (ADC)
Using MRI in the
Clinical Setting

Joanne Donovan, R.T., Karen Chisnell, R.T.
Radiographers MRI Unit, Department of Radiology,
St Vincent's Hospital, Darlinghurst, Sydney, Australia



2nd Place

Validation of Flow
Analysis Measurement
Tools Used for Prediction
of NPH Shunt Response

Sharneen Joomun, R.T., (R)(MR)
Keller Center for Imaging Innovation
Barrow Neurological Institute, Phoenix, Arizona, USA



3rd Place

Fast Gradient
Echo (FGRE)
Imaging at 3T to
Assess Hepatic
Steatosis

Mark Smith, M.S., R.T., (MR)(R)
Nationwide Children's Hospital
Columbus, Ohio, USA

Research Focus Paper Award Recipients



1st Place

Use of Clinical 3T MR
System in Longitudinal
Study of Anti-proliferative
Drug Treatment in LPK
Rodents

Sheryl Foster, MHSc.(MRS)(MRI)
Westmead Hospital
University of Sydney
Sydney, Australia



2nd Place

Evaluation of the Impact
of Temporal Resolution
on Harmonic Content of
Phasic Temporal Flow
Profiles of the Right
Coronary Artery Blood
Flow Measured using
PC- MRI

John Totman, DCR (R) MSc.
King's College London BHF Centre, Division of Imaging Sciences,
NIHR Biomedical Research Centre at Guy's & St. Thomas' NHS
Foundation Trust, and Sir Peter Mansfield Magnetic Resonance
Centre, University of Nottingham, England, United Kingdom



3rd Place

MRI to Show the
Reinnervation of
Nerve Anastomosis
After Spinal Cord
Injury

Annette Merkle, (R)
Department of Diagnostic Radiology
Medical Physics
University Hospital, Freiburg, Germany

Clinical Focus Poster Award Recipients



1st Place

Dynamic MRI
Enterography of
the Small Bowel in
Crohn's Disease

Catriona Todd, RT
Imperial College Healthcare NHS Trust
Charing Cross Hospital-MRI Department
London, United Kingdom



2nd Place

Patients with
Cochlear and
Auditory Brainstem
Implants. How We
Scan Them

Ilse Joubert, B-Rad
Radiology, Addenbrooke's Hospital and
University of Cambridge
Cambridge, England, United Kingdom



3rd Place

Clinical Applica-
tion of Iterative
Decomposition of
Fat and Water with
Echo Asymmetry
and Least-Squares
Estimation (IDEAL) as
an Alternative to Fat
Saturation

Mark Smith, M.S., R.T., (MR)(R)
Nationwide Children's Hospital
Columbus, Ohio, USA

Research Focus Poster Award Recipients



1st Place

Reduced
Gadolinium
Dose in Carotid
CEMRA using
Gadobutrol
at 3T

Stacy Vilu, RTR, RTMR
Medical Imaging
Sunnybrook Health Sciences Centre Toronto,
Ontario, Canada



2nd Place

Real-time MR
Guided Transurethral
Thermal Therapy of
the Prostate

Caron Murray, M.R.T., (MR)
Imaging Research
Sunnybrook Health Sciences Centre
Toronto, Ontario, Canada



3rd Place

Iron Deposition in
Adenohypophysis in
Adult Patients with
 β -thalassaemia:
Measurement
Modality with Multi-
Echo T2* Weighted
MRI Sequence: Our
Experience

Pier Paolo Arcuri
Department of Radiology
Pugliese-Ciaccio Hospital
Catanzaro, Italy

SMRT/ISMRM Joint Forum: Safe Exposure Limits for Staff and Patients



**Ben Kennedy, B.App.Sc. (MIT) MMRT
Chair, Joint Forum Committee and
SMRT Executive Member**

"The guidelines describe the various safety aspects and the corresponding practical rules and its purpose is to protect all employees who are involved with MRI as practically as possible."

Paul Glover's presentation predominantly observed the effects associated in the central nervous system with peripheral nerve stimulation, magnetic induced vertigo, metallic taste, and magnetophosphenes due to movement in high fields or twitched fields. He discussed the biology of the nerve axon, hair and retinal cells and how the temporal and spatial nature of the magnetic field induced currents can excite or modulate them. He demonstrated through evidence that these major sensory effects are mediated through induced electric fields induced by rotation or translation within the magnetic field. Magnetic susceptibility of sensory tissues in the vestibular system may also have some influence. Conductive fluid flow and the modification of that flow in the magnetic field are unlikely to have a significant role. Most importantly, no definite evidence of a direct magnetic effect on the central nervous system has been reported in humans less than 8T.

Donald Mc Robbie conducted Electromagnetic Field measurement surveys throughout the regions of the bore where the patient is situated and where staff is likely to be present during scans when required. It has been demonstrated both by measurement and calculation in Dr. McRobbie's and other studies that the ICNIRP reference values applicable to the imaging gradients will be exceeded for a person standing

within approximately 0.5m of the bore opening during scanning. Additionally RF reference levels may be exceeded or a person standing within 0.2-0.45m of the bore opening.

He concluded that there are a number of practical implications from the statutory enforcement of guideline limits for occupational exposure as in the Directive such as interventional MR procedures, support for vulnerable patients or children, monitoring of during sedation and general anaesthesia, and the use of manual contrast injections (which may be required for sick or very young patients). It was also noted that the excess ionizing radiation burden from using computed tomography as an alternative to MRI is estimated as 224 man-sievert per year. Extrapolated to the entire European Union an estimated 325 additional fatal cancers per year would be induced in patients from avoidable x-ray exposures. Given that there is still no known record of pathology caused from EMF exposure from a MRI system, this poses the similar thought with the use of the ALARA principle used with ionizing radiation with well known evidence of biological side effects.

Siji Greers discussed current and future ramifications for the MR workplace. The EMF Directive 2004/40/EC, was to be implemented in national legislation by no later than 30 April 2008. It became

clear in 2006 that the exposure limits stated in the Directive might inhibit the practical use of MRI in healthcare and research. This would have wide ranging ramifications for the application of this technology, which has been used in patient care for more than 25 years. It was decided to postpone implementation of the Directive until 2012. In the context of this postponement, both the content and the consequences of the Directive are being examined, looking in particular at avoiding restricting the use of MRI in practice.

The Netherlands, together with the United Kingdom, has played an important positive role in the postponement process. Based on their recommendation, a working group was set up comprising representatives from employers' and employees' organizations plus a number of additional experts, with the aim of developing practical guidelines defining safe ways for employees to work with MRI.

The guidelines describe the various safety aspects and the corresponding practical rules and its purpose is to protect all employees who are involved with MRI as practically as possible. The guideline is widely spread and brought to the attention of those who are involved in the discussion about changes to the EU Directive for the protection of employees from any potential dangers of exposure

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SMRT/ISMRM Joint Forum organizers and speakers, left to right: Freddy Stahlberg, Paul Glover, Penney Gowland, Siji Greers, Donald McRobbie, Ben Kennedy.

to electromagnetic fields. It describes various situations in which employees can be exposed to magnetic fields due to the application of MRI.

Dr. Freddy Ståhlberg discussed the debate around the EU Directive and its current position. In 2004, the EU adopted a measure known as the Physical Agents Directive 2004/40/EC, which member states are obliged by treaty to incorporate into their domestic legislation. Several groups, such as ISMRM, ESMRMB and the 'Alliance for MRI' (an umbrella group established 2007 and consisting of MEPs, professional bodies, funding agencies, patient groups and individual scientists) reacted on the directive, since it contained limits on occupational exposure to electromagnetic fields (EMF) that threatened to restrict the use of MRI in medical practice and research.

In October 2007, the European Commission proposed a postponement of the implementation deadline from April 2008 to April 2012 to allow more time for the evaluation of new data on EMF and its short-term effects on the human body. Later in October 2007 the interim report of the European commission's own study of consequences for the MRI community was received, showing that directive Action Values (AVs) are typically exceeded at around 1m from an MRI scanner. The final report, which was submitted in February 2008, confirmed that the exposure limit values (ELVs) are also exceeded in a range of realistic circumstances. The adoption of a new directive, which was passed using a special accelerated procedure, came into force on 26 April 2008, only four days before the original transposition deadline. Hence, the implementation of the directive has been postponed

until 2012, but a permanent solution at present (December 2009) remains the subject of ongoing debate. It can be foreseen that a formulation of the new directive will be proposed during spring 2010.

Overall this forum opened many eyes; particularly for those people from outside of Europe where this controversial Directive has virtually been ignored. Recent studies have demonstrated that the current form of this Directive is unachievable and it would seem impractical to just exclude MRI workers. Given that we still don't have hard evidence of the real effects biologically short or long term from current systems, it will be interesting to see if this EU Directive can be made practical in the MR environment. 



Business Meeting Report

Vera Miller, B.S., R.T., (R)(MR)
SMRT Secretary

"The SMRT leadership strives to cut costs without cutting membership benefits."

The SMRTs' annual business meeting was held on Saturday, 1 May 2010 in Stockholm. **Pam Vincent** called the meeting to order and welcomed the attendees. Acknowledgements and introductions were made for the Policy Board and Executive Committee. Pam thanked the Executive Committee as well as outgoing Policy Board members and Past President, **Wendy Strugnell** for their efforts during the year in service to the society. Congratulations to all who have new positions within the board:

Julia Lowe – President

Charles Stanley – President Elect,
External Relations Co-Chair, Publications-

Electronic Submissions

Gina Greenwood – External Relations
Co-Chair

Titti Owman – External Relations: Global
Relations Chair

Michael Macilquham – Executive
Member

Pam Vincent – Past President, Awards &
Nominations Chair

Steven Shannon – Finance Chair

Colleen Hammond – Bylaws Chair

Ashok Saraswat – Chapter Chair

Maryann Blaine – Education Chair

Barry Southers – Education: Student
Scope Subcommittee

Ben Kennedy – Membership Chair

Carol Lee – Program Chair

John Totman – Publications Chair

Julie Strandt-Peay – Publications –
Signals Chair

Anne Sawyer – Publications –
Educational Seminars Home Studies
Chair

Betsy Sestina – Regional Chair

Five Policy Board members are rolling
off and five new Policy Board members
have been elected to take their place.

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Back row left to right: Barry Southers, Sonja Robb-Belville, Vera Miller, Anne Sawyer, Heidi Berns, Maryann Blaine, Muriel Cockburn, Julie Strandt-Peay, and Joseph Castillo.
Middle Row left to right: Janice Fairhurst, Glenn Cahoon, Charles Stanley, Julia Lowe, Pamela Vincent, Mercedes Pereyra, Colleen Hammond, Titti Owman, and Carol Lee.
Front Row left to right: Ashok Saraswat, Ben Kennedy, Michael Macilquham, Betsy Sestina, Steven Shannon, John Totman, Filip DeRidder, and Stephen Darty

Policy Board terms are three years and many duties are required of these individuals. We appreciate the hard work of [Filip DeRidder](#), [Janice Fairhurst](#), [Paul McElvogue](#), and [Sony Robb-Belville](#) over the past three years. In-coming to the board are [Glenn Cahoon](#), [Mercedes Pereyra](#), [Betsy Sestina](#), [Barry Southers](#), and [John Totman](#). Congratulations on your elections. We look forward to working with you in the upcoming years.

We would like to acknowledge the tremendous support we receive from the ISMRM central office. The staff makes the day to day running of the SMRT possible. Very special thanks go to Jennifer Olson for all the hard work she performs for the SMRT. We would be lost without her.

SMRT Treasurer, [Steve Shannon](#) gave an update of the current financial situation. We received \$56,960.00 in general support from the ISMRM. Vendor donations totaled \$16,600 which was short of our budgeted 25,000. In the current economic climate we will need to work diligently to maintain a positive balance. The SMRT leadership strives to cut costs without cutting membership benefits. We reduced printing expenses for the meeting this year by providing CD ROMs in the place of syllabi. While the donations to the annual meeting were below budget we continue to receive Invivo's support toward the Educational Seminars Home Study program. This donation helps us provide important educational benefits and we appreciate Invivo's continued commitment to the SMRT.

This year we introduced the idea of vendor support for individual forums. We

hope this will entice more companies to support our meetings. The idea allows the vendor to fund a portion of the conference most beneficial to their area of business.

The annual meeting attendance was 425! This is an all time attendance record. [Michael Macilquham](#) and the Program Committee are to be commended for putting together a fantastic conference. Stockholm was a wonderful city and we all enjoyed the hospitality of the Swedish people. Thanks to our own [Titti Owman](#) (SMRT Policy Board member) for helping us to navigate the city.

SMRT Educational Regional Seminars have been steady with eight held during this fiscal year. Regional meetings are our grass roots support and we value the role they play in the overall educational mission. We will continue to provide support for regional meetings through the central office and the Regionals Committee. Look for announcements of upcoming regional seminars in your area.

Five new Local Chapters were added this year. Please look for a chapter near you or consider starting one of your own if none exist. It's a great way to provide MR educational offerings for technologists in your area.

External Relations is a very important function of the SMRT. [Gina Greenwood](#) and [Charles Stanley](#) have provided the SMRT voice in many venues this year. Please remember to look for the column in Signals for recent activities and updates from Gina and Charles. The following are two initiatives to which the External Relations Chairs

give focus. The Alliance is focused on passage of the Care Bill in the US. The SMRT is advocating on your behalf toward passage of the CARE bill. This effort embraces our core values and will help maintain standards for technologist education and accreditation. We encourage technologists in the US to write, call and e-mail your local representatives. Also Charles has been active with the RSNA to provide educational sessions for the MR technologist. There were five lectures at RSNA last year in which the SMRT participated.

We were able to add the UK (CPD) to the list of organizations that accept the SMRT as a CEU accrediting body. This means the 2010 annual meeting offered continuing education to technologists from North America, Australia, as well as the UK. We also for the first time are sending certificates of attendance to technologist who do not need CEUs but do need proof of attendance.

The SMRT has two main publication efforts. Both are on-line and can be accessed via the website. The first is *Signals*, our electronic newsletter. *Signals* has historically been published several times through-out the year but now will be going to a yearly newsletter with many "updates" as they happen during the year. We hope this will allow for timelier reporting of news and keep the membership up-to-date on SMRT events and activities. The second electronic offering available to members is our accredited Educational Seminars Home Study Program. These important materials keep SMRT members up-to-date with

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necessary education as well as providing requirements for mandated CEUs.

Anne Sawyer, editor of our Educational Seminars Home Study Program and **Julie Strandt-Peay**, Editor of the Signals newsletter, volunteer many hours of their time and put a tremendous amount of energy and effort into these member benefits for the SMRT. The SMRT is immensely appreciative of all their efforts over the years.

Ben Kennedy moderated the ISMRM-SMRT Joint Forum this year. "MR Safety Forum- Safe Exposure Limits for Staff and Patients" was the topic. The Forum is a collaboration between the ISMRM and SMRT, the forum occurs during each annual meeting. The lectures showcase the talents of technologists, radiologists, and researchers. Your two-day SMRT meeting registration entitles you to admission to this session held on Monday afternoon historically. Please watch for the next offering in Montreal 2011!

The Education Committee under the able leadership of **Maryann Blaine** has accomplished much. Below is a short list of the many endeavors of the members of this committee. Each year, the committee works to provide quality educational offerings to SMRT members. If you have any interest in participating, we'd love to have you! Contact **Maryann Blaine**, she'll



SMRT President Julia Lowe, presents the Past-President plaque to Pamela Vincent

surely have something for you to do! Amongst the many Education Committee duties last year was the following: Assist with annual meeting program and organization; Facilitate ISMRM accredited sessions during the annual meeting; SMRT/ISMRM Joint forum; Abstract review and scoring; Revamp of abstract process; Abstract mentor program completed; and Student scopes review and scoring.

The Global Relations Committee was active under **Filip DeRidder's** leadership. This important committee advocates the SMRT society throughout the world, bringing our mission of education to technologists and radiographers around the globe.

Pam Vincent reported on a committee being put together with the purpose of revising our Strategic Plan. The ISMRM continues their on-going work with their Strategic Plan and we need to follow suit to update the SMRT plan. It will be our roadmap to carry us into the next decade.

Pam Vincent concluded her term as president during the business meeting and passed the gavel on to **Julia Lowe**. We appreciate all of Pam's dedication and hard work.

Please speak, write or e-mail any of the SMRT Policy Board members. They would be glad to help you!

Julia asked the audience for any questions or new business:

From **Maureen Ainslie**: Could the financial information be placed on the website for viewing by the membership? We believe this to be possible and will work towards this goal.

We hope to see you all in Montreal 2011! We want your input and participation. Attend a SMRT regional, annual meeting, chapter meeting, or e-mail the Policy Board members. Be sure to VOTE this fall! [S]



Nominations and Awards Committee Report

Pamela Vincent MPA, R.T., (R)(M)(CT)(MR)
Chair, Nominations and Awards Committees

"Serving your profession and being involved in shaping the future direction of our society is an extremely rewarding professional endeavor."

Call for Nominations for Policy Board and President Elect

On behalf of the SMRT Nominations Committee, I would like to invite members of the SMRT to nominate individuals for candidacy to serve on the SMRT Policy Board (four positions) and for SMRT President-Elect (one position). To be eligible for candidacy to the Policy Board, the nominee must be a member in good standing of the SMRT for a minimum of two consecutive years. Nominees for President-Elect must have previously served on the Policy Board.

Policy Board positions are three year terms which will begin at the SMRT Annual Business Meeting to be held in May 2011 in Montreal, Quebec, Canada and will conclude at the 2014 Annual Meeting. The President-Elect will serve a three-year term as President-Elect, President and Past President, commencing May 2011. As these positions are voluntary, and demand a significant commitment, please consider the following information when considering an individual to nominate:

Policy Board

The Policy Board is responsible for ensuring that the SMRT achieves its stated purpose and objectives for creating and implementing SMRT policies, fundraising, and for managing SMRT finances. The board ensures the mission of providing quality education is met. The development of future

SMRT leaders and the maintenance and supervision of SMRT assets are also Policy Board responsibilities.

Election to the Policy Board is undoubtedly a great honor and represents peer recognition of an individual's contribution and standing in the field. Serving your profession and being involved in shaping the future direction of our society is an extremely rewarding professional endeavor. Policy Board membership entails a serious responsibility to participate actively in Policy Board activities and

requires a significant time commitment. Nominees must be prepared to make this commitment for the next three years. Candidates are expected to actively participate as committee members, and will be expected to serve as committee chairs. It is advantageous for Policy Board members to have the support of their employer as some commitments such as teleconferences and attendance at the annual meeting may require flexibility in the workplace. Generally, individuals selected to run for the Policy Board will have shown a commitment to SMRT activities – such as active involvement in SMRT committees, organizing chapter or regional meetings, participating in annual meetings by way of proffered papers or as an invited speaker. They are also typically focused on the importance of education for MR technologists and radiographers.

President-Elect

Eligibility for this position requires the individual to have served on the Policy Board and therefore, election to this role demands an even greater commitment to the SMRT. The President-Elect serves on the Executive Committee (as well as many other committees) and works closely with the current President and Past President.

This structure ensures excellent continuity in the direction and leadership of the SMRT and also provides an opportunity for mentoring into the role of President. Qualities required by the nominee are an ability to communicate well, provide

Policy Board
positions are three
year terms which
will begin at the
SMRT Annual
Business Meeting
to be held in May
2011 in Montreal,
Quebec, Canada
and will conclude
at the 2014 Annual
Meeting.

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Chapter Chat

Ashok Saraswat, M.S., B.Ed., R.T.,
Chair, Local Chapter Committee

"Within the past 12 months, five new SMRT local chapters have been created."


Year 2009-2010 has been very exciting for SMRT local chapters. Although term local chapter, may suggest otherwise, these are truly global chapters in various localities around the world. Local chapters of SMRT provide MR technologists the unique opportunity for quality continuing education in their geographic arena. MR technologists and radiographers who get actively involved with their local chapters benefit from all ISMRM/SMRT resources.

Within the past 12 months, five new

SMRT local chapters have been created. Currently we have 11 local chapters within the USA, one in Australia and one in Europe. The SMRT local chapter committee, working in conjunction with other SMRT committees and the SMRT Policy Board members, is constantly exploring any and all growth opportunities.

For those who are interested in establishing a local chapter or helping with a local chapter in their area and do not know whom to contact,

please contact [Ashok Saraswat](mailto:ashok.saraswat@ousmc.edu) (ashok.saraswat@ousmc.edu), any local chapter committee member, or follow the web link (<http://www.ismrm.org/smart/chapters/index.htm>).

Finally, I would like to take this opportunity to thank all local chapter committee organizers, officers, and volunteers. With their non-wavering interest and dedication, local chapters are doing extremely well and growing! 

Nominations and Awards *continued from page 18*

leadership of the organization, and to work effectively in a group. Election to the position represents the pinnacle of professional service and is an extremely rewarding endeavor. Nominees must be prepared to commit a large amount of time to fulfill the required duties of the position.

Nominations for Awards

Each year the SMRT recognizes the achievements of those who have made significant contributions to the SMRT and to the MR community. Please note a nominee may not be a previous recipient of the award they are currently being nominated for. As Chair of the Awards Committee, I invite members to submit nominations for the following awards:

Crues-Kressel Award

This award is presented for outstanding contributions to the education of MR technologists.

Fellow of the Section

This award is presented for significant and substantial contributions to the mission of the SMRT and contributions to the development of the Section.

Distinguished Service Award

This award is presented for outstanding contributions and level of effort and service to the Section.

Honorary Member Award


This award is presented in recognition of extraordinary achievement and an exceptional level of service and support for the Section and mission of the SMRT.

The Nomination Process:

Candidate nominations should be submitted directly to me at pamv@comcast.net or vincentp@nhlbi.nih.gov or to Jennifer Olson at jennifer@ismrm.org. The Bylaws of the SMRT require that nominations for Policy Board

and President-Elect be received by 1 September 2010. From the nominations submitted, the Nominations committee will determine a list of eligible candidates to be placed on the ballot which will be presented to the voting membership.

The Awards Committee will also present nominations for the Crues-Kressel Award to the membership for selection. (All other SMRT awards are voted on by the Policy Board.)

Nomination Ballots will be mailed to all voting members by 15 October 2010. Returned ballots must be postmarked by 1 December 2010 and received in the ISMRM/SMRT office by 7 December 2010 to be eligible. 



SMRT Gulf Coast Chapter

Sonja Robb-Belville, MSRS, R.T., (R)(MR)

"This organizing committee is already working on plans for a Fall Regional in September 2010. Contact mag.reson8or@gmail.com for information."

The SMRT Gulf Coast Chapter hosted an MRI Registry Review, and held its inaugural chapter meeting on 27 and 28 March 2010. Nearly 50 people from a 200-mile radius gathered to hear **Sonja Kay Robb-Belville** and **Teresa Adams-Tinker** share their knowledge of patient care, MRI physical principles, and clinical procedures while earning 12 category A CE credits. Several students took advantage of the opportunity to attend the review gratis by becoming student members of the SMRT, in addition to

the technologists who became members to enjoy a reduced registration fee to attend the meeting among the many other benefits of SMRT membership. Bracco Diagnostics contributed continental breakfast, and West Physics Consulting, LLC provided boxed lunches. Officers were elected after the chapter membership was established, **Sonja Kay Robb-Belville**, President; **Paula McCoy**, Secretary; and **Donnie Lester**, Treasurer. **Pamela O'Dowd** serves as the chapter's marketing coordinator and **Alice Nichols**

is the hospitality coordinator. This organizing committee is already working on plans for a Fall Regional in September 2010. Chapter members interested in contributing to the organizing committee are invited to contact mag.reson8or@gmail.com for information on the organizing committee's monthly meetings. Chapter membership is free, for more information visit the chapter web page at: www.ismrm.org/smart/chapters/gulfcoast. 



Attendees gather in the wonderful venue for the educational seminar.



Students (all SMRT members!!) Back Row from left to right: Eric Morgan, Stephanie Centeno, Sony Robb-Belville, Mary Alejandre-Garcia, Marquita Fountain. Front row from left to right: Sherin Joseph and Chau Truong



Organizing committee from left to right: Pamela O'dowd, Marketing Coordinator; Paula McCoy, SMRT Gulf Coast Chapter Secretary; Sonja "Sony" Robb-Belville, SMRT Gulf Coast Chapter President; Donnie Lester, SMRT Gulf Coast Chapter Treasurer. Not pictured: Alice Nichols, Hospitality Coordinator



Attendees have the opportunity to network and meet new colleagues during the lunch break.



Western Regional Educational Seminar Held in California

Julia Lowe, B.S., R.T., (R)(MR),

"Attendees were genuinely grateful for the opportunity to attend an educational seminar of such quality in their area."

The SMRT Western Regional Educational Seminar was held on Saturday, 13 February 2010 at the Ronald Reagan Medical Center on the UCLA campus in Los Angeles, California, USA. **Valerie Gausche** was the local Co-Chair and **Julia Lowe** and **Paul McElvogue** were the SMRT Policy Board Co-Chairs.

Speakers presented a variety of topics in the new Tamkin Auditorium located within the Ronald Reagan Medical Center. **Dr. Daniel Margolis** of UCLA opened in the morning with his talk on "Abdominal and Pelvic Pulse Sequence Optimization" followed by SMRT Publications Chair,



Dr. Daniel Margolis of UCLA



the Ronald Reagan Medical Center on the UCLA campus in Los Angeles, California, USA

Paul McElvogue with his talk on "Optimization of MR Parameters."

An SMRT Regional in Los Angeles would not be complete without **Dr. Frank Shellock**. Attendees enjoyed Dr. Shellock's "Safety Update: 2010" and took advantage of the question and answer time to ask relevant safety questions. **Dr. Kambiz Motamedi** of UCLA gave his presentation entitled, "Optimizing MSK Parameters at 1.5T and 3T." **Dr. Gerhard Laub** of UCLA and Siemens Medical Solutions gave

an interesting physics talk relevant to cardiovascular imaging and to nicely follow, **Dr. J. Paul Finn**, Past-President of the ISMRM and faculty of UCLA demonstrated exquisite cardiac and vascular images in his presentation, "Clinical Cardiovascular MRI." **Dr. Jeffry Alger** presented valuable information with his talk on DWI/PWI.

The buzz about the meeting during the afternoon break was all about the presentation, "Current Trends in Contrast Imaging" given by **Charles Stanley**. Charles used a novel approach in demonstrating the facts about recent NSF developments and the use of contrast media in MRI. Charles is currently an SMRT Policy Board Member and is a co-chair of the External Relations Committee and was recently elected incoming SMRT President-Elect. **Julia Lowe**, President-Elect was also there to moderate the

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Dr. Frank Shellock updating attendees on MR Safety



Dr. J. Paul Finn answering a question from an attendee

program, to speak with attendees about the benefits of being a member of the SMRT, and to provide attendees with current SMRT news updates. Julia had the opportunity to speak with SMRT members and meeting attendees during the breaks and to listen to suggestions and concerns.

Valerie Gausche, BSRT, Director, MRI Operations, UCLA Health System, Radiology and SMRT member together with her staff organized a beautiful environment in the new facility for registration, coffee breaks, lunch and the wine and cheese reception that followed the seminar. Meeting attendees expressed their gratitude for the nice setting and for such an outstanding program. Attendees were genuinely grateful for the opportunity to attend an educational seminar of such quality in their area. There were comments such as "When's the next meeting?"

In all, 69 attendees took part in a quality educational experience that was a success for all involved. Local vendors from **Bracco**, **GE Healthcare** and **Medrad**



Julia Lowe and Charles Stanley

were on site to chat with attendees and represent their companies. The SMRT would like to thank **Bracco**, **GE Healthcare**, **Medrad**, **Siemens Healthcare** and **West Physics Consulting** for their educational funding for the SMRT seminar. We would also like to thank **Dr. Sherlock** for providing lanyards, posters and his publication, "Reference Manual for Magnetic Resonance Safety, Implants, and Devices" to be given to attendees. I would like to thank **Toshiba American Medical Systems** Representatives for helping us distribute our seminar fliers to technologists. Our wonderful and talented speakers volunteered their time to provide an exceptional educational experience to attendees that day and we are grateful.

The SMRT is very happy with the success of this endeavor and wishes to extend a heartfelt thank you to **Valerie Gausche** and the faculty and staff of UCLA. We look forward to future SMRT seminars in the Southern California area and are confident that the interest in quality educational opportunities such as these will grow. 

Thank You Donors

The Section for Magnetic Resonance Technologists of the International Society for Magnetic Resonance in Medicine would like to thank the following donors for their generous sponsorship of the SMRT Western Regional

- Bracco Diagnostics, Inc.
- GE Healthcare
- Institute for Magnetic Resonance Safety, Education, and Research
- Invivo Corporation
- MEDRAD
- Siemens Medical Solutions
- West Physics Consulting

The SMRT gratefully acknowledges the following Corporate Members for their generous support of the educational activities of the SMRT:

Gold Corporate Members:

- GE Healthcare
- Philips Medical Systems
- Siemens Healthcare

Silver Corporate Member:

- Bruker Biospin MRI

Bronze Corporate Members:

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From left to right: Chad Durling of Bracco, Andrea Lewis of GE, and Steven Spilker of Medrad.

South Carolina Chapter Hosts President's Regional Educational Seminar



Carol Lee, B.S., R.T., R (CT)(MR)
Chair, Regional Seminars Committee

"We were fortunate to have speakers who have been a big part in making the SMRT what it is today."

The South Carolina Chapter of the SMRT hosted the President's Regional Educational at the Patewood Campus of the Greenville Hospital System on Saturday, 13 March 2010 in Greenville, South Carolina, USA. There were 112

explaining shoulder anatomy and his protocols. Our next speaker [Lisa Wall](#), a Senior MRI Technologist at Duke University Medical Center in Durham, North Carolina, USA, spoke on Eovist a new product used for liver imaging. She explained protocol design and presented great case studies.

We had a short break which gave the attendees time to speak to the vendors about the latest and greatest MR technology advances and MR services they have available. After break our next speaker [Dr. Dave Jordan](#) from West Physics spoke on "A New

Flair on Accreditation and Quality." He explained the new ACR updates, and the requirements for ACR vs. ICAMRL accreditation. Our next speaker, [Dr. Laura Amodei](#), the Medical Director at the Charleston Breast Center in Charleston, South Carolina, was named

"America's Top Radiologist in Breast Imaging" by the Consumer Research Council in 2007. She was back for a second time after great reviews for her lecture at our last meeting. She shared her expertise on Advanced MR imaging of the Breast.

The attendees enjoyed lunch sponsored by ICAD, networking with other technologist and speaking with the vendors. After lunch we started the afternoon off with our very own [Anne Sawyer](#) who traveled all the way from California which was an all-day affair getting to Greenville. She is the manager of the MR Whole Body Research Systems at the Lucas Center for Imaging at Stanford University School of Medicine, Stanford, California, USA. She has been a member of the SMRT since 1990 and has held many positions including Policy Board Regional Educational Seminar Committee Chair, Executive Committee and President of SMRT. She is also a Fellow of the SMRT, and recipient of the prestigious Crues-Kressel Award. She is

Continued on page 24 ➡



Dr. Jeff Weinke discusses shoulder arthrography

attendees; some traveling from all over the USA. The day started with breakfast sponsored by Philips Medical. Our first speaker [Dr. Jeff Weinke](#) an Orthopedic Radiologist from Greenville Hospital System, spoke on Hip and Shoulder Arthrography. He did a great job



Lisa Wall presented Liver Imaging with Eovist



Invivo representative Matt Bienke (right) is joined by speakers Drs. Dave Jordan and Laura Amodei

currently editor of the SMRT Educational Seminars home study program. She presented an excellent talk about "Why Accidents Happen in MR- A New Twist on MR Safety." It is always good to be reminded of the importance of MR safety issues that we need to be aware of everyday.


Our next speaker, **Paul McElvogue**, is the owner of Spectrum MR Education Services and an MR instructor at Gateway Community College in Phoenix, Arizona, USA. He is on the SMT Policy Board and the Chair of the SMRT Publication Committee. He spoke to us about Advanced MRI Spine Imaging. We were honored to have our next speaker, **Dr. Michael Moseley**, who traveled from California, where he is the Professor of Radiology at Stanford University in Stanford. He has published over 320 articles, received numerous awards for excellence including the prestigious ISMRM Gold Medal and achieved ISMRM and SMRT lifetime member status. We are very thankful for his support of MRI technologist and the SMRT. We enjoyed

his information on MR into the Next Decade. That is one of the reasons MR is so interesting, it is always changing.

Our next speaker, **Candi Roth** from Philadelphia, Pennsylvania, USA, is the CEO of Imaging Education Associates, LLC who has a wonderful on-line CT and MR educational program. Candi is one of the founding members of the SMRT; she is also a Fellow of the SMRT, a past SMRT President, and a recipient of the prestigious Crues-Kressel Award in 1996. She spoke on Tips and Tricks for Optimizing Protocols.

We want to thank all our speakers who gave up their weekend to provide

educational material for us. We were fortunate to have speakers who have been a big part in making the SMRT what it is today.

We want to give a great big THANK YOU to our sponsors who made it possible for us to have the very talented speakers at our Regional Seminar; without them the program would not be possible. The sponsors included **Bayer Healthcare, Bracco, CMS Imaging, East Coast Medical Systems, GE Healthcare, iCAD, Insight Imaging, Invivo/Philips Medical Systems, Sentinelle Medical, Siemens Medical Solutions, Toshiba and West Physics Consulting**. We also would like to thank the "Carolina girls" employers and Radiologists including **Greenville Hospital System, GRPA, Piedmont Orthopaedics, Easley Baptist and Upstate Carolina Radiology** for the wonderful door prizes. We hope to see all of you at our Regional Seminar next spring. Look for more details at: www.ismr.org/smr/chapters/SouthCarolina.htm. 



Candi Roth shares her imaging experience for optimizing protocols



Michael Moseley addressed the future of MR



The audience participates in the question and answer session



From left to right: Pam Vincent, Wendy Callahan, Melonee Elrod, Cindy Hipps, and Sheryl Peace



Third SMRT Benelux Regional Seminar Held in Brussels

Filip De Ridder, R.N.
UZBrussel, Belgium
Organizer

"The evaluations submitted at the end of the day indicated that the MR Benelux meeting was a great success, and confirmed that the SMRT has a future in the Benelux region."

On 27 March 2010 the 3rd SMRT Benelux meeting was held in Brussels. Organizer Filip De Ridder was assisted by co-organizers Raschel van Luijk and Sandra van den Berg, AMC Amsterdam, The Netherlands. The meeting was hosted by the radiological department of the Universitair Ziekenhuis Brussel and was held in the Auditorium P. Brouwer of the medical faculty. The location was ideal as it was spacious enough for all attendees to gather and socialize. We were pleasantly surprised by the good turnout of 207 registered participants from Belgium and The Netherlands.

The days program was divided into two separate sessions: The morning sessions covered an osteo articular part, while the afternoon discussions touched on advanced MRI, such as radiotherapy, surgical planning, functional, diffusion and fiber tracking of the brain.

Filip De Ridder, SMRT Chair of the Benelux meeting, opened the program with a welcome word and the usual announcements. He was followed by an introduction by **Professor J. de Mey**, head of the Radiological Department, Universitair Ziekenhuis Brussels. We were very pleased to have **R. Van den Broeck**, **Lector Medische Beeldvorming**,

Hogeschool-Universiteit Brussel, as the day moderator. He did a magnificent job during the day. **Dr C. Boulet**, Universitair Ziekenhuis Brussel, started the morning session with his talk on "Post Traumatic Injuries," his presentation was well



Filip De Ridder, UZBrussel, Organization and day moderator and R. Van den Broeck, Lector Medische Beeldvorming, Hogeschool-Universiteit Brussel

appreciated by all the participants. **Professor M. Reijnierse**, Leids Universitair Medisch Centrum, gave a fair overview on how to image "Inflammatory and Infection Diseases" on MRI.

The next speaker, **Dr. F. Van Hoenacker**, Universitair Ziekenhuis Antwerpen, gave a clear and splendid presentation around "Tumoral Pathologies." The different types of masses were well explained as well as how to image them. The next topic, MRI Arthrography of the Joints was well documented by **Dr. Shahabpour**, Universitair Ziekenhuis Brussel. She gave us an understandable overview of the different ways on how to perform direct – indirect MRI arthrography. The last topic on the morning session was given by **Mrs. S. van den Berg (RT)** co-organizer, Academisch Medisch Centrum, Amsterdam, on DTI Fiber Tracking of the Muscles, for most of the participants this was a new area of discovery. Mrs. van den Berg gave us a nice introduction, what MRI fiber tracking means in the muscles.

The walking dinner allowed for attendees to meet, share ideas and concerns. A brief walk outdoors was refreshing and cleared the mind for the afternoon session. Lunch time was also a good moment to visit the different booths from the sponsors, collecting information and time for networking.

The afternoon session started with a session in Radiotherapy and Neuro-

Continued on page 26 ➡


surgical planning. There was a small separate topic; the aim of this topic was: How to perform and what happens with the MR images when they leave the MRI department. This session started with **Dr. Nieboer**, Universitair Ziekenhuis Brussels, he explained how to perform and why high quality MRI images are important. Brain nerves were the red wires in his talk. The images leave the MRI department and **Dr. M. Moens**, Universitair Ziekenhuis Brussel, explained why they need high quality images of the brain, spine and how they use the MR images in the operating room: The next speaker, **K. Tournel**, Universitair Ziekenhuis, Brussel, spoke about the location of MR images in Radiotherapy Planning. For everyone in the hall it became very clear that detailed MR images are extremely important to treat the patient well at the radio therapeutic center.

The last coffee break was held at 15:00, just in time to stretch the legs and clear the head for the last session of the day.

Professor K. Deblaere, Universitair Zeikenhuis Gent, was given the hard job to inform and update the room about the latest techniques about "Functional MR Imaging." The last-but-not-least important speaker was **M. Caan**, Academisch Medisch Centrum, Amsterdam, on Diffusion/Fibertracking of the Brain. He gave a state-of-the-art on how to perform the use of fiber tracking in clinical practice. **Mr. F. De Ridder** ended the day with the traditional "Quiz." In total there were eleven questions. Every speaker selected one question and one segregation question.

In total 63% of the registered participants took part on the quiz. My congratulations to everyone, **Benedikt Vallaey**, AZ Groeninge, Belgium, won the day's

quiz and received the E150 prize. The questions and correct answers are available on the SMRT website (SMRT Regional Benelux, Quiz Results.) During and after the meeting we received very positive feedback and comments from the attendees, which was very encouraging. Although it was a long day, everyone felt their time was well spent. The evaluations submitted at the end of the day indicated that the MR Benelux Meeting was a great success, and confirmed that the SMRT has a future in the Benelux region.

On behalf of the SMRT I would like to thank our sponsors for their generous support. Also, I would like to thank my colleagues from my hospital for all their hard work. A special thanks to **Walter Rijsselaere** for his work and support. And last but not least, Jennifer Olson for all her support, advice and help in making this meeting a success, thank you all. 



The last coffee break was served at 3 pm. Just in time to stretch the legs and clear the head for the last session of the day.



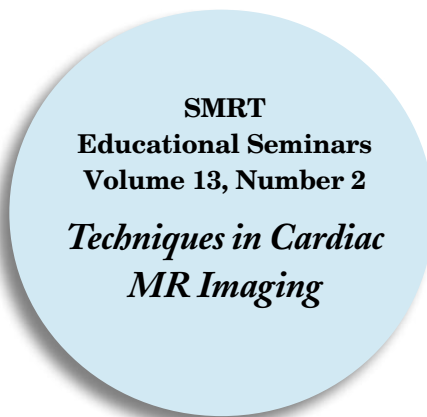
SMRT Educational Seminars Home Study Update

Anne Marie Sawyer, B.S., R.T., (R)(MR)
Editor
SMRT Educational Seminars
Home Study Program

"Out of the nine articles initially selected, Cindy Comeau, Manager of Advanced Cardiovascular Imaging in New York, New York, USA, prioritized these three to provide the SMRT members with a well-rounded issue including a clinical-based article, a technique article and an article describing new advancements in cardiac MR imaging."

We are pleased to present the SMRT Educational Seminars, Volume 13, Number 2: "Techniques in Cardiac MR Imaging." This is the 48th accredited home study developed by the SMRT, exclusively for the SMRT members. The accreditation is conducted by the SMRT, acting as a RCEEM (Recognized Continuing Education Evaluation Mechanism) for the ARRT. Category A credits are assigned to each educational symposium, which can be used to maintain one's ARRT and AIR registry. For this issue, we have selected three articles that provide a current review of cardiac MR imaging. Out of the nine articles initially selected, Cindy Comeau, Manager of Advanced Cardiovascular Imaging in New York, New York, USA, prioritized these three to provide the SMRT members with a well-rounded issue including a clinical-based article, a technique article and an article describing new advancements in cardiac MR imaging.

In the first article, the authors sum it up nicely by saying "The first recognized application of cardiac MRI was the assessment of anatomy, especially for congenital heart disease. With the development of faster acquisitions to image the moving heart, evaluation of cardiac function was possible and several new applications of cardiac MRI were instituted. The capability of accurate blood flow measurement added in establishing the role of MRI for cardiac



function and hemodynamic assessment in both congenital and acquired heart disease. Most recently, delayed-enhancement imaging has been used to depict areas of nonviable myocardium, essential in the management of ischemic heart disease. This technique has also been extended to characterizing several nonischemic myocardial diseases."

The second article presents what are experimental results but is quickly becoming standard clinical scan protocols in many MR facilities. The authors discuss the specific scan parameter selection and advantages of the Phase-Sensitive Inversion Recovery sequence and reconstruction method coupled with surface coil intensity normalization for detection of myocardial infection (MI).

The third article compares current techniques with a new technique, multicontrast late enhancement imaging (MCLE) in the assessment of myocardial

viability and wall motion. As stated by the authors "Cardiovascular MRI (CMR) is currently the most powerful noninvasive tool for the accurate, reproducible assessment of cardiac function and mass. Furthermore, gadolinium-enhanced CMR imaging, known as late gadolinium enhancement (LGE) imaging, has significant clinical and prognostic implications, enabling the differentiation of viable from nonviable, infarcted tissue."

Many thanks to [Cindy Comeau, B.S., R.T.\(N\)\(MR\)](#) from New York, New York, USA, for assisting in the selection of articles and for acting as our Expert Reviewer for this home study issue and the accompanying quiz that provides the continuing education credits.

Thanks also to [John Totman](#), SMRT Publications Chair and in the Berkeley, California, USA office of the ISMRM/SMRT, Jennifer Olson, Associate Executive Director, Mary Keydash, Publications Director, and the staff for their insight and long hours supporting these educational symposia.

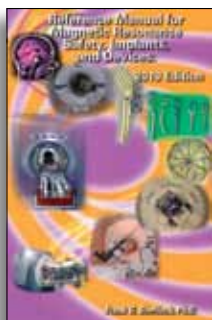
We would especially like to thank [John Wilkie](#) and all of the people at Invivo Corporation who generously support our home studies program, the SMRT Educational Seminars. Their continuing investment in advancing technologist and radiographer knowledge brings quality continuing education to the SMRT membership worldwide.

MRI Safety An Open Letter to the Food and Drug Administration

(This article represents the views of its author only and does not reflect those of the International Society for Magnetic Resonance in Medicine and are not made with its authority or approval)



Frank G. Shellock, Ph.D.
Adjunct Clinical
Professor of Radiology
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Keck School of
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Studies of Biomimetic
MicroElectronic Systems
National Science
Foundation,
Engineering Research
Center
University of Southern
California



*Reference Manual for
Magnetic Resonance Safety,
Implants, and Devices:
2010 Edition*

The Extrapolation of the Highest Spatial Gradient Magnetic Field Information for a Medical Device's Labeling is Not Advised

Recently, there have been draft versions or recent FDA approved labels for medical implants and devices that "extrapolated" the highest spatial gradient magnetic field information in consideration of the specifications that exist for a given MR system and with regard to the measured deflection angle determined for the particular implant or device.

Apparently, certain individuals at the FDA have suggested that this might be acceptable for medical device labeling. For example, these comments have been received by the FDA (adapted from the FDA comments pertaining to a particular medical device):

"The extrapolation of the highest spatial gradient magnetic field information has been suggested for a give device because it exhibited a relatively low magnetically induced deflection at 720-Gauss/cm. Therefore, it is recommended that additional analysis should be performed (i.e., some form of extrapolation of that incorporates the MR system manufacturer's measured value for the highest spatial magnetic gradient field and the

measured value for the deflection angle) in order to determine if there is a larger spatial gradient for which the device could be safely be scanned in a patient."

The assumption was that, if the device manufacturer could state a higher value for the spatial gradient in the labeling, this would provide patients with access to MRI scanners with maximum spatial gradient fields greater than the gradient at the location used for the displacement force testing (i.e., where the deflection angle was measured). However, this is a very problematic concept for many reasons, which will be explained in this monograph.

In one case, the labeling for a certain medical device stated a highest spatial gradient magnetic field value to be 2,500-gauss/cm (!), despite the fact that the actual spatial gradient magnetic field value used for the defection angle measurement was 700-gauss/cm. While this was presumed to be an extrapolated value, this particular vital information was not indicated in the labeling. That is, it did not add the phrase "extrapolated value" to, thus, indicate, "highest spatial gradient magnetic field of 2,500-gauss/cm (extrapolated value)".

Stating such a high value for the "highest spatial gradient magnetic field" for an implant will cause undue confusion for MRI professionals trying to decide if an implant or device is safe relative to the use of a particular MR system. For example, the MRI professional may, in fact, know the highest spatial gradient magnetic field for the MR system, which is much lower than the extrapolated value and, thus, be confused by the labeling and then there may be delay the decision to scan the patient or may not scan the patient with the implant.

To date, there is no formal statement or document from the FDA to indicate that such a practice of extrapolating to a higher spatial gradient magnetic field is recommended, suggested, or otherwise advised for the labeling of medical implants and devices and there is no guidance with regard to how to perform such an analysis that results in extrapolation of the highest spatial gradient magnetic field value.

Such a practice when labeling medical devices for MRI issues is highly discouraged for the following important reasons:

(1) This is not in accordance with the standard, ASTM

Continued on page 29 ➡


document (American Society for Testing and Materials (ASTM) Designation: F 2052-06 Standard test method for measurement of magnetically induced displacement force on passive implants in the magnetic resonance environment.

(2) Extrapolation of the highest spatial gradient magnetic field value has not been done for several thousand implants and devices that currently have FDA approved MRI labeling. As such, presenting “extrapolated” values has no precedent and is likely to cause

considerable confusion and concern for MRI professionals managing patients with implants.

Therefore, in consideration of the above information, the FDA is respectfully requested to cease the suggestion of using an extrapolated value for the reported highest spatial gradient

magnetic field in the MRI labeling of a medical device and to be consistent regarding the labeling information which has been applied to previously tested implants that have FDA approved MRI labeling.

Alternatively, the MRI community and device manufacturers would be grateful for specific guidance from the FDA regarding this matter if, in fact, there is to be a change in the de facto policy that has existed for the labeling aspects of magnetic field interactions for implants and devices. 

“Alternatively, the MRI community and device manufacturers would be grateful for specific guidance from the FDA regarding this matter if, in fact, there is to be a change in the de facto policy that has existed for the labeling aspects of magnetic field interactions for implants and devices.”

References

- (1) American Society for Testing and Materials (ASTM) International Designation: F 2503–05. Standard Practice for Marking Medical Devices and Other Items for Safety in the Magnetic Resonance Environment. ASTM International. West Conshohocken, PA.
- (2) Shellock FG, Woods TO, Cruess JV. MRI Labeling Information for Implants and Devices: Explanation of Terminology. *Radiology* 2009;253:26-30.
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- (4) Woods TO. Standards for medical devices in MRI: present and future. *Journal of Magnetic Resonance Imaging* 2007;26:1186-1189.
- (5) www.MRIsafety.com
- (6) American Society for Testing and Materials (ASTM) International Designation. F 2052-06e1. Standard test method for measurement of magnetically induced displacement force on passive implants in the magnetic resonance environment. ASTM International. West Conshohocken, PA.



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Monday, November 29

AS21 8:30 AM – 10:00 AM

Ethical Dilemmas: Regulatory and Business Ethics in Medicine Today

Karen J. Finnegan, MS, RT(R)(CV), FAVIR
Moderator
Richard Duszak Jr, MD
Frank J. Lexa, MD
Michael Delvecchio, BS, RT(R), (ARRT)

AS22 10:30 AM – 12:00 PM

Ethical Dilemmas: The Vital Role of Ethics in Clinical Excellence

Karen L. Green, RN, BSN, MHA, CRN
Moderator
Nabile M. Safdar, MD
Richard B. Gunderman, MD, PhD

AS23 1:30 PM – 3:00 PM

Picking Up the Pieces: Forensic Radiography Following Mass Disasters

Susan Crowley, BAppSc(MI), MRT(R) MA (Ed)
Moderator
Mark Viner, FCR, MSc, HDCR(R)

AS24 3:30 PM – 5:00 PM

Imaging Facility Design in an Age of Diminishing Resources

Morris A. Stein, FAIA, FACHA, B. Arch
Moderator
Morris A. Stein, FAIA, FACHA, B. Arch
Ronald L. Arenson, MD
Bill Rostenberg, FAIA, FACHA
Steven C. Horii, MD

Tuesday, November 30

AS31 8:30 AM – 10:00 AM

Who's Driving Radiology: Trends in Hospital/Radiologist Alignment

Donna Blakely, MS, RT(R)(M)(CRA), *Moderator*
Shay Pratt

AS32 10:30 AM – 12:00 PM

The Clinical Impact of Molecular Imaging

Charles Stanley, RT(R)(CT)(MR), *Co-Moderator*
David Gilmore, MS, CNMT, NCT, RT(R)(N)
Co-Moderator

A) The Growing Influence of PET/CT Clinical Decision-Making

Nancy M. Swanston, CNMT, RT(N), PET

B) Clinical Trials Network: The Impact Today

Kathy Hunt, MS, CNMT

AS33 1:30 PM – 3:00 PM

New Regulations and Their Impact on Radiology Practice

Donna Blakely, MS, RT(R)(M)(CRA), *Moderator*
Melody W. Mulaik, MSHS
Thomas W. Greeson, JD
Barbara Rubel, MBA

AS34 3:30 PM – 5:00 PM

Managing Risk for Optimal Patient Safety

Ellen Lipman, MS, RT(R)(MR), CAE, *Moderator*

A) Practical Methods for Creating a Culture of Safety in the Workplace

Charles Stanley, RT(R)(CT)(MR)

B) Patient Safety: A Clinical Perspective

Karen L. Green, RN, BSN, MHA, CRN

Wednesday, December 1

AS41 8:30 AM – 10:00 AM

Radiology's Changing Dynamics

Claudia A. Murray, *Moderator*
William A. Sarraile, JD
James P. Borgstede, MD

AS42 10:30 AM – 12:00 PM

Imaging Through Cross-cultural Lens: A Global Perspective on Ethics, Standards, and Human Resource Issues

Arlene M. Adler, MEd, RT(R), FAEIRS, *Moderator*
Cynthia Cowling, ACR, B.Sc, M.Ed
Lori Boyd, MRT(R), BA, MA

AAPM/RSNA Basic Physics Lecture for the Radiologic Technologist

(Approved for 1.25 AMA PRA Category 1 Credits and Category A+ credit for technologists)

Monday, November 29, 1:30 PM – 2:45 PM

Hybrid Imaging

Douglas E. Pfeiffer, MS, *Moderator*

A) SPECT/CT

Randell L. Kruger, PhD

B) PET/CT

Gary Sayed

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2010

11
September

John Koveleski 4th Annual Memorial Regional Educational Seminar
 The Penn State University Milton S. Hershey Medical Center, University Conference Center,
 Hershey, Pennsylvania, USA

11
September

President's Regional Educational Seminar
 Columbus Regional Hospital, Kroot Auditorium, Columbus, Indiana, USA

19-22
September

ISMRM Scientific Workshop: Improving Cancer Treatment with Advanced MR
 Chaminade Conference Center, Santa Cruz, California, USA

2
October

New England Chapter Fall Regional Educational Seminar
 Foxwoods Resort and Casino, Mashantucket, Connecticut, USA

2
October

Gulf Coast Chapter Fall Regional Educational Seminar
 Texas Children's Hospital, Blatner Auditorium, Houston, Texas, USA

15-17
October

ISMRM Scientific Workshop: MR Safety: RF Heating of the Human in MRI
 The Washington County Courthouse, Stillwater, Minnesota, USA

30
October

Northwest Chapter Fall Regional Educational Seminar
 Evergreen Hospital Medical Center, Kirkland, Washington, USA

13-14
November

5th Annual Meeting of the SMRT ANZ Chapter
 Crowne Plaza Hotel, Auckland, New Zealand

2011

19
February

Rocky Mountain Chapter Regional Educational Seminar
 Denver, Colorado

20-23
February

ISMRM Scientific Workshop: Ultra High Field Systems & Applications:
 7T & Beyond: Progress, Pitfalls & Potential
 The Fairmont Chateau Lake Louise, Alberta, Canada

12
March

South Carolina Chapter Regional Educational Seminar
 Greenville, South Carolina

7-13
MAY

ISMRM 19th Annual Meeting & Exhibition
 Palais des congrès de Montréal, Montreal, Quebec, Canada

7-8
May

SMRT 20th Annual Meeting
 Palais des congrès de Montréal, Montreal, Quebec, Canada

SMRT



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