

MEET YOUR NEW PRESIDENT



"Although I am the first SMRT President from outside the USA, I consider it a natural progression in the evolution of our society."

Wendy Strugnell, BAppSc(MIT)

In this Issue

2 Editor's Letter

2008 ANNUAL MEETING NEWS

- 3 Annual Meeting Program Report
- 5 ISMRM Joint Forum Report
- 6 SMRT Award Recipients
- 8 Oral and Poster Award Recipients
- 9 Annual Meeting Poster Reception
- 10 Annual Business Meeting

SMRT ACTIVITIES

- 11 MRI Primary Pathway
- 12 Call for Nominations

LOCAL, REGIONAL, GLOBAL REPORTS

- 13 Chapter Chat
- External Relations Report
- 14 Regional Update
- 15 SMRT Seminar: Denmark
- 17 SMRT Seminar: Benelux

INFORMATION UPDATES FOR YOU

- 19 Educational Seminars Update
- 20 MRI Safety Update
- 22 2009 Annual Meeting Announcement
- 23 RSNA Update

UPCOMING EVENTS

- 24 Calendar of Educational Offerings

Signals: Wendy, when did you first begin your work in MRI?

In 1987 the Australian Government installed five MRI systems in hospitals throughout Australia to assess the place for this new technology in the Australian health system. One of these was installed at my workplace, the Princess Alexandra Hospital in Brisbane, Queensland. In about 1989 I began my training in MRI on this low-field (0.3T) system while continuing my rotation through all other areas of diagnostic radiography. In 1993 I traveled to London and while working on "high-field" (1T and 1.5T) systems at Guy's and St Thomas' Hospitals I made the decision to specialize in the field of MRI. I returned to Australia in 1995 to take up a post in charge of a new clinical MRI department at my previous workplace. In this position I was fortunate to work with MR physicists and scientists and discovered a passion for the combined worlds of research and clinical medicine. In 2001, I moved to my current position at the Prince Charles Hospital to establish and manage a cardiovascular MRI research centre at the largest cardiothoracic hospital in Australia.

Signals: When and how did you become involved with the SMRT?

In 1995, Greg Brown and Michael Kean organized a wonderful educational meeting in a vineyard in country Victoria and introduced the SMRT to Australia. Shortly afterwards they established the Australia-

New Zealand Chapter and I became the Queensland representative. In 1998 I attended the ISMRM and SMRT Annual Meetings held in Sydney. I was thrilled to meet so many enthusiastic and conscientious MR radiographers and technologists from around the world as MRI was still a relatively small field at this time in Australia. I became a member of the SMRT at this meeting and was elected to the Policy Board in 2004.

One of the great benefits of membership of the SMRT is being a part of the ISMRM. I have attended seven SMRT Annual Meetings in the last decade and have found also attending the ISMRM Annual Meeting to be particularly rewarding. I believe MRI is one of the few fields in medicine where all the disciplines from science and technology through to the clinical realm interact so well with each other. I continue to find it fascinating to be a part of such a relatively new and dynamic field and particularly to have the opportunity to see pioneers in MRI, including Nobel Laureates, discuss their work.

Signals: Your efforts in getting the SMRT Education Symposia accredited for Australian and New Zealand radiographers is evidence of your interest in MR education. Why do you think education is important in this field?

This is such a dynamic and rapidly evolving field that it is paramount we maintain

Continued on page 2 ➡

ongoing professional development in MRI technology and practice. Constant advances in medical implants, devices and equipment also make it imperative that we, as the managers of a safe MRI environment, are constantly kept abreast of new developments.

My awareness of the need and interest in being able to access regular and affordable educational MRI meetings in Australia and New Zealand led me to establish annual meetings of the ANZ Chapter. This year our Third Annual Meeting will be the President's Regional and will be held in Sydney on 15 & 16 November.

Coming from a country with a small population spread across a large area and living a long way from the rest of the world I am also acutely aware of the great need to be able to access current and relevant education at home. It is important

that as MRI professionals we undertake our on-going professional development in our primary field and I think the SMRT is the best organization in the world to deliver this. During my term as President, the SMRT leadership will be very focused on increasing the amount of on-line education we offer.

Signals: Your election as the first president from outside the USA makes your term historic. What do you see as your vision for the future of the SMRT?

Regardless of nationality, it is a great honor to be elected president of an international organization. Although I am the first SMRT President from outside the USA I consider it a natural progression in the evolution of our society. As the world has become more of a global community it has become possible for us to expand our international presence and membership. With computer

technology becoming ever more advanced and affordable we are able to provide the same benefits for members wherever they live. Although the largest percentage of our membership is from North America, we currently have members from over 25 countries on five continents. The SMRT Policy Board is working hard to determine the diverse needs of our global membership so that we continue to provide relevant educational offerings and to increase our global presence. My ultimate vision for the SMRT is that as the Technologist section of the largest multi-disciplinary MRI society in the world we become increasingly recognised as the premier international society for MR technologist education and as the leading authority on all issues related to the delivery and operation of MRI services. 



Editor's Letter Julie Strandt-Peay, B.S.M., R.T., (R)(MR)

Welcome to a new era of the SMRT!

As you read this issue of Signals we are excited to be making history with our first elected President from outside of the USA. **Wendy Strugnell** shares her thoughts as she begins her term.

The 2008 Annual Meeting was deemed successful by all who were involved. Read about the events and activities as reported by the Program Chairs: **Anna Kirilova**, **Caron Murray** and **Nancy Talbot**; the Joint Forum Chair, **David Stanley**; the Awards Committee Chair, **Cindy Comeau** and the SMRT Secretary, **Vera Miller**. You may recognize colleagues in the SMRT Policy Board and Officer Photograph on page 9. Also on that page you will see that attendees took advantage of the

educational and professional networking at the Poster Reception. As Editor I would like to especially thank **Mark Spooner** and **Bryan Talbot** for taking many of the photographs at the meeting.

Education Committee Chair, **Sonja Robb-Belville** and member **Maryann Blaine** explain the different ways for technologists in the USA to become MRI certified. Past-President, **Carolyn Bonaceto** encourages us to seriously consider nominations for the future of the SMRT. Activities around the globe are reported beginning with the External Relations report by **Charles Stanley** and Chapter Chat by new Chair, **Ashok Saraswat**. **Janice Fairhurst**, Regional Chair brings us up to date with future programs. **Anne Dorte Blankholm** reports on the first SMRT seminar held in Denmark and **Filip DeRidder** reports on his successful Benelux seminar.

The latest offering of the Educational Seminars Home Study program is described by **Anne Marie Sawyer** along with new information about continuing education credits. MRI safety expert **Frank Shellock** shares information about hemostatic clips.

It's not too soon to think about planning for the 2009 Annual Meeting as announced by Program Chair, **Ben Kennedy**. RSNA is coming up soon and the SMRT continues to participate in the Associated Sciences. As always check the calendar of events in this issue and on the web-site often.

A final note: SMRT President Wendy Strugnell has not only committed to a busy time of MR professional activities; she gave birth to her new daughter in July! We wish the entire family well.

Happy Reading!



Anna Kirilova,
B.Sc., R.T., (R)(MR)



Caron Murray,
M.R.T., (R) AC, (CT)(MR)



Nancy Talbot,
M.R.T., (R)(MR)

2008 Annual Meeting Report

This year's attendance was outstanding, with over 300 Technologists and Radiographers from around the world.

The 17th SMRT Annual Meeting was held in Toronto, Canada on 3 and 4 May. While it was a bit cold and rainy outside, inside it was sunny and optimistic with our guests. This year's attendance was outstanding, with over 300 Technologists and Radiographers from around the world.

Saturday was opened with a welcome from our 2007-2008 SMRT President, **Carolyn Bonaceto**. Meeting announcements were made by **Anna Kirilova**, Program Co-Chair. **Steve Shannon** introduced our first speaker, **Joel Felmlee Ph.D.** who started the day with an enlightening talk on RF and SAR. **Cindy Comeau, B.Sc. R.T.,(N)(MR)** led us through Cardiac MRI and optimizing workflow to teach us how to complete a thorough exam in under one hour!

Our next speaker, **Domenic Kennedy, B.AppSc (MIT)** took us through MSK Imaging

Challenges, helping us with improving image quality with one of our high volume areas of work. **James Stuppino, B.S., R.T. (R) (MR)** discussed Veterinary MRI, showing us how to prep and scan dogs, iguanas and even snakes.

Before the luncheon, the SMRT Business Meeting was held with each Chair giving a brief update on the year's activities. The gavel was passed from **Carolyn Bonaceto** to **Wendy Strugnell** our 2008-2009 President.



Wendy Strugnell and Carolyn Bonaceto

Wendy spoke to the group regarding her vision for the SMRT and the challenges to be faced in the coming year.

Michael Noseworthy, Ph.D. opened up the afternoon session with a lecture on molecular imaging, increasing our knowledge on new contrast agents, spectroscopy, and new pulse sequences.

The Proffered Paper award recipients for the category of "Exploring Advanced MR Applications" then presented their work. The President's Award Proffered Paper went to **Violet Chua, B.Sc.** for her paper on "Evaluation of Territorial Arterial Spin Labeling in Acute Stroke Patients." Once again this year, the clinical and research work presented by MRI technologists and radiographers globally was inspiring.

Our first day concluded with excellent

Continued on page 4 ➡



Anna Kirilova, B.Sc., R.T., (R)(MR)



Joel Felmlee, Ph.D.



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



Domenic Kennedy, B.AppSc (MIT)



James Stuppino, B.S., RT(R)



Michael Noseworthy, Ph.D.



Violet Chua, B.Sc.

talks by **Thomas Helbich, M.D.** and **Leena Mammen, M.D.** **Dr. Helbich** gave a very thorough talk on the current indications and scanning methods for breast MRI as well as our future with 3T. **Dr. Mammen**, as well, gave an excellent talk on imaging the pregnant patient, from pregnancy related indications to MRCPs.

Saturday night was enjoyed by all as we moved to the Reception and Poster Walking Tour. After hearing the presentations from the poster submissions, attendees enjoyed refreshments, music, dancing, and lots of networking and socializing!

Sunday began with a welcome from our 2008-2009 President, **Wendy Strugnell**. Our first lecture followed, with an overview of Body MRI, indications and best scanning practices by **Russell Norman Low, M.D.** This was followed by a review of MR angiography and a comparison of 1.5T and 3T techniques by **Brian DeSouza, R.T. (MR)**.

Jason Polzin, Ph.D. educated us on Parallel Imaging Physics and Applications so that we can maximize our imaging speed and quality with these techniques.

Our second group of Proffered Paper Award recipients under the category of "Emerging MR Applications in Women's and Men's Health" presented their fantastic work. We followed this with the luncheon and the Awards Ceremony, where awards were presented to the paper and poster submissions. SMRT awards were granted to the following. **Julia Lowe, B.S, R.T. (R)(MR)** was the recipient of the 2008 Fellow of the Section Award. The 2008 Crues Kressel Award was presented to **Maureen D. Ainslie, M.S., R.T. (R)(MR)**. Awards for Distinguished Service were awarded to **Heidi Berns, M.S., R.T. (R)(MR)**, and **Laurian Rohoman, R.T., (R)(MR) ACR**.

Our afternoon session began with **Emanuel Kanal, M.D., F.A.C.R.** teaching us about Contrast Agents and NSF Risks; a well

needed lecture in our changing times. **John Posh, R.T., (R)(MR)** followed with a discussion of the MRI Safety Officer's Role, responsibilities and challenges.

Sunday concluded with a talk on Brain Imaging presented by **Carolyn Roth, R.T., (R)(MR)(CT)(M)(CV)** which was educational and entertaining. Our final speakers **John Christopher, B.A., R.T., (R)(MR)**, and **Laurian Rohoman, R.T., (R)(MR) ACR**, gave talks on artifacts we see in our practice as MRI technologists and radiographers, as well as remedies.

The Program Committee Co-Chairs **Anna Kirilova, Caron Murray** and **Nancy Talbot** would like to thank everyone on the program committee for all the hard work over the last year. This year was a fantastic Annual Meeting with outstanding attendance. We look forward to seeing everyone in Hawaii next year!



Thomas Helbich, M.D.



Russell Norman Low, M.D.



Brian DeSouza, R.T. (MR).



Emanuel Kanal, M.D. F.A.C.R.



John Posh, R.T. (R)(MR)



Carolyn Roth, R.T. (R)(MR)(CT)(M)(CV)



John Christopher, B.A. R.T.(R)(MR)



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



**David Stanley,
B.S., R.T., (R)(MR)
Chair
Joint Forum Committee**

ISMRM/SMRT Joint Forum

Nephrogenic Systemic Fibrosis—A Multidisciplinary and Global Issue

Described in 2000, nephrogenic systemic fibrosis (NSF) is an emerging systemic disorder characterized by widespread tissue fibrosis. The two-hour joint forum provided participants with the most current information concerning the onset of NSF after the administration of intravenous contrast material for MR imaging (i.e., gadolinium chelates). Understanding the issue of NSF and careful patient management prior to the administration of gadolinium contrast agents is now a requirement of consideration for all clinicians and technologists globally.

There were four main educational objectives which were (1) to relate the history and impact of NSF on the MR Community, (2) describe the global approach and finding for NSF, (3) Recognize and validate the need for careful patient screening for all MRA procedures and (4) implement improved patient handling and screening procedures for gadolinium contrast studies.



Emanuel Kanal, M.D., F.A.C.R.

Emanuel Kanal, M.D., F.A.C.R. began the session by giving a presentation entitled "NSF: Where have we been, where are we going?" which was an overview of the history of NSF and the new guidelines for patients who receive Gadolinium contrast agents. **Tim Leiner, M.D., Ph.D.** spoke on the challenges of Gadolinium and NSF outside of North America. The third speaker, **Eric Williamson, M.D.**, discussed the risk factor screening and contrast administration that included the experiences at his institution and their policy and procedures of administering gadolinium. The final speaker, SMRT Past-President, **Cindy Comeau, B.S., R.T., (N) (MR)**, presented "NSF Management:

a Technologist Perspective" in which she gave several tips for technologists and radiographers to manage the risks of NSF in patients who have renal insufficiency.

The last 30 minutes of the forum was dedicated to discussion between the presenters and the audience. There were so many questions for the presenters that the forum went several minutes over the scheduled end time. The presenters did stay afterwards to answer additional questions.

I would like to thank the speakers for taking time to prepare and present at the forum and making it a huge success.



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

The Section for Magnetic Resonance Technologists would like to thank the following donors for their generous support of the SMRT 17th Annual Meeting:

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Cindy R. Comeau
B.S., R.T., (N)(MR)
2007 SMRT Awards
Committee Chair

SMRT 2008 Award Recipients

On Sunday, 4 May in Toronto, the 2008 SMRT Awards were presented. As with past award recipients this years recipients all demonstrated a passion for promoting the mission of the SMRT. All have served in various SMRT functions which are so very important in maintaining the status of our organization. Their work and dedication has paved the way for all of us. I have been very fortunate and honored to have been able to serve with all of the recipients. Let's recognize our 2008 SMRT Award Recipients:

Maureen D. Ainslie, M.S., R.T., (R)(MR) **2008 Crues Kressel Award**

The Crues Kressel Award is for outstanding contributions to the education of magnetic resonance technologists.



Dr. Herbert Y. Kressel presenting the Crues Kressel Award to Maureen D. Ainslie.

Maureen has been an active member of the SMRT since 1991. She became involved in SMRT when she was sponsored by Squibb to attend the Annual Meeting in San Francisco in 1991. She was honored with the first Presidents Award at the Annual Meeting in New York City, New York in 1993 and sponsored a Regional meeting in Boston, Massachusetts in 1996.

Elected to the Policy Board in 1997, she served as Regional Chair, Program

Chair, and Executive Member. She was chosen to serve as President-Elect in 2002 and continued with her presidency in 2003-2004. She was instrumental in the process of the transfer of the hosting of the technologists list serve from Duke to SMRT in 2003. During her tenure as President, together with the SMRT Executive Board and Policy Board a strategic plan was developed and initiated in 2004. As part of this plan, the Policy Board actively worked towards application for RCEEM status with the ARRT which was granted to SMRT in 2005.

She was honored with a Fellow of the Section award at the Fifteenth Annual SMRT Meeting in Seattle, Washington USA. She is extremely proud of the accomplishments of the SMRT and continues to support technologist education by speaking at SMRT sponsored events, serving as an author for SMRT *Educational Seminars* program questions and speaking to technologists worldwide on the importance on investing in your self as a MR professional. Maureen truly encompasses the spirit of the Crues Kressel Award!

Julia Lowe, B.S., R.T., (R)(MR) **2008 Fellow of the Section Award**

This award is given in recognition of significant and substantial contributions to the mission of the SMRT.

Julia's interest in SMRT activities began in 1999 when she joined the organization



Julia Lowe, recipient of the Fellow of the Section Award

and attended the 8th Annual SMRT Meeting in Philadelphia. She recognized the importance of such an organization and was very impressed with the mission of the SMRT to provide

education to MR technologists.

She has submitted several abstracts that have been presented as posters at the annual meetings, three of which received awards in the research category. She was elected to serve as a Policy Board Member from 2001-2004 and was a member of the Education Committee until 2002. Subsequently, she served as chair of the Education Committee and helped extensively to organize the 2003 SMRT Annual Meeting in Toronto.

Julia helped implement the first Oral Poster Presentation session, which took place at the 2003 Poster Walking Tour. Julie also worked with the Program Committee to have, for the first time, the proffered paper presentations approved for continuing education credits for the 2003 meeting attendees. She has also been involved in the Home Studies, Student Scope projects and hosted a Regional in 2004.

Recently Julia has served as Chair of the External Relations Committee (ERC). As a part of the her duties of the ERC she has been very involved in supporting the CARE bill, serving the Associated Sciences Consortium of RSNA, communicating and attending meetings with the Health Professions Network and also supporting the Global Relations Committee. Julia's work as the ERC has really elevated the status of the SMRT as a professional organization internationally. She feels that the SMRT is a wonderful organization that provides means for technologists to continue education and communicate with other technologists. Julia has made so many contributions to the SMRT by participating in its various functions which makes her very deserving of SMRT Fellow status.

Heidi Berns, M.S., R.T., (R)(MR)

2008 Distinguished Service Award

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.



Heidi Berns, recipient of the Distinguished Service Award

Heidi has been a member of the SMRT since 1991 and actively participated as a member of the Finance Committee prior to being elected to the Policy Board in 1995. She has served

as Chair of the Bylaws Committee, Awards Committee, and Nominations Committee. She has also served as Secretary and President. She was the Co-chairperson of the SMRT South Central regional meeting hosted by the Iowa Chapter of the SMRT, which was held in Iowa City in 1994. She also hosted the President's Regional in Iowa City in 2001.

Heidi has been active in the abstract/poster presentations at the SMRT Annual Meetings and has spoken at several state and district meetings. In a joint project of the SMRT and the American Educators in the Radiologic Sciences (AERS), Heidi contributed to the course content for the publication of the MR Curriculum Guidelines. Heidi is currently the chair of the Ad Hoc RCEEM Committee, which evaluates submissions for CE approval. She believes that technologist education is vital and supports the mission of the SMRT. The SMRT is very fortunate to have Heidi at the helm of the RCEEM as she spends many hours ensuring the integrity of

RCEEM status for the SMRT. She certainly deserves this award for distinguished service for all of her time and efforts in supporting the mission of the SMRT.

Laurian Rohoman, ACR, RT(MR),CTIC, RT(R)

2008 Distinguished Service Award

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.

In 1993 Laurian became a member of the SMRT after she attended her first MRI meeting and has not missed any of the meetings since. She has been actively involved in the SMRT since 1997. She served on the education committee from 1997-2000 and has helped with scoring abstracts and posters during that period. She was elected and served as a Policy Board Member from 2000-2003. She was the program chair for the 2003 SMRT Annual Meeting which was held in Toronto. After rolling off the Policy Board in 2003 she served as a member of the program committee for the 2004 Annual Meeting. She has organized the first Canadian SMRT Regional Meeting in Montreal in September 2002 and was instrumental in getting the 2nd SMRT Regional Seminar in Ottawa off the ground in 2004. In 2004 she was elected SMRT Treasurer and served a

three-year term, which ended at the Annual



Laurian Rohoman, recipient of the Distinguished Service Award.

Meeting in Berlin. She continues to serve as member of the Finance Committee, the Program Committee and the Awards Committee. She has submitted several abstracts, which were accepted as posters at the

SMRT Annual Meetings. When the 4th Canadian SMRT regional meeting was held at the Sunnybrook Health Center in Toronto in November 2006, Laurian teamed up with the Montreal group to videoconference the meeting. This was the first SMRT videoconference which was successful. She believes that videoconferencing or webcasting the regional seminars will give technologists the opportunity to participate in these meetings, when travel is not an option. In October 2007, Laurian hosted the 5th Eastern Canada SMRT regional seminar in Montreal, which was linked by videoconference to Toronto.

The mission of the SMRT is to promote continuing education and she strongly

believes in continuing education for technologists in specialty areas. Her goal is to promote continuing education in Montreal by organizing SMRT Regional Seminars. She is proud to be a member and play an active role in the SMRT. Laurian always goes that "extra mile" which makes her such an important asset to the SMRT and very deserving of the Distinguished Service Award.



Left to right: Julia Lowe, Heidi Berns, Herbert Kressel, Maureen Ainslie, and Laurian Rohoman

2008 SMRT Abstract Award Recipients

Proffered Paper Award Recipients



President's Award – Violet Chua, B.Sc.,
National Neuroscience Institution
Department of Neuroradiology, Singapore
*Evaluation of Territorial Arterial Spin
Labeling in Acute Stroke Patients*

Clinical Focus Award Recipients



1st Place
*Susceptibility
Weighted Imaging
of Cartilage*

Zahid Latif, R.T. (R)(MR)(CT),
Wayne State University, Detroit, Michigan, USA



2nd Place
*NOVA (Non-invasive
Optimum Vascular
Analysis) Studies
Accurately Identify
Cerebral Vascular
Deficits to Redefine
Patients at Highest Risk
for Strokes*

Susan Ryan, R.T., (MR)(CT) ARRT
University of Illinois at Chicago, Chicago, Illinois, USA



3rd Place
*Prostate
Spectroscopy
in Radiation
Therapy: The
Role of the
Technologist
Beyond MRI
Simulation*

Theresa Richardson, R.T., (R)(CT)(MR)
Fox Chase Cancer Center, Philadelphia, Pennsylvania, USA

Research Focus Award Recipients



1st Place
*Treatment
Response of
Quetiapine
in Bipolar
Mania using
1H-MRS*

Barry Southers, B.S., R.T., (R)
University of Cincinnati Center for Imaging
Research, Cincinnati, Ohio, USA



2nd Place (Tie)
*Utilizing
BREASE (Breast
Spectroscopy
Exam) to
Monitor
Neoadjuvant
Chemotherapy
Response at
3T - Preliminary
Results*

Brandy Reed, B.S., R.T., (R)(MR)
The University of Texas, Anderson Cancer Center,
Houston, Texas, USA



2nd Place (Tie)
*NPI: A Joint
Acquisition/
Analysis
Approach
to Allowing
Binary Tissue
Classification of
the Brain*

John Totman, DCR, (R),
Sir Peter Mansfield Magnetic Resonance Center,
University of Nottingham, United Kingdom



3rd Place
*Utilizing a
Single Point
Dixon Sequence
for Fat/Water
Separation
in Dynamic
Contrast
Breast MRI: A
Feasibility Study*

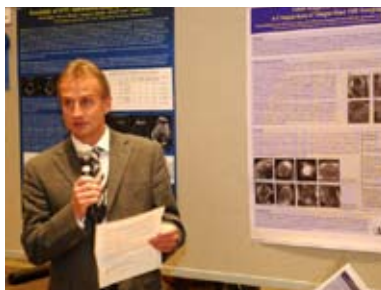
Caron Murray, M.R.T., (MR)
Sunnybrook Health Science Centre, Toronto,
Ontario, Canada

Clinical Focus Poster Award Recipients



1st Place
*Feasibility of
MTC Subtraction
Imaging of the
Knee at 3T*

David Stanley, B.S., R.T., (R)(MR)
GE Healthcare, Milwaukee, Wisconsin, USA



2nd Place
*Fetal Magnetic
Resonance
Imaging - A
Comparison
of Single-Shot
MR Imaging
Sequences*

Frank Stadie presenting for Denise Steffinger, R.T., (MR),
University Hospitals Ludwig-Maximilians-University of Munich, Germany



3rd Place
MRI Enteroclysis

Steven Williams, B.A., R.T., (R)(MR),
Mayo Clinic, Rochester, Minnesota, USA

Research Focus Poster Award Recipients



1st Place
*T1 Mapping in
Breast MRI Using
a Variable Flip
Angle Gradient
Echo Pulse
Sequence*

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



2nd Place
*Assessment
of SNR
Improvement
When Using
a 16-Channel
Receiver Array
Coil for
Anatomical
Imaging at 3T*

Jeannette Black, B.S., R.T., (R)(MR), National Institutes of Health,
MRI Research Facility, NINDS, Bethesda, Maryland, USA



3rd Place
*NMR Imaging
of Lungs with
Hyperpolarized
Helium
3-A Novel
Approach*

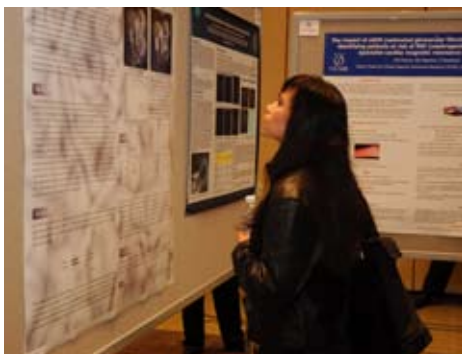
Hina Jaggi, M.S., R.T., (R)(MR), RDMS, CCRC,
New York University, New York, New York, USA

SMRT Executive Committee and Policy Board Members



*Back Row, Left to right: Steven P. Shannon, David Stanley, Filip DeRidder, Ben Kennedy, Stephen Darty, Ashok Saraswat;
Middle Row, Left to right: Anna Kirilova, Gina Greenwood, Caron Murray, Julie Strandt-Peay, Jane Francis, Anne Sawyer,
Heidi Berns, Nancy Talbot; Front Row, Left to right: Vera Miller, Janice Fairhurst, Carolyn Bonaceto, Wendy Strugnell,
Pamela Vincent, Cindy Comeau, Maryanne Blaine; Not Pictured: Charles Stanley, Joseph Castillo, Randy Earnest, Paul
McElvogue, Sonja Robb-Belville*

SMRT 16th Annual Meeting Toronto, Ontario, Canada Poster Reception



**Look, listen, learn,
and smile!**





Report of the SMRT Annual Business Meeting

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

Every year the SMRT Policy Board meets during the annual SMRT meeting. The purpose is to allow the membership both to know their elected representatives and understand the direction the organization is taking. We encourage participation both in this forum and more direct conversations with SMRT policy board and executive members. This is the transcript of the highlights from Toronto.



Left to right: Past President, Cindy Comeau; President, Carolyn Bonaceto; Incoming President, Wendy Strugnell; President Elect, Pam Vincent

Carolyn Bonaceto called Business Meeting of the 17th Annual SMRT Conference to order at 11:20am Eastern time. The members of the Executive and Policy Board were introduced both in-coming and out-going. The chairs made committee reports to attending membership as follows:

Finance

Steven P. Shannon, R.T. (R)(MR), SMRT Treasurer

A report was presented on the financial status of the SMRT, to-date the SMRT is on track this year with their fiscal budget. Donations for the Annual Meeting are down from prior years. Steve reminded attendees to please stop by at the SMRT meeting donor's exhibit booth and thank them for their support. The annual meeting has 300 plus registered attendees. Membership for SMRT is up overall, there is still a small percentage who do not renew.

External Relations

Gina Greenwood, MBA, R.T. (R)(MR), Co-Chair

Gina gave an explanation of the committee purpose and term of the chairperson and an overview of the activities both in the HPN and Alliance organizations.

Question: What is the status of the CARE bill? Passed the house sub-committee but with the upcoming elections future is unclear.

Global Relations

Jane Francis, DCR (R), DNM, Co-Chair

The committee for this year has pushed to take the SMRT more international. Currently there are 92 SMRT members in Europe. Language is still a barrier with this effort. A call to all to attendees to work towards more international membership was made by Jane.

Program

Nancy Talbot, M.R.T., (R)(MR), Co-Chair

Thanks to the audience for attendance. Please fill out the evaluations and comments, as they are useful for the next year's Program Committee.

Nominations

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

Cindy noted that feedback is needed addressing future award recipients, a short synopsis of awards process given. The current awards are to be presented during the Sunday session.

Regionals

Janice Fairhurst, B.S., R.T., (R)(MR), Chair

Thanks to all who held a regional or have one in the planning stages. Resources are available to all members if they wish to host a regional. SMRT will provide support both monetary and speakers. Please include comments on your evaluation as to the resources needed and where we might direct our efforts.

Signals Newsletter

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

Transition from hard copy to electronic versions of the Signals newsletter is complete.

We went GREEN!

Educational Seminars Home Studies

Anne Sawyer, B.S., R.T., (R)(MR), Editor

The June electronic *Education Seminars* will be on-line. Home Study tests will be available on-line hopefully by August 2008. Please provide feedback for the writers and reviewers.

Local Chapters

Pam Vincent, M.P.A., R.T., (R)(M)(CT)(MR), Chair

Thanks to the chapter organizers! Call to audience to direct interests in chapter formation to in-coming chair Ashok Saraswat. Please seek him out if you have any questions.

Membership

Filip De Ridder, R.N., Chair

Filip gave us an account of membership internationally. He defined for the audience the difference between voting and non-voting status.

Carolyn Bonaceto, SMRT President, thanked the audience for growth in membership. She was happy to be able to report this to the ISMRM board. We appreciate all our sponsors and encourage members to let the sponsors know how very much we appreciate the support they give us.

There was the passing of the gavel by Out-going President **Carolyn Bonaceto** to the In-coming President, **Wendy Strugnell**. Wendy then presented Carolyn with a plaque commemorating her year of service.

Questions and Comments from the audience:

Q. **Maureen Ainslie** requested the Policy Board's strategic plan either in our syllabus or via e-mail.

A. Wendy explained we are in the process of providing this but are in the evaluation and updating phase of the strategic plan.

Motion to adjourn by **Julie Strandt-Peay** and seconded by **Ben Kennedy**. Motion carried and meeting adjourned at 12:05 pm.



**Maryann Blaine,
R.T., (R)(MR)**



**Sonja K. Robb-Belville,
B.S., R.T., (R)(MR)
Chair
Education Committee**

MRI Primary Pathway

Two Roads - Same Destination

From its inception, MRI has involved physicists, chemists, engineers, physicians, and others intrigued by the technology and the role it plays in diagnostic imaging. Over the years MRI technologists have entered the workplace with varying educational backgrounds and prior work experiences with the desire to become part of this amazing imaging science. Like all the various imaging modalities, MRI has grown and changed over the years. Technologists and radiographers have found ways to learn and grow with the technology, some through formal MRI programs and others through the watchful eyes of fellow professionals in the clinical setting.

In January of 2006, a second "pathway" to becoming a MRI technologist in the USA was introduced by the American Registry of Radiologic Technologists (ARRT), the primary pathway. This pathway is intended to augment the already existing pathway of advanced registration in Magnetic Resonance (MR) for technologists who already hold a primary credential. To earn a credential in MR one must pass the MR registry examination. A summary of the two pathways to registry eligibility is provided below. Additional information regarding both pathways can be found on the ARRT website <http://www.arrt.org>.

Primary pathway candidates gain registry eligibility through successful completion of a formal educational program in MR that is accredited by a mechanism recognized

by the ARRT. Further, the program's director must verify that the student has completed and passed the didactic and clinical competency requirements. The didactic portion of such a program must follow an accepted curriculum (MRI Curriculum Update). The clinical competencies required by the ARRT include general patient care

As the MRI world continues to evolve, so does the education and credentialing of MR technologists.

competencies in addition to competencies in MRI procedures of the head and neck, spine, thorax, abdomen and pelvis, musculoskeletal system, special imaging procedures, and quality control. Primary pathway candidates who successfully pass the MR registry exam earn their credentials as registered technologists denoted by the abbreviation RT(MR)(ARRT).

Advanced registration in MR is available to technologists holding a primary credential in a supporting discipline, such as: Nuclear Medicine, Radiation Therapy, Radiography, and/or Sonography. Nuclear Medicine Technologists can be credentialed through either the ARRT or the Nuclear Medicine Technology Certification Board (NMTCB). Radiation Therapists and Radiographers must be credentialed through the ARRT. Sonographers can be credentialed through the ARRT or the American Registry

for Diagnostic Medical Sonographers (ARDMS). The Primary Pathway is not intended to replace registration in MR as an Advanced Modality. Advanced registration will continue to be available as a pathway for earning a credential in MR. Individuals holding a credential in one of the supporting disciplines mentioned above whom complete the ARRT MR clinical experience requirements are considered MR registry eligible, and will be awarded an advanced credential in MR upon successfully passing the MR registry exam. For example, a technologist holding a primary registration in Radiography who also earns his or her credential in MR would be denoted by the abbreviation RT(R)(MR)(ARRT).

It is important to note that eligible candidates from both pathways take the same examination to earn their credential in MR. Technologists already working in MRI who do not hold a credential in the modality should be aware that Continued Qualification will be implemented by the ARRT in 2011. This means that technologists certified in the year 2011 and beyond will be required to update their credential via continued qualification criteria every ten years.

As the MRI world continues to evolve, so does the education and credentialing of MR technologists. The creation of multiple pathways to earning a credential in MR supports including professionals from diverse backgrounds who continue to come together to support each other and the profession we all share.



**Carolyn Bonaceto, B.S.,
R.T., (R)(MR),
Chair
Nominations Committee**

Nominations Committee "Call For Nominations"

The opportunity is now. This is your chance to help define the direction and growth of the SMRT for the next several years. The incoming members of the Policy Board will shape our growth, status and recognition within the medical and research community. The Nominations Committee is currently seeking a list of names to place on the ballot to serve on the SMRT Policy Board. The chosen member will serve a three-year term taking office in April 2009 at the business meeting that will be held in conjunction with the Annual Meeting in Honolulu. Individuals who are nominated must meet eligibility requirements as defined in the SMRT By-Laws. They must be voting members of the section and be willing to follow through with the responsibilities as defined in the Policy Board SOP. These include being an active committee member on various committees, chairing or co-chairing a regional educational seminar, being available for teleconferences and attending the Annual Meeting. If you or someone you know would like to be considered please contact me via e-mail at carolyn.bonaceto@rcn.com to discuss the commitment and see if this is something you or your candidate can truly commit to.

The SMRT Membership also nominates candidates for the office of President Elect. The President Elect serves a three year term as President Elect, President and Past President, representing a significant

commitment to the SMRT. Qualified individuals include SMRT members in good standing who have the ability to lead the organization and must have served as an at-large member on the Policy Board.

The Past President also chairs the Awards Committee. The Award nominations are yet another responsibility of the SMRT membership. Members submit the names

***"Now for the most important item;
YOU
NEED TO VOTE!"***

of qualified individuals to the Awards Committee. The Cruess-Kressel Award is presented to an individual for his/her outstanding contribution to the education of MR technologists. The SMRT awards also include the Honorary Membership given in recognition for extraordinary achievement and service. The Distinguished Service Award given for outstanding contribution for the operation of SMRT and the Fellow of the Section Award given for significant participation in SMRT functions.

All Policy Board nominations should be submitted directly to Jennifer Olson, jennifer@ismrm.org in the ISMRM/SMRT Business Office or to me by close of business on 1 September 2008. Ballots

containing the nominations presented by the Nominating Committee and/or nominations made by direct Member petition will be mailed to all voting Members no later than 15 October 2008. Ballots must be postmarked by 1 December 2008 and received at the SMRT offices by 7 December 2008.

Now for the most important item; YOU

NEED TO VOTE! The current SMRT leadership is painfully aware that the process of mailing your ballot is tedious. *Who uses a stamp anymore? Well right now we do but we are making an effort to allow the ability to vote on line. For various reasons that is not available to us just yet. But please help*

select those individuals you would like to see represent you and your profession.

The SMRT is growing and we are having an impact. We all need to keep the momentum going internationally. We are a relatively new organization but our membership needs to grow and you can help. Is everyone you work with a member? Spread the word. SMRT is committed to building a strong organization that will provide you with the best there is in MR specific education and to ensure your voice is heard in the medical and research community. Please make an effort to be a part of ensuring that globally the individuals responsible for the day to day activities of running an MR system are educated and informed.



External Relations Report

**Charles T. Stanley,
CRA, R.T., (R)(CT)(MR)
Co-Chair
External Relations
Committee**

Health Professions Network

Charles Stanley attended the Health Professions Network meeting in April, held in Baltimore, Maryland, USA. The Health Professions Network is a group of health care professionals who represent the diverse specialties of allied health professions, including provider organizations, educators, accreditors, credentialing agencies, and administrators. The group works together in a cooperative and interactive manner on issues relevant to workforce development and the delivery of health care in the United

States. At the meeting we were presented with lectures on subjects such as "Achieving Cultural Competency in the Workplace," "Restoring Federal Funding to Healthcare Training Programs," and "Health Care Without Harm – Improving the Health Care Environment." We also had a business meeting at which we received and update on the Health Professions Awareness Project and the involvement of Johnson & Johnson.

Afterwards the group divided into subcommittees that were working on various projects. The subcommittee that Charles is continuing to work with is the Health Professions Awareness Committee. The

Awareness Committee continues to formulate and refine strategies to achieve funding for the Health Professions Awareness Project. This committee will reconvene at the HPN meeting later this year.

CARE Bill

The bill is working through the legislative process in both the House and Senate. All efforts right now are focused on keeping the Bill sponsors engaged as there is no real opposition to the Bill, but also no one has seen the desire to "hurry" it along either. The next CARE Bill meeting is scheduled for later this year.



Chapter Chat

**Ashok Saraswat, M.S.,
B.Ed., R.T., (R)(MR),
Chair
Local Chapters
Committee**

It is matter of great privilege and honor to chair the SMRT Local Chapter committee. As a part of the transition, **Pam Vincent** called a meeting of Local Chapter officers during the Annual ISMRM/SMRT Meeting in Toronto, Canada. This was a grand opportunity for me to meet chapter leaders from all over the world to better understand and learn from what they are doing to enhance the mission of the SMRT. There was much excitement and willingness to grow on the foundation provided by **Pam Vincent** and her team. A couple of suggestions were made to facilitate the growth of SMRT Local Chapters. It was requested to simplify the process of opening a new local chapter and eliminate the need of having separate bank accounts in different countries or

remote regions. **Ashok Saraswat** and **Pam Vincent** will work with SMRT/ISMRM to see if anything can be done to improve the existing process.

Currently, SMRT has about 10 local chapters serving the interests of our members in the United States, Australia and New Zealand. Many prospective Local Chapters are in various stages of development. Due to the collective efforts of many individuals and committees, the SMRT membership is growing at a rapid pace. MR technologists and radiographers worldwide are finally recognizing the benefits of belonging to the SMRT as a global society which truly cares about their interests. It is only natural that the growing membership base will further the mission of our MR society by establishing strategically located SMRT/ISMRM local chapters worldwide. This sustained growth at grassroots level is sure to fulfill the functions of SMRT in different geographical

areas by providing equity, diversity and balance in the MR profession. The growth opportunity in the form of a symbiotic relationship between a local chapter and the main SMRT/ISMRM is clearly advantageous. Stay tuned to the exciting Local and or regional educational seminar coming near you!

Local Chapters can be formed by only two to three SMRT members within the geographical boundaries of a state or a country and are a vital link in the SMRT/ISMRM network. A strong, effective chapter is a powerful voice in representing the mission of our section. SMRT Local Chapters provide some of the most tangible SMRT benefits directly to the MR technologists. If you are a SMRT member and are interested in forming a local chapter, please e-mail Ashok.Saraswat@osumc.edu or contact any Local Chapter Committee member.



Regional Report

**Janice Fairhurst, B.S.,
R.T., (R)(MR), Chair
Regional Committee**

Hello All,

Well summer has finally arrived here in New England, Boston Red Sox are in first place and the New England Celtics are ahead three games to one over LA in the finals! You might ask what does that have to do with SMRT Regional Seminars? Well for one it shows the competitive nature of New Englanders and that being said, I'd like to challenge all of you to help the SMRT

Regional's committee to beat last years tally of 8 Regional Meetings! We have 50 states in the USA and hundreds of other opportunities internationally; it would be an honor to help anyone who would like to accept the challenge to hold a Regional Meeting and help beat last year's numbers.

I know I've said this before but it's worth repeating I can't stress enough the importance of the educational seminars, the dedication and hard work that each one takes to plan, the commitment and enthusiasm of the guest speakers who bring cutting edge education locally so

that technologists and radiographers from all realms of the field can stay on top of their game. Show your support for your profession by either attending a local meeting or by hosting one of your own. We'll be happy to help!

With heart felt thanks, gratitude and admiration for those of you who have already stepped up to the plate, no pun intended.

I look forward to hearing from the rest of you!

2008 Seminars to Date

26 January 2008	Grand Rapids, Michigan, Spectrum Health Butterworth Campus, North Central Regional Seminar
09 February 2008	Denver, Colorado, SMRT Rocky Mountain Regional Seminar
29 February 2008	Arhus, Denmark, Afdelingsradiograf MR-Centret Sygenhus, Denmark Regional Seminar
15 March 2008	Greenville, South Carolina, Southeast Regional Seminar
12 April 2008	Brussels, Belgium, Universitair Ziekenhuis Brussel, Benelux Symposium Regional
09 August 2008	Hershey, Pennsylvania, John Koveleski 2nd Annual Memorial Seminar

Upcoming Educational Opportunities

04 October 2008	Seattle, Washington, Fred Hutchinson Cancer Research Center, Northwest Regional Seminar
15-16 November 2008	Sydney, Australia, President's Regional, 3rd Annual Meeting of the Australia/New Zealand Chapter
28 February 2009	Denver, Colorado, SMRT Rocky Mountain Regional Seminar
Date TBA	New England Chapter, SMRT Regional Meeting





Regional SMRT Seminar News: Denmark

Anne Dorte Blankholm,
M.Sc., R.T., (MR),
Co-Chair

I hereby thank the SMRT for support and for giving me the opportunity to make the first SMRT Regional Seminar in Europe a reality!

On 29 February and 1 March 2008 the first SMRT Regional Seminar was held at Aarhus University Hospital,

Skejby in Denmark. The comprehensive two-day program provided an excellent opportunity for the attendees to increase their knowledge and advance their skills in the field of MRI and to meet **Cindy Comeau**, our SMRT Past President from the USA.

Some last minute changes had to be made to the program because one of the guest speakers from Sweden, **Sara Brokstedt**, was unable to attend. We were very lucky that **Peter Vuust**, Associate Professor at the Centre for Functional Integrative Neuroscience (CFIN) and Professor at the Royal Academy of music in Aarhus, Denmark agreed to come and give a speech about some of the very interesting research he has done on the effect of music on the brain.

Friday the program started out with coffee during registration. After the welcome **Leif Østergaard**, Professor at CFIN and Aarhus University Hospital started out talking about diffusion and perfusion in the brain and about the latest news concerning diagnosis of stroke. **Bengt Nielsen** from GE spoke about new developments from GE. One of

them was MR-PET. After a short break **Peter Vuust** gave his presentation about music and the brain. He made us listen to easy as well as difficult rhythms and convinced us that jazz music is a language or a kind of communication.

Suzan Dyve, neurosurgeon from Aarhus University Hospital, Aarhus Sygehus gave

Skejby gave a lecture about fetal MRI and how to perform this in practice. **Lars Rybro**, consultant in anesthesiology, spoke about anesthetizing infants, children and adults in the MRI environment and emphasized the safety issues. **Carsten Thomsen**, Professor from Rigshospitalet, Copenhagen University Hospital spoke as a representative from Siemens about 3T.



Participants gather prior to the seminar.



Attendees network at the coffee break.

After a quick cup of coffee a bus took us to the Old Town where we had an extremely interesting and entertaining guided tour. The sun finally decided to shine. Saturday morning we started out with information about the SMRT. Information was given about the advantages of being a member, as a global citizen and about the needs and wishes for future SMRT Regional Seminars as well as the opportunity of a Local Chapter.

The next lecture by **Anne Dorte Blankholm** was about NSF (Nephrogenic Systemic Fibrosis) about the disease and the latest updates. It is a very hot topic around the globe these days and an issue that we have to address and take seriously as

an interesting lecture about how the recent developments in MRI, such as tractography and fMRI can be very useful in neurosurgery.

Before lunch **Claes Aspelin** talked about the latest developments from Philips. After a delicious lunch and the opportunity to network, **Brian Staunsbøl-Grøn**, consultant in radiology from Aarhus University Hospital,

MR technologists, radiographers and radiologists. We had a very interesting discussion about the different practices in the different countries and departments.

The next speaker was **Titti Owman**, Lund University Hospital, Sweden who talked about how to prepare small children and infants for MRI using specially designed earplugs and small earmuffs. The session on

parallel imaging was given by the physicist **Lau Brix**, Aarhus University Hospital. After the coffee break we carried on with our SMRT past president **Cindy Comeau, B.S., RT(N)(MR)** from New York, USA who spoke about cardiac imaging and the technical considerations. The next speaker was **Won Yong Kim**, who spoke about plaque imaging. **Lau Brix** gave his second lecture on kt-SENSE and kt-BLAST - a very interesting but also difficult topic.

The next presentation by **Kaare Brix**, radiographer at Copenhagen University Hospital, Herlev, Denmark and application specialist for Philips gave a very instructive and radiographer-specific information on MRI of the female pelvis.

After a delicious lunch and time for networking **Cindy Comeau** carried on giving her second session on cardiac MRI and applications on 1.5Tesla, which was very educational. The last speaker was **John Gelineck**, consultant in radiology at Aarhus University Hospital, Aarhus Sygehus. He spoke about musculoskeletal MRI describing

the experience in joint imaging.

Overall the meeting was a fantastic opportunity to catch up with colleagues from USA, The Netherlands, Switzerland,

Sweden, and Denmark. It was an opportunity to learn from experts and to get inspired to continue to strive for excellence in our work.

I would like to thank the speakers for generously donating their time. The meeting would not have been successful without such experienced, dedicated and knowledgeable speakers. Of course the seminar would not have been possible without the phenomenal support of our sponsors. **Philips Healthcare, Initios Medical AB, Bayer Schering Pharma, GE Healthcare, Vicare Medical and Siemens Medical Solutions.**



A group of participants visiting Old Town



Left to right: Titti Owman, Cindy Comeau, and Anne Dorte-Blankholm in Old Town

I would also like to thank Aarhus University Hospital, Skejby for generously lending us the auditorium with audio visual equipment and very competent staff to operate it. I would like to thank my co- chairs: **Titti Owman** and **Dora Zeidler** for their help. Last but not least I would like to thank Jennifer Olson at the ISMRM/SMRT office for all of her invaluable help. I could not have done this without her.

Overall the meeting was a fantastic opportunity to catch up with colleagues from USA, The Netherlands, Switzerland, Sweden, and Denmark. It was an opportunity to learn from experts and to get inspired to continue to strive for excellence in our work.



Filip De Ridder, R.N.
Chair
Membership Committee

Report: SMRT Regional Benelux Symposium

On April 12th the first SMRT Benelux meeting ever was held in Brussels. The meeting was hosted by the radiological department of the Universitair Ziekenhuis Brussel and was held in the Auditorium P. Brouwer of the medical facility. 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 210 participants from Belgium and The Netherlands. There were 70 people on the waiting list to participate in the meeting, but unfortunately there was only space for 210 participants. As usual the day began with coffee and juice during registration.

The program was divided into two separate parts: the morning sessions covered a basic MRI program, while the afternoon discussions touched on advanced MRI, such as state of the art abdominal imaging, MRI of the heart, MR Angiography and MRI perfusion.



Seminar Chair, Filip De Ridder

Filip De Ridder, SMRT Membership Chair, opened the program with a welcome word and the usual announcements. This was followed by an introduction by **Prof. J. de Mey**, Head of the Radiological Department, Universitair Ziekenhuis Brussel. We were very pleased to have **R. Van den Broeck**, **Lector Medische Beeldvorming**, Hogeschool-Universiteit Brussel, as the session moderator. He did a magnificent job during the day, and gave a fine quiz presentation for the motivated participants at the end of the day.



Left to right: W. Rijsselacre, R. Van den Broeck, J. Francis, P. Devacht, and F. De Ridder

Prof. R. Luybaert, Ph.D., Universitair Ziekenhuis Brussel, started the morning session with his talk on "Basics MRI," his presentation was well appreciated by all the participants, especially his correlation between CT and MRI. Always good to hear are the safety issues on MRI, **P. Van Schuerbeek, Ph.D.**, Universitair Ziekenhuis Brussel, gave a fair overview of the "MRI Safety 1.5 -3T" issues. The next speaker: **Prof. Dr. S. Dymarkowski**, Universitair Ziekenhuis Leuven, gave a clear and splendid presentation around "MRI of the Heart." The technique and the different types of imaging of the heart were well



Dr. Vanderdood: MR Abdominal Imaging

explained. The last topic of the morning session was "MRI Contrast Medium: Species, Application and Reactions" by **Dr. B. Op de Beeck**, Universitair Ziekenhuis Antwerpen. He gave an overview of the different types of contrast media, the possible problems that we encounter during our daily work, valuable information about the recent Nephrogenic Systemic Fibrosis (NSF) problems and the recommended

guidelines for Glomerular Filtration Rate (GFR).

The walking lunch 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.

After a nice lunch, the afternoon session started with **Jane Francis**, Policy Board Member SMRT, The John Radcliffe Hospital, Oxford, England, who gave a very interesting presentation on the role of the SMRT in the MRI world. **Dr. K. Vanderdood**,

Maaslandziekenhuis, Sittard, The Netherlands, was the next speaker. **Dr K. Vanderdood** spoke on protocol optimization for: "Imaging of the Body." He presented several imaging scenarios for the chest, liver, kidneys and pelvis to demonstrate different disease processes.

"MRI Artifacts" was the next topic, that topic was shifted to the afternoon session. **Filip De Ridder** gave a clear overview of the different types of artifacts in MRI. During his talk he explained the cause, recognition and how to avoid MRI artifacts.

The last coffee break was served at 3.30 pm. Just in time to stretch the legs and clear the head for the last session of the day.

Dr. J. De Jaegere, Maaslandziekenhuis, Sittard, The Netherlands, was given the hard job to inform and update the room about the new developments in MR Angiography. Starting from the head and ending at the toe. It was a well documented presentation, containing all the different

types of measurements, beginning with the conventional TOF, PC-MRA and the more advanced 3DCE MRA with key-hole imaging or shared view techniques. Last but not least important speaker was **Dr. M. Dujardin**, Universitair Ziekenhuis Brussel. She explained how to perform "MR Perfusion Studies" in the different organs of the brain, heart, breast, and kidneys, different types of perfusion studies, post-processing and the value of the perfusion studies. For many participants this presentation was very interesting, especially the outcome of the perfusion studies.

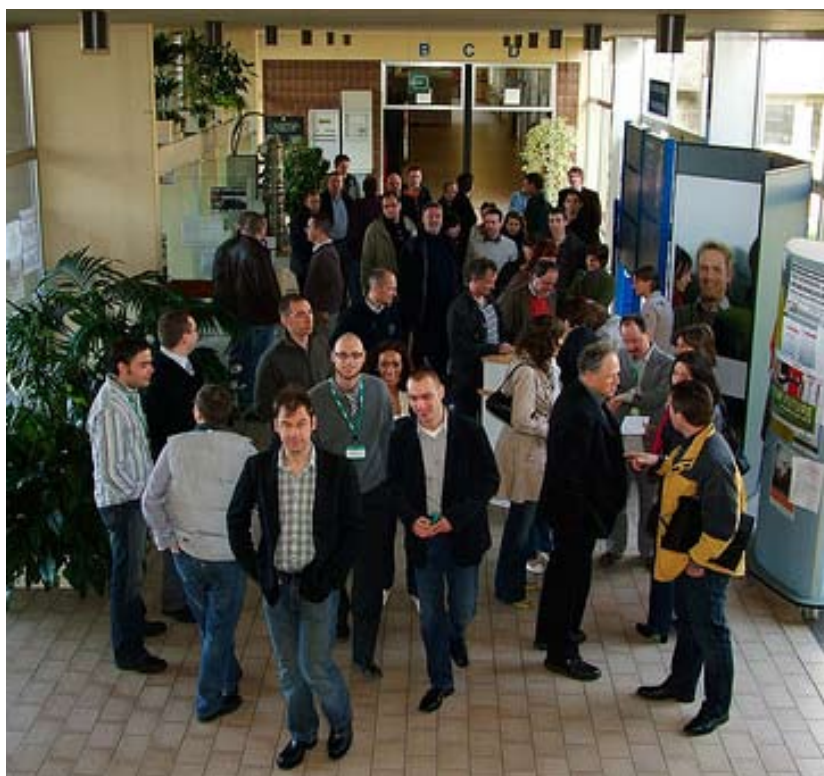
R. Van den Broeck ended the day with a quiz presentation. In total there were eleven questions. Each speaker selected one question from their presentation, with an additional three questions from the moderator. In total 40% of the registered participants took part in the quiz. My congratulations to everyone, **Ms. V. Vandermeersch**, UZLeuven, Belgium won the day quiz and received the quiz award. The

questions and correct answers are available on the SMRT web-site (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 there is a future of this type of meetings 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.



Benelux Seminar attendees networking.

Great News about the SMRT Educational Seminars!

The SMRT Educational Seminars home study program is expanding into an electronic format. What this means is increased accredited educational opportunities for SMRT members. The quarterly home study publication will continue to be mailed to members.

The electronic versions will provide additional Category A credits easily and quickly accessed via the SMRT website. The first offering will be available to members August 2008.



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

SMRT Educational Seminars Home Study Program

We are pleased to present the SMRT Educational Seminars, Volume 11, Number 3: "MRI of the Head and Neck at 3.0T." This is the forty-first home study developed by the SMRT, exclusively for the SMRT members.

The challenges associated with MR imaging at different field strengths is not a new experience to those at many clinical and research facilities around the world. In the early 1980's we started imaging patients at lower field strengths and then continued to increase up to 1.5T and more recently, 3.0T, 4.0T and higher. However, with the acknowledgment of the diagnostic value of MR came the reality of space limitations, and subsequently, lower field strength magnets continued to evolve. Mobile magnets became available to provide services to smaller hospitals wishing to remain state-of-the-art in their medical imaging offerings to their patient population. Despite past experience in imaging at various field strengths, the ascent to 3.0T is attracting more technologists, radiographers, radiologists and clinicians and has quickly become the most challenging technological endeavor in the world of clinical MRI.

As the number of 3.0T MR systems grows rapidly worldwide, the manufacturers strive to expand their arsenal of enticing new software, hardware and coils. Most importantly, this includes methods of reducing or eliminating the difficulties encountered by early users of this higher field strength. To quote Dr. DeLano and his colleagues in our first article, "Although most of the challenges that initially limited dissemination and adoption of 3T MR devices have been addressed by several approaches, the full potential of the added value of very high field is dependent on continued software and hardware

SMRT Educational Seminars Volume 11, Number 3

MRI of the Head and Neck at 3.0T.

development and the choices that are made in protocol implementation." They reinforce that statement by adding, "As with the transitions between low-field open scanners and 1.5T instruments, proper field-specific parameter selection remains important for the establishment of clinical protocols." We must, therefore, continue to broaden our knowledge to more fully embrace 3.0T capabilities to ensure we are taking advantage of its full potential. In addition, we must provide constructive feedback to the manufacturers of our MR systems, to ensure that they continue to develop improvements that will provide the optimum in MR imaging at 3.0T. We hope that these articles will provide insight into the optimization of 3.0T clinical scan parameters and the development of applications not yet fully realized.

We would like to express our grateful appreciation to [Kara Baczkowski](#) (Southport, Queensland, Australia), [Cindy Hipps](#) (Greenville, South Carolina, USA), and [Beth Winningham](#) (Birmingham, Alabama, USA) for writing the questions that compose the quiz required to obtain Category A continuing education credits.

Special thanks goes to [Greg Zaharchuk, M.D., Ph.D.](#), Assistant Professor, Department of Radiology, Stanford University, Stanford, CA, USA for acting as our expert reviewer.

Thanks also to [Paul McElvogue](#), 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.

Finally, we would like to thank [John Wilkie](#) and all of the wonderful people at Invivo Corporation who support our home studies program, the SMRT Educational Seminars. Their continuing support of technologist and radiographer education brings quality continuing education to the SMRT membership worldwide.

Please note that the SMRT Educational Seminars Home Study Programs are renewed continuously by the SMRT RCEM Committee for Category A CE accreditation. You may have some of the earlier published editions of the Educational Seminars Home Studies, home studies that you are still planning on completing the Quiz for CE credits. IMPORTANT: Please be aware that the earlier published Home Study CE credit amounts have been adjusted due to changes in the guidelines made by American Registry of Radiologic Technologists (ARRT) in the CE approval process. Self-learning activities such as directed readings and home studies that have previously been approved and/or renewed after 1 January 2006 are now evaluated on the content only. CE credits are awarded based on the time spent reading the text, and completing the learning portion of the activity only. The time spent completing the Quiz will no longer be awarded CE credit. All RCEMs are required to follow this ARRT guideline change. The ARRT also requires that the number of questions that compose the Quiz is determined by the guidelines established by the ARRT.

Hemostatic Clips and MRI Procedures: Some Safe...Some May Not Be

(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)

A recent "Sentinel Alert" from the Joint Commission addressing the prevention of accidents and injuries in the MRI suite stated: "All implants should be checked against product labeling or manufacturer literature specific to that implant, or peer-reviewed published data regarding the device or implant in question. Technologists should be provided with ready access to this information." The List posted on www.MRIsafety.com now contains information for over 1,800 implants, with more than 600 tested at 3-Tesla. This database is provided in an effort to facilitate the pre-MRI patient screening process, which is conducted by MRI healthcare workers.

In general, it was previously believed that since virtually all hemostatic (also called ligating) vascular clips and similar devices (including "endoclips" deployed through endoscopes) are made from nonferromagnetic materials such as tantalum, titanium, and certain forms of stainless steel, patients with these implants are not at risk for injury in association with MRI procedures. Furthermore, patients with nonferromagnetic versions of these implants may undergo MRI examinations procedures immediately after they are placed. To date, for the hemostatic clips that have undergone MRI testing, there has been no patient injury or other problem related to MRI.

However, there are now several new hemostatic clips in use today that present potential problems for patients referred for MRI procedures. Patients with these clips require special attention to ensure the safe use of MRI. In some cases, MRI is deemed "unsafe". In others, a "waiting" period is necessary and x-rays must be inspected to determine if the clips are present or not, prior to performing MRI.

Specific MRI-related labeling statements for the hemostatic clips that require further



**by Frank G. Shellock,
Ph.D., FACC, FACSM**

*Adjunct Clinical Professor
of Radiology and Medicine,
Keck School of Medicine*

*Director for MRI Studies
of Biomimetic
MicroElectronic Systems*

*National Science Foundation,
Engineering Research Center,
University of
Southern California,
Los Angeles, California*

*President,
Shellock R&D Services, Inc.*

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The 2008 Edition

attention during the pre-MRI screening procedure are, as follows:

Resolution Clip. The Resolution Clip (Boston Scientific Corporation) is indicated for placement within the gastrointestinal tract for the purpose of endoscopic marking or hemostasis. Currently, the Resolution Clip is labeled, as follows: "Do not perform MRI procedures on patients who have had clips placed within their gastrointestinal tract, as this could be harmful to patients."

Long Clip, HX-600-090L. The Long Clip HX-600-090L (Olympus Medical Systems Corporation) is indicated for placement within the gastrointestinal tract for the purpose of endoscopic marking, hemostasis, or closure of GI tract luminal perforations within 20-mm as a supplementary method. Currently, the Long Clip HX-600-090L is labeled, as follows: "Do not perform MRI procedures on patients who have clips

placed within their gastrointestinal tracts. This could be harmful to the patient."

Additional information: Olympus endoscopic clips have been shown to remain in the patient an average of 9.4 days, but retention is based on a variety of factors and may result in a longer retention period. Prior to MRI, the physician should confirm there are no residual clips in the GI tract. The following techniques may be used for confirmation:

(1) View the lesion under radiologic imaging. Olympus clip fixing devices are radiopaque. By using x-ray, the physician can determine if any residual clips are in the gastrointestinal tract. If no clips are evident under radiologic imaging, MRI may be accomplished.

(2) Endoscopically examine the lesion. If no clips remain at the lesion, MRI may be accomplished.

QuickClip2, HX-201LR-135 & HX-201UR-135. The QuickClip2, HX-201LR-135 & HX-201UR-135 (Olympus Medical Systems Corporation) are indicated for placement within the gastrointestinal tract for the purpose of endoscopic marking, hemostasis, or closure of GI tract luminal perforations within 20-mm as a supplementary method. Currently, the QuickClip2 (HX-201LR-135 & HX-201UR-135) is labeled, as follows: "Do not perform MRI procedures on patients who have clips placed within their gastrointestinal tracts. This could be harmful to the patient."

Additional information: Olympus endoscopic clips have been shown to remain in the patient an average of 9.4 days, but retention is based on a variety of factors and may result in a longer retention period. Prior to MRI, the physician should confirm there are no residual clips in the GI tract. The following techniques may be used for confirmation:

(1) View the lesion under radiologic imaging. Olympus clip fixing devices are radiopaque. By using x-ray, the physician can determine if any residual clips are in the gastrointestinal tract. If no clips are evident under radiologic imaging, MRI may be accomplished.

(2) Endoscopically examine the lesion. If no clips remain at the lesion, MRI may be accomplished.

QuickClip2 Long, HX-201LR-135L & HX-201UR-135L. The QuickClip2 Long, HX-201LR-135L & HX-201UR-135L (Olympus Medical Systems Corporation) are indicated

for placement within the gastrointestinal tract for the purpose of endoscopic marking, hemostasis, or closure of GI tract luminal perforations within 20-mm as a supplementary method. Currently, the QuickClip2 Long (HX-201LR-135L & HX-201UR-135L) is labeled, as follows: "Do not perform MRI procedures on patients who have clips placed within their gastrointestinal tracts. This could be harmful to the patient."

Additional information: Olympus endoscopic clips have been shown to remain in the patient an average of 9.4 days, but retention is based on a variety of factors and may result in a longer retention period.

Prior to MRI, the physician should confirm there are no residual clips in the GI tract. The following techniques may be used for confirmation:

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Ben Kennedy
B.A.Sc., MMRT,
Chair
Program Committee

**Announcing the Eighteenth SMRT
Annual Meeting In conjunction with
the ISMRM Seventeenth Scientific
Meeting and Exhibition
18-19 April 2009
Honolulu, Hawai'i, USA**

Preparations for the 18th SMRT Annual meeting in Honolulu have commenced with a view to continue the outstanding educational quality achieved at our Toronto meeting.

The didactic program will be held on Saturday and Sunday the 18th and 19th of April 2009.

With the exceptional experience of our program committee and the instructive attendee evaluations of previous meetings, our program will strive to achieve an outstanding MR

educational forum. The informative sessions will provide a diverse range of clinical topics and new innovations with the highest quality speakers available.

The poster exhibition and walking tour will once again be a key event on Friday evening preceding the didactic program. This is a great opportunity to see a diverse range of research and innovation performed by your fellow colleagues from around the world and discuss their work with them directly, sharing valuable knowledge. Please consider submitting abstracts for oral or poster presentations of any interesting research/clinical innovation from your own site. Awards are presented in areas of both clinical or research focuses. Dates and deadlines will be announced soon. Also

check for this information and any updates at <http://www.ismrm.org/smrt>.

The annual business meeting will provide an excellent opportunity for members to learn about the activities of the SMRT over the previous year and the goals for the upcoming year. All members of the Policy Board and Executive committees are introduced. This is an important part of the meeting where you as a member get to voice your questions/opinions to the Policy Board and Executive members. Your attendance and interaction at this meeting is invaluable to the SMRT in continuously improving our networking with our membership and allowing the SMRT to

increase its ability to evolve further as a global resource of MR education.

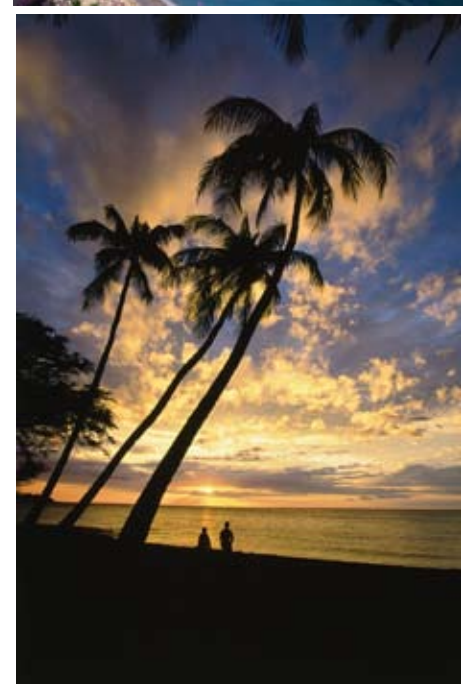
Registration for the SMRT annual meeting also includes an invitation to the ISMRM/SMRT combined forums held during the

following week. This collaboration brings together information from technologists, scientists, and physicians allowing an excellent opportunity to learn multiple perspectives of important issues in our field and new innovative scanning techniques.

This meeting will provide an excellent educational forum for MR technologists from a diverse range of clinical and research environments around the world as well as provide invaluable networking opportunities for all who attend. Next year it will be held in April instead of the usual month of May so be sure to get these dates locked in on your calendar now.

***Next year the meeting will
be held in April instead of
the usual month of May.***

***Be sure to get these dates
locked in on your calendar
now!***





RSNA2008
Personal Learning in the
Global Community

Radiological Society of North America
94th Scientific Assembly and Annual Meeting
November 30–December 5, 2008
McCormick Place, Chicago

Associated Sciences Program at RSNA 2008

Registration Information

Registration is required to attend the Associated Sciences programs at RSNA 2008 (RSNA2008.RSNA.org).

Advance registration for the RSNA annual meeting ends November 7, 2008. Registration at McCormick Place begins at 12:00 PM on Saturday, November 29. RSNA shuttle bus service to McCormick Place will be available beginning at 11:00 AM on Saturday.

Registration fees at McCormick Place are \$100.00 higher than advance registration fees, so register now.

If you would like a copy of the published Associated Sciences Proceedings, please call 1-877-776-2227.

Sponsoring Organizations

- American Healthcare Radiology Administrators (AHRA)
- American Institute of Architects – Academy on Architecture for Health (AIA-AAH)
- American Radiological Nurses Association (ARNA)
- American Society of Radiologic Technologists (ASRT)
- Association of Educators in Imaging and Radiologic Sciences, Inc. (AEIRS)
- Association of Vascular and Interventional Radiographers (AVIR)
- Canadian Association of Medical Radiation Technologists (CAMRT)
- International Society of Radiographers and Radiological Technologists (ISRRT)
- Radiology Business Management Association (RBMA)
- Section for Magnetic Resonance Technologists (SMRT-ISMRT)
- Society of Nuclear Medicine – Technologists Section (SNM-TS)

RSNA is an ARRT®-approved Recognized Continuing Education Evaluation Mechanism Plus (RCEEM+) and will provide Category A+ continuing education credits for technologists and radiologist assistants.

REFRESHER COURSES

Sponsored by the Associated Sciences Consortium

(Each refresher course is approved for 1.5 AMA PRA Category 1 Credits™ and Category A+ credit for technologists)

Monday, December 1

AS21 8:30 AM – 10:00 AM

Radiation Dose: Are We at Crisis? — Protecting Our Personnel
Karen J. Finnegan, MS, RT(R)(CV), FAVIR, Moderator

A) Radiation Risk in Interventional Radiology
John F. Angle, MD

B) The U.S. Radiologic Technologists Cohort Study of Occupational Ionizing Radiation Exposure
Bruce H. Alexander, PhD

AS22 10:30 AM – 12:00 PM

Radiation Dose: Are We at Crisis? — Protecting Our Patients
Susan Crowley, BAppSc(MI), MRT(R), MA (Ed), Moderator

A) Low-Dose CT: Practical Applications
Narinder S. Paul, MD

B) Pediatric Dose
Donald P. Frush, MD

AS23 1:30 PM – 3:00 PM

Preventing Radiology Errors
Ellen Lipman, MS, RT(R)(MR), Moderator

A) Communication Is the Key
Kathy Scheffer, RN, MN, CRN

B) Minimizing the Risk
Christine J. Lung, CAE

AS24 3:30 PM – 5:00 PM

Fusion Imaging
Valerie R. Cronin, CNMT, Moderator

A) Cross-Training Nuclear Medicine Technologists
Mark Wallenmeyer, MBA, CNMT, RT(N)

B) Fusion Imaging Related to Treatment Interventions
Amish N. Raval MD, FRCPC

Tuesday, December 2

AS31 8:30 AM – 10:00 AM

Why Imaging Network Deployments Are Behind Our Non-Health Care IT Brethren
Judy LeRose, RT(R), CRA, Moderator
Stuart Gardner

AS32 10:30 AM – 12:00 PM
Design That Makes a Difference: Solutions for Today's Radiology Environment
Morris A. Stein, FAIA, FACHA, Moderator

Morris A. Stein, FAIA, FACHA
Bill Rostenberg, FAIA, FACHA
Steven C. Horii, MD

AS33 1:30 PM – 3:00 PM
Radiology's Role: When Disaster Strikes!
Valerie R. Cronin, CNMT, Moderator

A) Mass Casualties
Douglas M. Coldwell, MD, PhD

B) Lessons Learned from Weather Disasters
Edward I. Bluth, MD

C) Disease
Narinder S. Paul, MD

D) Radiological Events
Douglas W. Fletcher, PhD

AS34 3:30 PM – 5:00 PM

Satisfying Our Diverse Patient Needs: Unique Like Everyone Else
Arlene M. Adler, MEd, RT(R), FAERS, Moderator
Bettye G. Wilson, MA, Ed, RT(R)(CT), RDMS, FASRT
Peter K. Shams-Avari

Wednesday, December 3

AS41 8:30 AM – 10:00 AM

Imaging in the Operating Room
Charles Stanley, CRA, RT(R)(CT)(MR), Moderator

A) Multimodality Imaging in the Operating Room
Ferenc A. Jolesz, MD

B) Multidisciplinary Imaging in the Operating Room
Michael D. Dake, MD

AS42 10:30 AM – 12:00 PM

Current Regulatory Impacts on Compliance
Judy LeRose, RT(R), CRA, Moderator

A) Deficit Reduction Act
Melody W. Mulaik

B) Stark III
Barbara Rubel, MBA

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, 1:30 pm – 2:45 pm

CT Technology; Cone-Beam and Dose Considerations

Douglas E. Pfeiffer, MS, Moderator
Dianna Cody, PhD
Michael F. McNitt-Gray, PhD

RSNA

Radiological Society
of North America
Founded in 1915

RSNA2008.RSNA.org

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20
SEPTEMBER

SMRT NORTHEAST OHIO CHAPTER EDUCATIONAL SEMINAR

Akron City Hospital, Akron, Ohio, USA

27
SEPTEMBER

SMRT ATLANTA CHAPTER ANNUAL MEETING

Atlanta, Georgia, USA

4
OCTOBER

SMRT NORTHWEST REGIONAL EDUCATIONAL SEMINAR

Fred Hutchinson Cancer Research Center, Seattle, Washington, USA

11
OCTOBER

SMRT SOUTH CAROLINA CHAPTER EDUCATIONAL SEMINAR

Greenville Hospital System, Patewood Medical Office Building, Greenville, South Carolina, USA

14
OCTOBER

BENELUX EVENING SEMINAR MR MAMMOGRAPHY

UZ Brussel, Brussels, Belgium

15-16
NOVEMBER

3RD ANNUAL MEETING OF THE SMRT AUSTRALIA-NEW ZEALAND CHAPTER

Sydney, Australia

2009: 28
FEBRUARY

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