Meet Your New SMRT President



"Our professional society faces the same challenges that we face in our own lives: tough economic challenges, rapid technological advances, and increasingly complex problems requiring well thought-out solutions."

Charles Stanley, R.T., (R)(CT)(MR)

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Charles Stanley began his term as SMRT President during the Annual Meeting in Montreal. *Signals News* asked him questions so that you can get to know your elected leader.

Signals News: Charles, when did you first become involved with MR?

My very first exposure to MRI was in fact, when I was still a student in 1985. The hospital that I was working at was fortunate to get the very first MRI scanner in the state and our very own *Cindy Hipps* was selected to be the first technologist. I was one of the first test patients to be scanned—I'm pretty sure they left me in there for about six hours! I actually first started working in MRI in the early 1990s for a company that was doing mobile CT and MRI in South Carolina. Later I relocated to Virginia and continued working in MRI for 10 years there.

Signals News: What led to your involvement with the SMRT?

Well it was again our very own *Cindy Hipps*! As my career continued to progress I had the pleasure of working with Cindy in the late 1990s and knew about her involvement in the SMRT, but still I didn't make the

jump myself. Later when I relocated to work at the University of Virginia, Cindy kept urging me to get involved and I finally did about 2003. I then ran for and was elected to Policy Board in 2004.

Signals News: You have been very active within the SMRT, how will that experience help you to lead the organization?

When I joined the Policy Board in 2004 I hit the ground running and immediately became involved in several key committees and projects. I had the good fortune to work with a number of people that were very dedicated to the SMRT and had a passion for what the SMRT was trying to accomplish. Cindy Hipps, Wendy Strugnell, Anne Sawyer, Maureen Ainslie, Julie Strandt-Peay, Julia Lowe and others; these were some of the people that I just looked at in awe as to the level of dedication they brought to the society. I was inspired to try and give the SMRT my best as I see that effort from each of them. I was fortunate enough to be selected as Cindy Comeau's Executive Member and then Co-Chaired the External Relations Committee with

Gina Greenwood for four years. I learned from them that a lot of what you do at the Executive Board level is not for "fame and fortune" but rather because the work has to be done, and that is the bottom line. I also gained a great appreciation for the breadth and depth of experience from the SMRT's leadership; it helped me understand that it takes more than just energy and a desire to do good things. It takes a perspective, understanding of all sides of a problem, looking at the implications of a decision, and always keeping in mind that what we do is for our members and future members.

Signals News: Do you have any specific goals for this year?

One of my goals for this year is to work with a couple of committees I put together or revitalized and deliver a Strategic Plan to the membership. This is picking up on some work that was done several years ago and updating and further developing to reflect the needs of our society today. Our professional society faces the same challenges that we face in our own lives: tough economic challenges, rapid technological advances, and increasingly complex problems requiring well thought out solutions. The leadership must be good stewards of the time, money, and energy provided to us by our members. There are many good things that "could" be done but that doesn't mean they

"should" be done by us as we may not be the best resource to accomplish that. A strong Mission and Vision statement, which we developed at the beginning of this year, combined with a Strategic Plan, will help keep us focused on doing what we should do for our members and doing it well.

Another goal that I have for the coming year is to expand our collaborative efforts with other like organizations. I am very excited that we had a representative of the CAMRT (Canadian Association of Medical Radiation Technologists) at our Montreal Annual Meeting; SMRT is in the initial stages of developing a stronger relationship with them. I am also excited that we have started a dialogue with the SNMTS (Society of Nuclear Medicine Technologists Section) regarding MR-PET and how our respective societies can provide a consistent and inclusive message to our members regarding the

roles of technologists/radiographers in this emerging field. Lastly, along with others, I would like to accelerate our online delivery of educational content. We desire to be a leading global organization and provide resources to technologists/radiographers around the world; obviously online content delivery is a perfect vehicle to do so.

Signals News: What needs to be done in the future to expand or enhance the SMRT?

Our Mission and Vision statements talk about how we strive to be the leading professional organization for technologists and radiographers in the field of MRI and to do so throughout the world. I feel to accomplish that goal we must continue to expand our online presence and seek ways to show the value of being a part of this great organization. I also feel we need to expand our collaborative efforts with other like professional societ-

ies; as they have lessons we can learn that will allow us to maximize the resources we have. We are a relatively young organization and are fortunate to be representing an industry that still has tremendous growth potential, it is imperative that we remain focused on providing value to not only our members but to the field of MRI as a whole.





"Another goal that I have for the coming year is to expand our collaborative efforts with other like organizations.
... respective societies can provide a consistent and inclusive message to our members regarding the roles of technologists/radiographers in this emerging field"

Editor's Letter



Julie Strandt-Peay, B.S.M., R.T., (R)(MR), FSMRT Editor, Signals "Each year the SMRT acknowledges the significant contributions made on behalf of the organization."

Dear Readers.

Welcome to the special Annual Meeting issue of *Signals News*. For several weeks following the meeting in Montreal,
Canada, the SMRT has been in a state of transition. New leadership is commencing terms of service and committees are incorporating new members and gearing up for another year of service. Times of transition allow for a reflection of past successes as well as areas that need improvement. Continued development into the future is a common goal.

We begin by learning about President Charles Stanley; his experience and his vision for the SMRT. Carol Lee, 2011 Program Committee Chair walks us through the exceptional Annual Meeting. Thank you to Carol and Publications Committee Chair, John Totman for providing many of the photographs in this issue. Each year the SMRT acknowledges the significant contributions made on behalf of the organization. The award recipients are presented here for you to know those individuals who have made a difference. Past recipients are listed to give you the perspective that the SMRT already has a history supported by many dedicated individuals.

For the first time, the John A. Koveleski Award for Professional Development was bestowed upon a worthy MR professional. *Barry Southers*, Professional Development Committee Chair, explains the significance of the award and interviews the recipient for 2011.

Maryann Blaine, 2011 Education
Committee Chair was instrumental in refining the process of judging, scoring, and presenting the proffered papers and posters at the annual meeting. Those individuals whose work received an award this year are listed for you to view. Included with the annual meeting is the Joint Forum with the ISMRM. 2011 Chair, Michael Macilquham, was not able to travel to Montreal. Ben Kennedy willingly substituted and conducted the forum activities well.

SMRT Secretary, *Vera Miller* provides us with the annual meeting business report. As you peruse the outline keep in mind this is the only time during the year the entire leadership meets with the membership in person. Introductions of the incoming and outgoing policy board members and officers are made for those members attending the meeting. During the year; many hours are filled with discussion and deliberation on your behalf with a concerted effort to create the finest MR professional organization possible.

Newly elected Chair of the External Relations Committee, *Cindy Comeau*, has already been attending meetings and representing the SMRT. See her report for details of the many activities of the SMRT involving other organizations around the world.

Among the duties of the immediate Past-President is to chair both the Nominations Committee and the SMRT Awards Committee. The 2011 Chair is *Julia Lowe* who is inviting your input to choose the future leadership of the SMRT. Candidates for the Crues-Kressel Award are also requested. Details for eligibility of the candidates and expected responsibilities are published for your review.

An extraordinary benefit of SMRT membership is the availability of quality continuing education offerings specific to the MR technologist/radiographer. *Anne Marie Sawyer*, Editor of the Educational Seminars Home Study Program describes the current publication. Be sure to check the SMRT web-site for up-to-date information on electronic educational material

Carol Lee, Chair of the Local Chapter
Committee shares her thoughts and
invites you to become involved by starting a chapter in your area. Note the many
SMRT local chapters are now active in
the USA and in other areas of the world.
Regional Seminars Committee Chair,
Betsy Sestina, announces the schedule of
excellent programs scheduled throughout the year. And as always you are
encouraged to check the SMRT web-site
for up to the minute information.

Happy Reading! S

SMRT Annual Meeting Report



Carol Lee, B.S., R.T. (R)(CT)(MR) Chair, 2011 Annual Meeting Program

"The didactic program was structured into forums striving to provide a balance with talks on clinical and research topics with some basic, advanced and new advances in MR"

"Celebrating 20 Years of MR Educational Excellence"

The 20th SMRT Annual Meeting "Celebrating 20 years of MR Educational Excellence" was held in Montreal, Quebec, Canada, 7-8 May 2011. If you did not know your plane landed in Canada you would have thought you were in France. Montreal is a beautiful city and everyone was very kind and helpful. This was a special year because we celebrated our 20th Annual Meeting. I am so thankful for those who loved our profession 20 years ago and started the SMRT. If you are reading this, it probably implies you LOVE MR and the SMRT as well.

We had 345 attendees this year and 25-30 Exhibitors/Corporate Member employees who attended our SMRT meeting weekend session. It took many people and hours to make this meeting possible. I want to thank everyone who was a part of the 20th Annual Meeting. I would like to say a great big THANK YOU to our sponsors, our speakers, our attendees, the Program Committee, the Educational Committee, the SMRT Policy Board, the SMRT office staff, the convention staff, the moderators, the bar code scanners and all the wonderful helpers for making our meeting a success. When you interact with sponsors and speakers please thank them for their contribution to the SMRT.

This year we displayed posters showing the past SMRT Award Recipients, Past

Presidents and the Policy Board Members. We included a History of MR Poster which was created by John Totman with assistance from Anne Marie Sawyer over many hours and e-mails.

The President's Proffered Paper winner, Megan Cromer, received a special MRI Book titled: "Advances in Magnetic Resonance: N.M.R.Imaging" published in 1982 and signed by Sir Peter Mansfield who shares the 2003 Nobel Prize for Medicine. John Totman delivered the book from the United Kingdom.



The President's Award is presented to Megan Cromer by Charles Stanley

I produced a slide show video of past SMRT Annual Meetings that was shown during the meeting. Photographs for the video were provided by Anne Marie Sawyer, Greg Brown, Cindy Hipps, Bobbie Burrows, Donna O'Brien, Andrew Cooper and Carol Lee. Thank you to all who contributed and if you send photos to me at clsc@charter.net the video will



Amanda Golsch receives the first John A. Koveleski Award for Professional Development from Charles Stanley

be updated. The SMRT plans to have this historic video online for all to see soon. I would also like to thank the CAMRT leadership for attending and helping us celebrate 20 years.

We started the weekend off on Friday with the Poster Reception. The awardwinning posters were displayed so the authors could give a brief presentation of their work. We were excited to present the first John Koveleski Award for Professional Development this year to Amanda Golsch from Ohio, USA. The attendees were able to view the other educational posters and interact with their friends and peers. Following the presentations was a time of connecting with colleagues over food and drinks. Since it was the 20th Annual Meeting we did a little celebrating too. Thank you to those who graciously let us photograph those Kodak moments with the hats and boas.



Colleen A. Hammond, R.T.(R)(MR) volunteers to assist with bar code scanning



SMRT President Julia Lowe, B.S., R.T. (R)(MR), FSMRT, addresses the audience



Gerhard Laub, Ph.D.



J. Paul Finn, M.D., Ph.D.

New to the SMRT Annual Meeting program was the recording of attendees' presence with the use of bar code scanners. Continuing education credits were earned based on the scanner certification that the attendee was present for the session. As with anything new, there were a few glitches and we thank attendees for their patience.

The didactic program was structured into forums striving to provide a balance with talks on clinical and research topics with some basic, advanced and new advances in MR. Julia Lowe, SMRT President 2010-2011 started the Program Saturday morning with a warm welcome. The Cardiac MRI Forum began with Cindy Comeau from New York City speaking on the many Challenges in Setting up Cardiac Services. Cindy has many years of cardiac experience, is recognized as a Cardiac MR expert, and has served the SMRT, including as president, over the years. Dr. Gerhard Laub from San Francisco, California, USA gave an excellent presentation on "Cardiovascular MR Physics and Application."

Dr. Paul Finn from Los
Angeles, California,
USA complimented this
with a talk on "Clinical
Cardiovascular MRI." It was
a great cardiac forum with a
wide range of cardiovascular
MR.



Glenn Cahoon, B.App.Sc., Dip. Ed., M.App.Sc.



Thoralf Niendorf , Ph.D.



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

A Technical Updates Forum was presented after the break and included SMRT Policy Board member, *Glenn Cahoon* from Australia. He shared many helpful techniques that he uses everyday to get the best Paediatric MRI images possible. Glenn will be the Program chair for our 21st Annual meeting in Melbourne, Australia.

Dr. Thoralf Niendorf from Berlin, Germany gave an excellent presentation on Body and Cardiac MR at 7T. He was excited about speaking at our meeting and is very involved in MR Technologist/Radiographer education in Germany.

The SMRT Annual Business Meeting was held before lunch. Julia introduced the out-going and in-coming Policy Board members. The President's gavel was passed from Julia Lowe to Charles Stanley. Thank you to Julia for her year as President! Charles spoke about his vision for this year.



Julia Lowe passes the President's gavel to Charles Stanley



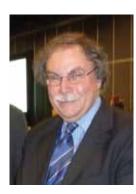
Steven P. Shannon, R.T.(R)(MR)

Steven P. Shannon discussed the SMRT finances as he finished four years as Treasurer. He had a challenging job in this difficult economy. After the business meeting was conducted, we viewed the video highlighting the past 20 years of the SMRT. The memories caused laughter and some tears looking back at those many years. The SMRT has enabled many friendships from around the world that are truly treasured.

After lunch Barry Southers introduced the Research Focus Proffered Paper awards. Congratulations to Megan Cromer from Sydney, Australia who presented the President's Award Paper "Reproducibility of Manual Segmentation of the Cartilage Volume Measurements using 3T Magnetic Resonance Imaging." The other Award Research focus recipients were Eric Zalusky-1st Place from Ohio, USA, KellyAnne McGorty-2nd Place from New York, USA, and Megan Cromer-3rd Place from Sydney, Australia. See Education Committee report for more details.



Anna Simeonov, M.Sc., R.T. (R)(MR)



Sir Peter Morris, Ph.D., M.A.

During the Emerging Technologies Forum, Anna Simeonov from Toronto, Canada spoke on "Practical Approaches to MR Spectroscopy." Anna was on the 2011 Program Committee and has been a part of the SMRT for many years. Charles Stanley, current SMRT President, from Stanford, California, USA provided an excellent and fast paced presentation on MRI Guided Focused Ultrasound. A personal note: Charles, Cindy Hipps and I went to Radiology school together more than 20 years ago!

During the Physics and Technology Forum, Sir Peter Morris from Nottingham, United Kingdom gave a very interesting and informative historical view of the Fundamental Physics of MR.



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



Robert Mulken, Ph.D.



Raquel del Carpio-O'Donovan, M.D.



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

He included a BBC video of Sir Peter Mansfield performing the first human MR images in 1975. It was amazing how MRI has evolved since. Bill Faulkner, SMRT Past-President, from Chattanooga, Tennessee, USA gave an excellent lecture on the Physics of Advanced MR Sequences. Bill always makes the difficult seem easy in MR. He has been involved with MR since the early days and played a significant role in the founding of the SMRT. His contributions to the SMRT and MR education are appreciated. Dr. Robert Mulkern from Boston, Massachusetts, USA did a fantastic presentation on MR Artifacts. He has offered many informative lectures over the years at SMRT Regional Educational Seminars in the US.

Charles Stanley the new 2011-2012 SMRT President started Sunday off with a big Welcome. The Neuro Forum was first on the Sunday program. Dr. Raquel del Carpio-O'Donovan began with an informative illustration of Spinal Tumors, including a refresher on Spinal Anatomy. She is from Montreal and was very excited about speaking at our meeting. It is so refreshing to meet radiologists who will give up their time and are excited to educate the technologist/radiographer.

Carolyn Roth, SMRT Past-President, from Philadelphia, Pennsylvania, USA graciously stepped up at the last moment due to a family emergency for the scheduled speaker. Always creative, she produced a neuro forum using the award recipient poster presenters. This innovative format enabled a spontaneous speaker, audience interaction that was well received. Attendee Scott Dunn stated:

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Stephen E. Jones, Ph.D.



Bobbie Burrow, R.T. (R) (CT)(MR), FSMRT



Diego Martin, M.D., Ph.D., FRCP



Jurgen J. Fütterer, M.D., Ph.D.

"Candi helped the presenters along, getting the main points covered, fielding questions and keeping things on track. It was the fastest moving segment of the program." Thank you to Candi for her many contributions to MR technologist/radiographer education and her instrumental role in the founding of the SMRT. Dr. Stephen Jones from Cleveland, Ohio, USA complimented the Neuro Forum with an excellent Clinical Functional MRI presentation. The advances that continue in MR are extraordinary!

The Body MRI Forum started with former Policy Board member, Bobbie Burrow from Atlanta, Georgia, USA. Bobbie shared her expertise for getting optimal Body MRI/MRA Images. She explained the things that help to make us successful technologists and team players in our practice. She illustrated great tips and ideas for getting the patient through the procedure as well as protocols that work. Bobbie has been active in the SMRT for many years and has been part of the Atlanta Chapter leadership. *Dr. Diego Martin* from Atlanta, Georgia, USA who works with Bobbie at Emery complimented her talk with his talk on "Optimizing MR Body Imaging" to get the correct diagnosis every time. Dr. Martin and Bobbie together did a fantastic job of explaining what is needed in order to provide the patient with the best body MR exam which includes knowledge, experience, consistency, and team work. Dr. Futterer from Nijmegen, The Netherlands spoke on "Prostate Imaging and Spectroscopy," he gave an excellent presentation.

The afternoon session started with the Proffered Papers-Clinical Focus Award Presentations. The 1st Place Award recipient, Sharmeen Joomun from Phoenix, Arizona, USA presented her paper "Optimizing Disc Perfusion MR Imaging for the Brain Tumor Patients." 2nd Place Award recipient Claudio Arena from Houston, Texas, USA and 3rd Place Award recipient to *Daniele* Petrucci from Chieti, Italy also presented their papers. It was a pleasure to meet Daniele at his first SMRT meeting.

The number of international paper and poster awards this year was exciting. The Award recipients were from 8 different countries. We want to thank and commend everyone who produced a poster or wrote a paper for their commitment and dedication to the field of MR. Posters and Proffered Papers are an important part of the advancement of education promoted by the SMRT

Thank you to Maryann Blaine who did an excellent job as the Educational Chair for the last two years. The SMRT Award Ceremony introduced the Authors of the highest scored Poster and Proffered Papers received the awards. Please see the Education Committee report for details. This year we



Amanda Golsch, B.S., R.T. (R)(MR)



James M. Linklater, M.D., M.B.B.S.

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also presented the 2011 John Koveleski Award for Professional Development to Amanda Golsch. Congratulations Amanda!

The SMRT Awards for submitted work were bestowed by the SMRT President, Charles Stanley and the Education Committee Chair, Maryann Blaine. SMRT also awards those special individuals in our MR community who provide extraordinary service to the organization. Please see SMRT Awards Recipients report for more details.

During the Musculoskeletal (MSK) Forum *Dr. James Linklater* from Sydney, Australia gave a very informative talk on Hip MRI to Include Femoral Acetabular Impingement (FAI). The excellent lecture covered anatomy, clinical indications, sports injuries and pathology of the hip. Dr. Mark Schweitzer continued the forum with his presentation on the evaluation of the athlete. He showed great slides of athletes from the



Mark Schweitzer, M.D.



Emanuel Kanal, M.D.,

technologist education.

Olympics in Canada and evaluated their injuries. No faces or names were shown but the audience appreciated the gravity of the injuries. This was one of my favorite forums maybe because I work at an orthopedic office.

We saved the Safety Forum for last and the SMRT was honored to have Dr. Emanuel Kanal from Pittsburgh, Pennsylvania, USA speak on "MR Conditional Pacemakers." He discussed in depth the differences between the pacemakers that have been available for many years and the new MRI "CONDITIONAL" pacemakers. When it comes to MRI safety, there are always conditions. Dr. Kanal continued the Safety Forum with his presentation on "Nephrogenic Systemic Fibrosis (NSF) Updates and New Guidelines." He delivered the latest information available during his teaching with some of the information only available shortly before the meeting. Dr. Kanal is one of the radiologists who are actively involved in and passionate about

SMRT Past-President, Anne Marie Sawyer from Stanford, California, USA closed the didactic program with "Making Your MRI Department Safe." This very important topic is part of your MRI department's practice every day. Besides her excel-



Anne Marie Sawyer, BS RT(R)(MR), FSMRT

lent talks, Anne does a fantastic job as Editor of the Educational Seminars Home Studies and electronic offerings. She has been an active participant of the SMRT since the beginning.

Discussion about MR safety and other topics of interest are on-going through the SMRT MR tech list serve. If you are not on the list serve please

consider joining the interaction with your peers across the globe. It is a great source for learning the latest and staying current in the MRI field including Safety. Many SMRT members and MR experts play an active role on the MR tech list serve.

For those of you who attended, I hope you enjoyed the meeting, learned a few things, met a few friends and captured a few Kodak moments. Again, I would like to thank everyone who made this meeting possible. We hope to see you at a SMRT Educational Seminar this year and join us next year at the SMRT 21st Annual Meeting in Melbourne, Australia.



Attendees learn about new MR techniques in the didactic sessions

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Left to right: Mercedes Pereyra, Bobbie Burrow, Donna O'Brien, Candi Roth, Dennis Mullen and Jennifer Olson join in the 20th Anniversary Celebration



Taking time away from Duke University, Durham, North Carolina, USA, Maureen Ainslie, Past-President and SMRT Fellow shares her friendly smile with us.



Policy Board member and Chair of the Regional Seminars Committee, Betsy Sestina (middle) welcomes invited speakers Dr. J. Paul Finn, and Dr. Gerhard Laub to the SMRT Annual Meeting



Past and present Policy Board members get together to congratulate Amanda Golsch, the first John A. Koveleski Professional Development Award recipient. Left to right: Helle Juhl Simonsen, Denmark; Amanda Golsch, USA; Candi Roth, USA; Nancy Hill Beluk,USA; and Scott Dunn, USA



Maryann Blaine, 2011 Education Chair enjoys the Poster Tour Reception

The 2011 Crues-Kressel Award Recipient

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



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. She currently is the Manager of Cardiovascular MRI at Advanced Cardiovascular Imaging on Manhattan's Upper East Side in New York City and directs a MRI Core Laboratory for a research development company. Cindy has been a member of the SMRT since 1997 and in keeping with the mission and development of the SMRT section has volunteered her time to share her knowledge at numerous SMRT Annual, Regional and Chapter Meetings throughout United States and internationally. She has had the privilege to have worked with many leading professionals in the field of cardiovascular MRI, which has allowed her to accomplish many academic endeavors. 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. At that time Cardiac MRI was an emerging clinical application as she realized that there was a need for her to share her expertise and since then she still actively participates in many SMRT committees and educational activities today. She has developed cardiovascular MRI training material, book chapters, authored publications, abstracts and has given numerous presentations at many educational meetings for both



Cindy R. Comeau, B.S., R.T. (N)(MR) FSMRT and Herbert Y. Kressel, M.D.

The Crues Kressel Award is for Outstanding Contributions to the Education of Magnetic Resonance Technologists

Prior Crues Kressel Award Recipients		
2010	John Posh	
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 Shellock	
1993	Julie Strandt	
1992	No award given	
1991	John Crues, Herbert Kressel	

technologists and physicians. In October 2002 she worked with the International Center for Postgraduate Education and produced Essentials of Vascular MRA a video lecture series that has received very high reviews. In June 2003 she authored Magnetic Resonance Imaging Cardiac MRI a home study module sponsored by Bracco Diagnostics and Outsource, Inc. Released in June 2004, she coordinated the SMRT Home Study Cardiovascular

MRI: Update I and authored Cardiovascular MRI: Update II released June 2005. Assisting in the continued development of Cardiac MRI educational material has always been an important priority for Cindy as she has served as the expert reviewer for the recently released SMRT Home Study on "Cardiac MRI Techniques." Cindy was elected as the 2006-2007 SMRT President and during her presidency she advocated continual development of electronic continuing education offerings to support a growing SMRT membership. She would like to credit the phenomenal support from the Executive Committee and Policy Board members as she truly believes in promoting a team effort! 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. She is continually striving to promote the SMRT's mission as it has certainly been an honor for her to be able to share her expertise with so many outstanding technologists/ radiographers from around the world whom truly appreciate the value of being a SMRT member. She strongly feels the SMRT will continue to grow in membership and she looks forward to serving in future SMRT educational activities globally. It is truly an exceptional honor for Cindy to be consid-



Charles Stanley presents the Crues-Kressel Award to Cindy Comeau ered as a nominee for the Crues-Kressel Award. She is owned by three adorable Shih-tzus, Toby, Simba and Mindy whom support all of her SMRT endeavors!

SMRT 2011 Honorary Member Award

John D. Wilkie, Director Marketing Communications, Invivo



John D. Wilke has continuously supported the SMRT in our mission for quality MR education. Since 2001, he has supported the SMRT Educational Seminars Home Study Program with grants for printing. He has also supported our SMRT Regionals with donations as well as being a wonderful speaker.

Charles Stanley presents the Honorary Member Award to John Wilke



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

Prior SMRT Honorary Member Award Recipients		
2010	William Faulkner	
2009	Herbert Y. Kressel	
2008	No award given	
2007	Michael Moseley	
2006	Anne Marie Sawyer	
2005	No award given	
2004	Emanual Kanal	
2003	Frank Shellock	
2002	Carolyn Roth	

SMRT 2011 Fellow of the Section Award

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

Muriel Cockburn, D.C.R., B.Sc.Hons.



Muriel Cockburn D.C.R., BSc Hons, Pgd Cert MRI Pgd Cert MRI Reporting I have been a radiographer since 1980 and worked in MRI since 1983. Apart from my age I feel that I have been privileged to be a part of such a changing and developing field. I became a member of the SMRT in 1999 and in 2000 I was honoured to be Co-chair of the BAMRR and SMRT Meeting in Glasgow Scotland. This opportunity and working with a very enthusiastic policy board gave me access to the SMRT and I have been privileged to be part of SMRT since. I currently serve as a policy board member and contribute to various committees. I enjoy the interaction, developments and dedication of everyone associated with the various aspects of the SMRT. I have presented talks at SMRT meetings, and loved being a moderator at the annual meetings over the years. I have written and been involved in the home studies and have been an active member of the education committee scoring abstracts over the years. The SMRT has always been willing to listen to suggestions for speakers at their annual meeting and some of these have become great supporters of the SMRT. Serving the SMRT is a humbling experience particularly as the depth of knowledge and passion for MRI within the SMRT is

amazing. To work with colleagues from the global community

who share a continual aim to include and share education with

all technologists and radiographers working in the MR commu-

education internationally and I have been able participate fully

with my SMRT connections. My enthusiasm has never wielded

I am now at a stage in my career that I want to try and support

MRI reporting qualification and I would like to encourage other

colleagues to be able to have this opportunity. I look forward

to sharing the challenges of the SMRT globally. S

others to have and enjoy the opportunities that I have had

within the MRI world. I am lucky enough to have gained an

nity is wonderful. I firmly share the SMRT goal to provide

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



Laurian Rohoman, ACR, RT(MR), CTIC, RT(R), became a member of the SMRT in 1993 after attending her first SMRI meeting in Dallas, and has not missed any of the Annual Meetings since. In 1997 she became actively involved in the SMRT serving as a member on the education committee until 2000. During this time, she has also participated in reviewing abstracts and posters for the Annual Meetings. Laurian was elected and served as a member of the SMRT Policy Board from 2000-2003. In 2002, she served as the program chair for the 2003 Annual Meeting in Toronto. After rolling off the Policy Board in 2003, she remained active in the organization, serving as a member on the program and education committees. She has also done question writing for the SMRT Home Study program. In 2004, Laurian was elected Treasurer of the SMRT and served a three-year term, which ended at the Annual Meeting in Berlin in 2007. She remained an active member on several committees such as the education, awards and global relations committees. Laurian has also submitted several abstracts, which were accepted as posters at the SMRT annual meetings (1998, 2001, 2002, 2005, and 2007.) She has organized the first Canadian SMRT Regional Meeting in Montreal in September 2002 and was instrumental in getting the second SMRT Regional Seminar in Ottawa off the ground in 2004. She also co-chaired the Toronto Regional Meeting in 2006, which was linked by video to Montreal. In October 2007, she hosted the fifth Eastern Canada SMRT regional meeting in Montreal with videoconference link to the University Health Network in Toronto. In 2008, she was an invited speaker at the SMRT Annual Meeting in Toronto, Canada where she presented "Artifacts in Body Imaging." In 2010, Laurian was invited to speak at the SMRT Annual Meeting in Stockholm, Sweden where she presented "Female Pelvic Imaging." She is currently a member of the Education and Program committees

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as well as a member of the Ad Hoc Committee involved with the review of the Strategic Plan. In 2008, Laurian was very honoured to have been presented with the Distinguished Service Award by the SMRT. Laurian is also an active member in the Canadian Association of Medical Radiation Technologists (CAMRT). From 2001-2005 she was a member of the CT certification committee, presently she is serving as a member of the Continuing Education Advisory Group. She also serves as a RCEEM reviewer. Laurian was the program chair for MR section of the CAMRT Annual

Meeting, which was held in Quebec City in May 2010. She has authored and co-authored articles in the Canadian Journal of Medical Radiation Technologists. Laurian is committed to the mission of the SMRT to promote continuing education to MR technologists across the globe and to maintain a high standard of excellence in the profession through Annual Meetings, regional seminars and workshops. She plans to stay involved in continuing education by promoting and organizing MR meetings. Laurian feels very honoured to be a nominee for the Fellow of the Section Award.

Prior Fellow of the Section Award Recipients			
2010	Cindy Comeau, Maureen Hood		
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		



Charles Stanley presents the Fellow Award to Muriel Cockburn



Charles Stanley presents the Fellow Award to Laurian Rohoman

SMRT 2011 Distinguished Service Award

Cindy T. Hipps, BHS, R.T. (R)(MR), FSMRT





Cindy T. Hipps, BHS, R.T. (R)(MR) FSMRT has been a practicing MRI Technologist since the early days of MRI. She was one of the first two MRI Technologists in South Carolina. She continues to work in MRI at Baptist Easley Hospital in Easley, SC. To help her stay current in the ever changing field of MRI, she joined the SMRT in 1993 and attended her first annual meeting in New York. She was elected by the membership in 1999 to the Policy Board, where she served her three-year term. As Policy Board Member, Cindy chaired the Annual Meeting Committee and the Education Committee. She also continued to serve the SMRT with appointments to the RCEEM, Finance, Publications, Annual Meeting and Education Committees after rotating off of the Policy Board. In 2003, Ms. Hipps was elected as President-Elect of the SMRT. During her tenure as President, and with the help of the Executive Committee and Policy Board, she was instrumental in mapping out the first strategic plan that was first submitted by Past President Maureen Ainslie. After much work with the RCEEM committee, the RCEEM became a reality during her tenure, and the RCEEM committee is now one of the standing ad hoc committees that report to the Executive Committee and which attend all Policy Board Meetings. She is very proud of the work that was done during her tenure with the Alliance and the CARE Bill. She also was instrumental in starting the first Advisory

Committee of the SMRT, as well as establishing the first Educational Standards Ad Hoc committee. Cindy was diligent in planning the first MR Primary Pathway Summit meeting in Seattle to discuss and revise the current MR Curriculum in order to reflect the changes in the field of MR where one could pursue the field as a primary pathway. With the leadership of Luann Culbreth and much work from a host of MR professionals, this project became a reality and the revised MR Curriculum has been published by the ASRT and can be found on the SMRT and ASRT website. Cindy has chaired many SMRT Regional Meetings in SC. Cindy helped organize the South Carolina Chapter of the SMRT along with her co-organizers and is a charter member and serves as Treasurer of this Chapter. She is a firm believer that the local chapters are a means to grow the membership of the SMRT. The SC Chapter's mission is to promote the SMRT while also providing continuing education for area technologists. The SC SMRT hosts one or two meetings per year and Cindy is



Charles Stanley presents the Distinguished Service Award to Cindy Hipps

Prior Distinguished Service Award Recipients		
2010	Denise Echelard R.T., (R)(MR)	
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	

instrumental in organizing these meetings with the help of the other officers of the chapter. Over the years, Cindy has been involved with reviewing SMRT Home Studies, writing questions, taking the tests and reviewing the questions for validity as a member of the SMRT Publications Committee and RCEEM Committee. Though time-consuming, she finds this one of the most rewarding functions in the SMRT. Cindy was elevated to Fellow Status of the SMRT at the 2007 SMRT Annual Meeting in Berlin for her substantial contributions to the SMRT over the years. She also received the coveted Crues-Kressel Award at the 2009 Annual Meeting in Hawaii. She just learned that she was elected as the Secretary of the SMRT and will take office at the annual meeting in Montreal. Cindy has much energy and likes to be involved in her community as well. She takes on many projects, such as her involvement with Crime Stoppers of Greenville, where she currently serves as Past President. She also serves as President of the Board of CrossRoads Group Home for Sexually Abused girls. Cindy is humbled that one of her peers nominated her for this award. S

SMRT 2011 John A. Koveleski Award for Professional Development

This award was established to honor John A. Koveleski, SMRT Past-President, in recognizing professional development in MR.

Amanda Golsch, B.S., R.T. (R)(MR)



The first recipient of the John A. Koveleski Award is *Amanda Golsch, B.S., R.T. (R)(MR)*, Imaging Research Center, Department of Neurology, Cincinnati Children's Hospital Medical Center, University of Cincinnati, Cincinnati, Ohio, USA. *Barry Southers* spoke with Amanda about her MR experience.

Amanda, first of all, congratulations on receiving the 1st Annual John A. Koveleski Award for Professional Development from the SMRT. Now that the SMRT Annual Meeting is over for this year, tell us how you feel about being the first recipient for this award?

I feel honored and excited to be the first recipient of this award. I believe that continual professional development is crucial for all technologists throughout their career. Learning new techniques and staying abreast of new technology is what helps us to create value for ourselves, our departments, our radiologists, and most importantly our patients and their families. In my opinion, the John A. Koveleski Award for Professional Development embraces these ideas and encourages all new technologists to become active within the profession.

Please tell the readers a little more about your background, and what led you to this point of your career, and ultimately, to receiving this award?

I graduated in 2001 from the imaging program at Xavier University. Following graduation I worked as a Cardiac Cath Lab technologist at The Christ Hospital in Cincinnati, Ohio, USA. After obtaining valuable experience, I joined the Interventional Radiology team at Children's Hospital Medical Center as a manager. In 2008, I decided to try a different imaging modality (MRI) and became an Imaging Research Technologist with the Imaging Research Center (IRC) at Children's. The IRC has provided me with many opportunities to grow and learn as a technologist. They are always supportive in terms of technologists writing columns, articles, abstracts, and attending educational conferences. I believe that the encouragement that I have received from Dr. Charles Dumoulin, Scott Dunn, R.T.(R)(MR), Kendall O'Brien, B.A, R.T.(R)(MR), and Donna Lyons is what has led me to this point in my career and ultimately to earning this award.



Charles Stanley presents the first John A. Koveleski Award for Professional Development to Amanda Golsch

What are your strengths and how do you feel these strengths will assist the Professional Development Subcommittee for the upcoming year?

I believe that my strengths lie with my experience as a research technologist. The Imaging Research Center is a multidisciplinary department. We work alongside cardiologists, neurologists, chemists, engineers, physicists, and veterinarians. This has given me a broad array of educational opportunities in terms of specialized MR imaging studies. I believe that having a multitude of unique scanning experiences will be of assistance to the Professional Development Subcommittee in the upcoming year.

What will you take from this experience of being a JAK Award Recipient, and how do you think this award will affect your career, both at work, and with the SMRT?

The experience has made me realize how important career development can be and that contributing to the profession as a whole is a good cause. I think that earning the JAK Award will amplify my

career, my work, and help to develop an ongoing relationship with the leadership of the SMRT. I hope to convey a positive message to other technologists by showing them that taking interest in your job not only makes you a better technologist, but it earns respect among your peers. Receiving an award for the work that is done at the IRC also gives me a great sense of pride, which is extremely fulfilling. I want to thank the SMRT for allowing me to be the first JAK Award Recipient.

It is noted that Amanda showed her professionalism beyond her scheduled presentations when she was called upon by speaker *Candi Roth* to explain her work and entertain questions from the audience during the Neuro Forum at the SMRT Montreal Annual Meeting.

Professional Development Report



G. Barry Southers, BRST, R.T. (R)(MR) Chair Professional Development Committee "We encourage everyone to spread the word about this wonderful new award, dedicated to the life and memory of a fellow MR professional and SMRT leader who played such a crucial role in the growth and success of countless members of our profession."

The Education Committee and the Subcommittee for Professional Development of the SMRT are proud to announce the John A. Koveleski Award for Professional Development.

For this award, we invite MRI students, graduate students, and MR radiographers and technologists practicing less than three years to submit abstracts. Qualification will be determined by a resume/CV submitted by the author.

The award recipent will receive a \$150 monetary award, a three-year membership in the SMRT, and the honor of participating as a member of the SMRT Subcommittee for Professional Development for one year. In addition, the recipient will be invited to present their work at the annual meeting, if

possible. If the recipient is not able to attend the meeting, the abstract will be displayed as a poster during the annual meeting. The award-winning abstract will be published in the Annual Meeting materials, and on the SMRT Website.

At the time John Koveleski was SMRT President in 2002, he was asked what he would like to see the SMRT accomplish in 2002, as well as in the future. John's response was, "I'd like to see a continuation of international growth and also growth from the 'grass roots' technologists—those working in the trenches at outpatient centers, etc., that represent well over 90% of the technologists employed in the field."

John recognized that each member played a role in the future success and

growth of the SMRT, and as a result he played a vital role in the professional development of many technologists.

One such technologist is Cindy Hipps who commented, "John Koveleski was my colleague first, but fast became my friend because of his warm smile, professional demeanor, and helpful attitude. John believed that all technologists had a contribution to make to our profession and he encouraged everyone to get involved in the SMRT. He was instrumental in my professional development and SMRT involvement, and I will always cherish his memory."

We encourage everyone to spread the word about this wonderful new award, dedicated to the life and memory of a fellow MR professional and SMRT leader who played such a crucial role in the growth and success of countless members of our profession.

As a first step in your professional development early in your career, we hope many of you will begin sharing your ideas and discoveries with the SMRT. Please consider this your personal invitation to contribute by submitting an abstract for this award.

For more information about, or to submit an abstract for this award, please visit the SMRT website, at www.ismrm.org/smrt.



Amanda Golsch, JAK Professional Development Award recipient and Barry Southers, Chair of Professional Development Committee





Maryann Blaine, MAT, B.S., R.T. (R)(MR) 2011 Education Committee

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

The 20th Annual SMRT Meeting. "Celebrating 20 Years of MR Educational Excellence" was a great success! 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 year's meeting. This year's Abstract Review Panel reviewed 51 submissions, from 12 different countries, in the clinical and research focuses to determine the President's Award, Proffered Paper and Poster Award recipients. The Abstract Review Panel was very focused on its mission to provide highquality abstracts to our MR technologists/ radiographers from around the globe.

Our meeting began Friday evening with the Poster Walking Tour and Reception. This event provided a venue for poster presentations, socializing, and networking. The poster award recipients were introduced by Maryann Blaine, Education Committee Chair prior to providing a brief overview of their poster and answering any questions from the audience. During the Poster Walking Tour, all poster authors were available to discuss their work with the meeting attendees. As the SMRT celebrated its historic 20th Annual Meeting, John Totman presented a Special MR History presentation and an incredible history poster, bringing us back to the beginnings of NMR through to the present day MR imaging. Also, this year the SMRT presented the first John A. Koveleski Award for Professional Development to Amanda Golsch from Cincinnati, Ohio. Please see the Professional Development report and interview for more details. The Friday evening Poster Tour Reception is a great

opportunity to socialize and network with your colleagues from around the world.

The Saturday session of the meeting included the presentation of the President's Award by Megan Cromer titled "Reproducibility of Manual Segmentation of Cartilage Volume Measurement Using 3T Magnetic Resonance Imaging." This presentation was followed by the 1st, 2nd, and 3rd place Research Focus Abstract presenters; Eric Zalusky, KellyAnne McGorty and Megan Cromer respectively. (Arthur Escalona presented on Megan's behalf) After lunch on Sunday the 1st, 2nd, and 3rd place Clinical Focus Abstract presentations were given by Sharmeen Joomun, Claudio Arena and Daniele Petrucci respectively. After completion of the Clinical Focus Abstract presentations,



SMRT Meeting Attendees listening to the award-winning poster presentations at the Friday evening Poster Reception

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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 presented with their awards.

Congratulations to all the award recipients, and a thank you to all the abstract and poster authors who have partici-

pated in fulfilling the SMRT's commitment to excellence in MR education.
A special thank you to the following abstract reviewers: Glenn Cahoon,
Muriel Cockburn, Janice Fairhurst,
Maureen Hood, Julia Lowe, Laurian
Rohoman, Adam Stevens, Wendy
Strugnell, Kathleen Thangaraj, and Beth
Winningham for your dedication and

hard work. The SMRT Annual Meeting is a great opportunity for technologists and radiographers from around the world to share ideas, learn new techniques and enhance your clinical or research practice in the field of magnetic resonance imaging.



Maryann Blaine announced the Proffered Paper and Poster Award winners



Titti Owman, Global Relations Chair left and Heidi Berns, Chair of the RCEEM Committee



Dr. Kressel, friends and past recipients of the Crues-Kressel Award: Nancy Hill Beluk, Carolyn Roth, Dr. Kressel, William Faulkner, Julie Strandt-Peay and Cindy Hipps

Reproducibility of Manual Segmentation of Cartilage Volume Measurements using 3T Magnetic Resonance Imaging

Cromer, M1, Bourne, R2, Fransen, M3, Fulton, R2, Wang, SC4.

1. Westmead Hospital, MRI Suite; Discipline of Medical Radiation Sciences, Faculty of Health Sciences, University of Sydney, 2. Discipline of Medical Radiation Sciences, Faculty of Health Sciences, University of Sydney, 2. Discipline of Medical Radiation Sciences, Faculty of Health Sciences, University of Sydney, 2. Discipline of Medical Radiation Sciences, University of Sydney, 2. Discipline of Medical Radiation Sciences, Faculty of Health Sciences, University of Sydney, 2. Discipline of Medical Radiation Sciences, University of Sydney, 2. Discipline of Medical Radiation Sciences, University of Sydney, 3. Discipline of Medical Radiation Sciences, University of Sydney, 3. Discipline of Medical Radiation Sciences, University of Sydney, 3. Discipline of Medical Radiation Sciences, University of Sydney, 3. Discipline of Medical Radiation Sciences, University of Sydney, 3. Discipline of Medical Radiation Sciences, University of Sydney, 3. Discipline of Medical Radiation Sciences, University of Sydney, 3. Discipline of Medical Radiation Sciences, University of Sydney, 3. Discipline of Medical Radiation Sciences, University of Sydney, 3. Discipline of Medical Radiation Sciences, University of Sydney, 3. Discipline of Medical Radiation Sciences, University of Sydney, 3. Discipline of Medical Radiation Sciences, University of Sydney, 3. Discipline of Medical Radiation Sciences, University of Sydney, 3. Discipline of Medical Radiation Sciences, University of Sydney, 3. Discipline of Medical Radiation Sciences, University of Sydney, 3. Discipline of Medical Radiation Sciences, University of Sydney, 3. Discipline of Medical Radiation Sciences, University of Sydney, 3. Discipline of Medical Radiation Sciences, University of Sydney, 3. Discipline of Medical Radiation Sciences, University of Sydney, 3. Discipline of Medical Radiation Sciences, University of Sydney, 3. Discipline of Medical Radiation Sciences, 3. Discipline of Medical Radiation Sciences, 3. Discipline Sydney, 3. Discipline Sydney, 3. Discipline Sydney, 3. Dis . Clinical and Rehabilitation Sciences Research Group, Faculty of Health Sciences, University of Sydney. 4. Discipline of Imaging, Sydney Medical Schoo

Background - The quantification of anatomic volumes from Magnetic Resonance Imaging (MRI) data can be utilized for a variety of applications. Currently there are many freeware software programs that offer various applications that can be utilized with MRI data to allow for sophisticated image analysis. These analyses can be used to give valuable information for the evaluation of disease progression for patients. However the processes of obtaining these volumes must be robust, validated and give accurate results. The quantification of knee cartilage volumes can be an important tool in identifying disease progression in osteoarthritis. The longitudinal assessment of patients is required in some disease states such as in osteoarthritis. Therefore segmentation errors must be minimal relative to actual volume differences attributable to disease progression or regression.

Aim - To assess the accuracy of a manual segmentation technique for quantification of knee cartilage volume from 3T MRI fat saturated Fast Gradient Echo (FGRE) 3D data using a custom software program.

Methods -A single Sagittal 3D dataset (320x320 matrix, 2.2mm slice thickness (ZIP 2), zero gap, TR-7.6ms, TE-2.3ms, 2 NEX) was acquired in a porcine knee (Figure 1) utilizing a 3T Signa Excite magnet (General Electric, Milwaukee, WI) and an eight channel transmit/receive knee coil by Medical Devices. After imaging, the porcine knee cartilage was harvested by scraping the individual cartilage from each of the three joint surfaces (patella, tibial plateaus and femoral condyles) with a scalpel (Figure 2). The actual cartilage volume was determined via a water displacement method. The MRI data was taken offline and manual cartilage segmentation was performed using 3D Slicer (Version 3.4)² software to determine an MRI derived value of the cartilage volume. Segmentation involves defining the cartilage in the individual plates between the bone/cartilage interface and the articular surface (Figure 3) on each slice in the dataset. To assess for the error from the segmentation process the acquired MRI dataset was segmented on five separate occasions by the same operator (MC) with weekly intervals between the timepoints.

Results – The results for the cartilage volume measurements from the displacement method was 0.5mL patella, 0.9mL tibia, 2mL femoral with 3.4ml for total volume. The segmented volumes ranged from 0.52-0.59mL, 0.72-0.78mL, and 2.14-2.41mL in the patella, tibia and femoral cartilage plates respectively (Table One). The mean (+ SD) total volume of the porcine knee was 3.56+ 0.13mL compared to 3.4ml from the displacement volume. Thus a 0.16mL difference between the displacement volume and resegmentation volume of the porcine knee. The coefficient of variation (CV) for the resegmentation data is given in Table 2. The CV for total volume was 3.57%.

		Segr	nentation Timep	oint	
Cartilage Plate	1st	2nd	3rd	4th	5th
Total volume	3.75	3.49	3.41	3.57	3.57
Patella Volume	0.59	0.55	0.52	0.58	0.54
Tibial Volume	0.75	0.72	0.75	0.78	0.78
Femoral Volume	2.41	2.22	2.14	2.21	2.25

Table One - Segmentation Results (mL)

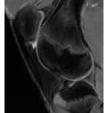






Figure 3 - Segmented MRI imag

Cartilage Plate	Mean Volume(mL)	Std. Deviation (mL)	CV %
Total Volume	3.56	0.13	3.57
Patella Volume	0.56	0.03	4.77
Tibial Volume	0.75	0.03	3.51
Femoral Volume	2.25	0.10	4.57

Table Two - Coefficient of Variation (CV%) for Segmentation Measures



Discussion - Porcine anatomy is similar to human anatomy although the total cartilage volume of the knee is considerably smaller.³ The use of porcine knees allowed for the cartilage to be harvested and an actual volume to be quantified and measured against. The segmentation process in this study had a high reproducibility with a CV of 3.57% (for total volume). The difference in cartilage volume from the repeated segmentation measures was 160mm3 for the total cartilage volume (patella, medial and lateral tibia, medial and lateral femur). Burgkart et al (2001) reported estimated tissue loss in patients with valgus OA (compared to healthy patients) of 2490mm³ in the tibia (medial and lateral). This technique can be applied for use in other disease processes such as quantification of MS plaque volumes, plexiform neurofibroma volumes, liver and spleen volumes in evaluation of Gauchers disease. This technique is available for use in all imaging centres as it uses freely available software programs with data from clinical sequences. It can allow for important quantitative information for the evaluation of a patients disease state from a routine imaging examination.

Conclusion – The manual segmentation of 3D MRI data using a FGRE fat saturated sequence is a valid and reliable tool for use in in vivo cartilage imaging and allows for accurate cartilage volume quantification derived from clinical imaging sequences.

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2011 Proffered Paper and Poster Award Recipients

Oral - Research Focus Paper Award Recipients



1st Place
An Automated Patient
Guidance System
for Functional MRI in
Neurosurgical Treatment Planning



2nd Place
Evaluation of Meniscal
Abnormalities using T2
Relaxation Time Mapping
at 3T



3rd Place
The Use of
Functional
Magnetic
Resonance
Imaging in Evaluation of Fibromyalgia

Eric Zalusky, B.S., R.T. (R)(MR) Innovation Center, Kettering Health Network Kettering, Ohio, USA

KellyAnne McGorty, B.S., R.T. (R)(M)(MR) New York University Langone Medical Center New York, New York, USA

Megan Cromer, BaAppSc (Hons1) Westmead Hospital Sydney, Australia

Oral - Clinical Focus Paper Award Recipients



1st Place
Optimizing DSC Perfusion
MR Imaging for Brain Tumor
Patients



MR Angiography for Comprehensive Neurovascular

2nd Place

Resonance

2nd Place

The Promise of Simultaneous EEG & fMRI

Comparison of Visual

Analysis of Adenosin

Stress Cardiac Magnetic

Imaging in Patients with

Myocardial Ischemia & Automated Color-Encod-

ed Perfusion Maps

High Resolution Multi-

Stack 3D Time-of-Flight

2nd Place



3rd Place Evaluation of Aortic Valve Area in Cardiovascular Magnetic Resonance

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

1st Place

Tract

Aging Changes T2

Relaxation Time in

the Corticospinal

Claudio Arena, R.T. (MR)(CT) Department of Diagnostic and Interventional Radiology St. Luke's Episcopal Hospital Houston, Texas, USA

Daniele Petrucci, R.T. ITAB, Università "G. d'Annunzio" Chieti, Italy

Research Focus Poster Award Recipients



Tsukuba, Japan

Kousaku Saotome, R.T.

Tsukuba Medical Center Hospital



Katrin Koziel, R.T. Institute of Clinical Radiology and Nuclear Medicine, University Medical Center Mannheim, Germany



Young Yu, R.T. Asan Medical Center Seoul. Korea

Phantom after Radio Frequency Ablation Treatment using MRI Temperature Mapping

3rd Place

Measuring Tempera-

ture Changes in a

Clinical Focus Poster Award Recipients



1st Place Reduced Gadolinium Dose in Carotid CEMRA using Gadobutrol at 3T

Denise Steffinger, R.T. (MR)
Department of Clinical Radiology
University Hospitals Ludwig-Maximilians
University of Munich, Germany



Amanda Golsch, B.S., R.T. (R)(MR) Imaging Research Center, Department of Neurology Cincinnati Children's Hospital Medical Center, University of Cincinnati, Cincinnati, Ohio, USA



3rd Place
Dynamic ContrastEnhanced
T1-Weighted Perfusion in Clinical Use

Helle Juhl Simonsen, M.R.T., Functional Imaging Unit, Department of Clinical Physiology and Nuclear Medicine, Glostrup Hospital, University of Copenhagen, Denmark

SMRT 2011 Poster Award Presentations



Kousaku Saotome, R.T., Tsukuba Medical Center Hospital, Tsukuba, Japan: "Aging Changes T2 Relaxation Time in the Corticospinal Tract"



Katrin Koziel, R.T., Institute of Clinical Radiology and Nuclear Medicine, University Medical Center, Mannheim, Germany: "Comparison of Visual Analysis of Adenosin Stress Cardiac Magnetic Resonance Imaging in Patients with Myocardial Ischemia & Automated Color-Encoded Perfusion Maps"



Young Yu, R.T., Asan Medical Center, Seoul, Korea: "Measuring Temperature Changes in a Phantom after Radio Frequency Ablation Treatment using MRI Temperature Mapping"



Denise Steffinger, R.T. (MR), Department of Clinical Radiology, University Hospitals Ludwig-Maximilians, University of Munich, Germany: "MR-Based Measurement of Intracranial Pressure-Tips & Tricks"



Amanda Golsch, B.S., R.T. (R)(MR), Imaging Research Center, Department of Neurology, Cincinnati Children's Hospital Medical Center, University of Cincinnati, Cincinnati, Ohio, USA: "The Promise of Simultaneous EEG & fMRI"



Helle Juhl Simonsen, M.R.T., Functional Imaging Unit, Department of Clinical Physiology and Nuclear Medicine, Glostrup Hospital, University of Copenhagen, Denmark: "Dynamic Contrast-Enhanced T1-Weighted Perfusion in Clinical Use"



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SMRT/ISMRM Joint Forum: DTI: Is it Ready for the Clinic?



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

"Crucial parameters discussed were voxel size and shape achieved versus signal loss in diffusion technique, in plane resolution versus SNR and slice thickness/number of slices for isotropic voxels."

Editor's note: Ben Kennedy substituted as interim/proxy Executive Member for Michael Macilquham.

Professor Derek Jones gave a physicists perspective of whether DTI is ready for the clinical field. Initially stating his honest opinion, "not yet," Dr. Jones articulately described the minimum steps absolutely necessary to achieve accuracy. In choosing acquisition parameters for the pulse sequence to optimize data quality and maximize interpretability of the data, many steps were described, particularly maximizing data quality in accuracy, precision and statistical rotational invariance.

Crucial parameters discussed were voxel size and shape achieved versus signal loss in diffusion technique, in plane resolution versus SNR and slice thickness/number of slices for isotropic voxels. Cardiac gating in DTI was demonstrated to have superior

accuracy with minimizing the effects of the pulsatile motion of the brain within the CSF showing tissue volume pulsing in and out of slice profiles. TR and the number of slices per R-R interval was an important factor in scan time efficiency.

Sampling schemes were compared such as high number of directions versus fewer directions sampled multiple times. Practical steps for assessing data quality and for identifying artefacts in the image data were also discussed.

Overall this presentation struck a chord or reality in what we are measuring; how easy it can be to achieve diagnostic appearing tractography which can be based on inaccurate data giving false positive outcomes in white matter mapping trajectories and how important to get the raw data accurate before any post processing/interpretation can be used.

Shawna Farquharson discussed current clinical uses of diffusion imaging including diagnosis and management of hyper-acute due to cytotoxic oedema. Quantitative parameters derived from the diffusion tensor (DTI) were described such as apparent diffusion coefficient (ADC), fractional anisotropy (FA) maps and their relative correlation with conditions such as multiple sclerosis, schizophrenia, and vascular dementia.

In the tractography process Shawna reaffirmed the importance of raw data accuracy described by Dr. Jones, particularly in the number of acquired directions necessary for robust measure of anisotropy and discussed the estimation of fibre orientations. After describing the limitations of a single diffusion tensor, which was the initial method used in DTI tractography, higher order methods



Meng Law, M.D, FRACR, Shawna Farquharson, B. Sc, M Sc., Derek Jones, Ph.D., Ben Kennedy, B. App.Sc, MMRT (Chairperson), Professor Gareth Barker, Ph.D. (Chairperson)

capable of describing multiple fibre orientations within a single voxel were discussed as a step forward in achieving accurate white matter mapping trajectories. This included limitations of deterministic algorithms, most common alternative tracking algorithms and accurate fibre orientation estimates.

Dr. Meng Law discussed implementation and development of guidelines for using DTI in routine clinical practice from a radiologist's perspective. Also concurring with the importance of accuracy in raw

data with the previous speakers, Dr. Law discussed the relative influence of other information determined from the raw data such as DWI, ADC maps and FA maps, and their caution in perceived accuracy when discussing how relative data accuracy can be in relation to information used by brain surgeons.

Role of diffusion-weighted imaging, diffusion tensor imaging and fibre tractography in adult brain and spine lesions were discussed from his clinical perspective, as well as current literature and evidence of

current and new methods available clinical and in the research settings for these techniques.

Dr. Law discussed potential future role of these techniques in the brain and spine and some novel methods such as high resolution diffusion spectral imaging and other new tractography algorithms.

Over all with emerging applications and challenges, Dr. Law's main message was the need for standardization and automation before DTI can be widely implemented in the clinic.

JOIN SMRT IN MELBOURNE, 5 – 6 MAY 2012!



The SMRT Program and Education
Committees would like to invite MR
Technologist and Radiographers from
around the world to attend The SMRT
21st Annual Meeting: Celebrating a New
Era in MR Education in Melbourne,
Australia, 5-6 May 2012 in conjunction
with the 20th ISMRM Annual Meeting and
Exhibition. We are excited about the
SMRT Annual Meeting program which
will include a diverse range of topics and
many outstanding international speakers.
The SMRT provides a forum for education, information, and research and strives

to establish and maintain a high level of professionalism in the field of MR. Those seeking to expand their knowledge in this ever-changing imaging modality are invited to join us for this exciting weekend of education and networking with colleagues and friends from around the world.

We hope to see each of you in Melbourne. Voted multiple times as one of the world's most livable cities, Melbourne (the capital of the state of Victoria) is a vibrant and cosmopolitan city with a seaside setting on Port Phillip Bay offering the very best in major events and festivals, shopping, nightlife, food and wine and unique experiences.

Superbly located right in the heart of the city is Melbourne's newest destination for fashion, food and lifestyle experiences — South Wharf. It's certainly a destination worth exploring, offering a unique and fresh perspective on what is already one of the world's most dynamic cities.

Please refer to the SMRT website for updated Program information. www.ismrm.org/smrt S

Business Meeting Report: Montréal Quebec Canada



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

"Thanks to all attendees for their help and support. As incoming SMRT External Relations Chair I look forward to representing the SMRT in important collaborations with other professional organizations."

This is a historic year for the SMRT because we celebrate 20 years as an organization. Montréal was a wonderful city in which to commemorate this milestone. Carol Lee (Program Chair) and Maryann Blaine (Education Chair) out did themselves with two days of interesting and entertaining lectures. Carol compiled a slideshow video documenting the history of our organization in pictures. What a pleasure to reminisce on past events.

Our Business meeting was held during lunch on Sunday, 7 May. The timing is designed to allow members to sit in and observe the working of their elected leadership. Questions and comments are welcome during this time.

Prior to the Business meeting, consent agendas from each committee chair are provided to the President and Policy Board. Any issues are then discussed and brought forward as necessary.

For our members, two important aspects we try to share are the financial health of the organization and our efforts in external relations. Every year the president also gives a "state of the society" and outlines major milestones and accomplishments.

Below is a synopsis of the business meeting:

At 11:30 EST President Julia Lowe called the meeting to order.

Introductions to the current **Executive Committee and** Policy Board as well as Incoming Executive Committee, Policy Board and Ex-officio Committee Chairs.

Julia Lowe introduced the entire **Executive Committee and Policy** Board and Ex-officio members along with their roles.

Incoming and new Executive Committee and Policy Board members were intro-

> duced along with their upcoming roles. New members of the Board are R. Scott Dunn. Rosemary Fisher, Kirsten Moffat and Helle Juhl Simonsen. Welcome!

Outgoing Policy Board members are *Joseph* Castillo, Ben Kennedy, Ashok Saraswat, and *Maryann Blaine* who have served the society well and we thank them sincerely for all their hard work. As this is a volunteer organization we are blessed to have such dedicated and committed Policy Board Members.



Steven P. Shannon, SMRT Treasurer, gives his financial report

Finance Report, Steven P. Shannon (Treasurer) **REVENUE STREAMS:**

• 8% from the ISMRM-\$54,300

This number varied over the last few years as donations go up and down with the

- Membership fees collected to date gave us \$182, 654 with \$28K outstand-
- 345 attendees at this meeting in Montreal.
- \$25,000 in donations was budgeted for Montreal, but we have collected only \$18.2K to date.

This reflects a decrease in vendor support and is an on-going trend of concern.



Julia Lowe calls the SMRT Business Meeting to order

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Vendor support is important! Please seek our donors out and thank them for the support we do receive.

- Regional Seminars account for \$151K of our fiscal budget with 5 held to date. Revenue from regional meetings is currently \$109.5K.
- Annual meeting expense was budgeted at \$76,650.

Total Fiscal Net to-date is currently in the black \$3,710.

Total Liabilities and Assets are \$452K.

Thanks to all attendees for their help and support.

External Relations Report, Cindy Comeau, Chair 2011–2013

As incoming SMRT External Relations Chair I look forward to representing the SMRT in important collaborations with other professional organizations. In preparing this article, I spent time reviewing the past activities and communications that the SMRT leadership has been involved with. To start with, outgoing External Relations Co-Chair Charles Stanley and Gina Greenwood as well as Past-President and External Relations Chair Julia Lowe have initiated collaborations with two professional organizations about which I would like to update to the membership.

The 2011 SMRT Annual meeting just held

in Montreal, Canada presented a great

opportunity to meet with the leadership

of the Canadian Association of Medical Radiation Technologists (CAMRT). The CAMRT is Canada's national professional association and certifying body for medical radiation technologists and therapists for Canada. There are four disciplines represented among CAMRT's membership: radiological technology, magnetic resonance, nuclear medicine and radiation therapy. The meeting held on 9 May 2011 identified some key areas of interest for collaboration between the SMRT and CAMRT. Continued communication with this organization will certainly develop into educational opportunities that will benefit all MRI professionals. SMRT President-Elect, Vera

Miller represented the SMRT

at the recent CAMRT June Conference held in Saskatoon, Saskatchewan, Canada.

The second organization involves a new hybrid imaging modality that many of you have probably have heard about which is PET/ MR. Early communications with the Society of Nuclear Medicine Technologists Section (SNMTS) have started as current SMRT President Charles Stanley and

I just attended a SMRT and SNMTS leadership meeting on 4 June 2011 at the Society of Nuclear Medicine Meeting (SNM) that took place in San Antonio, Texas, USA. This meeting resulted with the identification of a PET/MR Working Group which will consist of SMRT and SNMTS representatives. This collaboration will ensure that the highest standards



Charles Stanley presents the President's Plaque to Julia Lowe

for educational training are achieved for those technologists/radiographers working with PET/MR scanners.

RSNA Associated Sciences Consortium

Since 1997 the SMRT has been a member of the RSNA Associated Sciences Consortium. The SMRT External Relations Chair attends the planning meeting in January held in Chicago each year. For those of you planning to attend RSNA this year the 2011 program can be viewed on page 35.

CARE BILL

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The SMRT is a member of the Alliance for Quality Medical Imaging and Radiation Therapy (AQMIRT). There has been a regular schedule of conference calls in



Gina Greenwood reports on External Relations activity

which I have participated. The AQMIRT has been driving The Consistency, Accuracy, Responsibility and Excellence (CARE) in Medical Imaging & Radiation Therapy bill. The CARE bill was introduced by Rep. Ed Whitfield (R-KY-1) in the House of Representatives on 2 June 2011. The bill will be the same as S. 3737 that was introduced in the last Congress with updated effective dates. This information was announced by *Christine Lung* who is the Vice President of Government Relations and Public Policy of the American Society of Radiologic Technologists. It is now very important to keep the momentum going so please consider contacting your representative. The ASRT website makes this very simple. Just go to: https://www.asrt.org/content/ GovernmentRelations/TakeItFurther/ Landing.aspx select the "Take Action" button, then click on "Contact Your Representative TODAY" add a brief personal message and complete the "sender information" and the note will

automatically be composed and routed to your representative. Additional information concerning the CARE Bill can be found at https://www.asrt.org/content/GovernmentRelations/CAREBill/faq_legislative.aspx\. The AQMIRT will hold its next meeting during the week of RSNA which I will be attending.

Health Professions Network (HPN)

At the 2011 Spring HPN meeting was held 12-15, April 2011 in Milwaukee, Wisconsin, USA and the SMRT was represented by our current SMRT President, *Charles Stanley*. The presentation topics for this meeting can be reviewed at http://www.healthpronet.org/milwaukee_april_2011. php Charles Stanley will continue his involvement with HPN as he has been nominated to the HPN Board.

SMRT Global Relations

Policy Board member *Titti Owman* currently serves as the Global Relations Chair for the SMRT. Our international presence continues to grow as Titti strives to make contact with the European

Radiographers organizations. She attended the European Congress of Radiology meeting and met with different representatives from radiographers' associations in Europe. Her presence at these meeting helps promote the mission of the SMRT globally.

As I have reviewed all these activities; the SMRT leadership is very dedicated in ensuring that our organization and profession is represented at all levels and persists to seek out new collaborations. As I take on this role, I'm looking forward to meeting many new professionals from all of these different organizations. I also look forward to working with the current SMRT Executive Committee and Policy Board members in all external relations endeavors. Did you realize that by promoting, educating and sharing information with others in and outside of our profession, we all perform external relation duties within our jobs, perhaps without even knowing it! S



Members of the CAMRT welcome SMRT attendees at the CAMRT reception.

In Recognition of Distinguished and Devoted Service to the SMRT

SMRT Outgoing Officers, 2007 – 2011



Steven P. Shannon, Treasurer, 2007 – 2011



Vera Miller, Secretary, 2007 – 2011



Gina Greenwood, External Relations, Co-Chair, 2007 – 2011



Charles Stanley, External Relations Co-Chair, 2007 – 2011

SMRT Policy Board, 2010 - 2012



SMRT POLICY BOARD 2010-2011: Back row: Left to right: Barry Southers, Steven Shannon, Glenn Cahoon, Ben Kennedy, Heidi Berns, Charles Stanley, Betsy Sestina. Middle Row: Left to right: Mercedes Pereyra, Maryann Blaine, Vera Miller, Carol Lee, Gina Greenwood, Julie Strandt-Peay, John Totman. Front Row: Left to right: Ashok Saraswat, Anne Marie Sawyer, Julia Lowe, Muriel Cockburn, Titti Owman.



SMRT POLICY BOARD 2011-2012: Back row: Left to right: Barry Southers, Kirsten Moffat, Mercedes Pereyra, Glenn Cahoon, Heidi Berns, Helle Juhl Simonsen, Julie Strandt-Peay. Middle Row: Left to right: Cindy Comeau, Julia Lowe, Vera Miller, Carol Lee, Betsy Sestina Front Row: Left to right: Scott Dunn, Cindy Hipps, Anne Marie Sawyer, Charles Stanley, Muriel Cockburn, Titti Owman, John Totman

Nominations and Awards Request



Julia Lowe, B.S., R.T. (R) (MR) Chair Nominations and Awards Committees

"From the nominations submitted, the Nominating Committee will determine a list of eligible candidates to be placed on a ballot and presented to the membership."

Nominations for Policy Board and President-Elect

On behalf of the Nominating Committee, I invite members of the SMRT to nominate individuals for membership of the Policy Board (four positions) and for President-Elect (one position). To be eligible for selection of Policy Board, the nominee must be a member in good standing of the SMRT and have been a member for a minimum of two years. Nominees for President-Elect must also have served on the SMRT Policy Board. Policy Board positions are threeyear terms which will take effect from the SMRT Annual Business Meeting to be held in May, 2012 in Melbourne, Australia and will conclude at the 2015 Annual Business Meeting. The President-Elect will serve a three-year term as President-Elect, President, and Past President, commencing May, 2012.

The Nomination Process:

Nominations should be submitted directly to me at j_lowe66@yahoo.com or to Jennifer@ismrm.org.

The Bylaws of the SMRT require that nominations be received by 1 September 2011. From the nominations submitted, the Nominating Committee will determine a list of eligible candidates to be placed on a ballot and presented to the membership. The Awards Committee will also present nominations for the Crues-Kressel Award to the membership for selection. (All other awards are voted on by the Policy Board.) Ballots will be mailed to all voting members by 15 October 2011. Returned ballots must be postmarked by 1 December 2011 and received in the ISMRM/SMRT office by 7 December 2011 to be eligible.

Policy Board

The Policy Board is responsible for ensuring that the SMRT achieves its stated purpose and objectives, for creating SMRT policies, for fund raising, and for managing SMRT funds. 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 peerrecognition 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. However, 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. It is also advantageous for Policy Board members to have the support of their employer as some commitments such as teleconferences may require flexibility in the workplace.

Generally, an individual who is elected to the Policy Board will have shown a commitment to SMRT activities – such as 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 having already served on the Policy Board and therefore election to the

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 the role of President.

Qualities required by the nominee are an ability to communicate well, provide 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 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. As Chair of the Awards Committee I invite members to submit nominations for the following awards:

Crues-Kressel – for outstanding contributions to the education of MR technologists;

Fellow of the Section – for significant and substantial contributions to the mission of the SMRT and contributions to the development of the Section;

Distinguished Service – for outstanding contributions and level of effort and service to the Section;

Honorary Member – in recognition of extraordinary achievement and an exceptional level of service and support for the Section and mission of the SMRT.

Chapter Chat



Carol Lee, B.S., R.T., (R)(CT)(MR) Chair, Local Chapter Committee "My goal this year is to encourage anyone who would like to start an SMRT Local chapter to go for it."

I am excited about my new role as

Chapter Chair. Local Chapters are an important part of the SMRT and the goal of providing quality education. In our area we are blessed to have two SMRT Local chapters. The Atlanta Chapter was the first SMRT Local Chapter formed. The founders were *Donna O'Brien*, *Bobbie Burrows* and *Carolyn Brown*, who continue to do a fantastic job. They are celebrating their 20th Anniversary as a SMRT Local Chapter in September. I have attended many of their meetings over the years and they always have an excellent program. The South Carolina Chapter is also an active chapter and we will have

our next chapter meeting in March 2012.

There are 13 SMRT local Chapters, most being in the US. They include Australia & New Zealand, BeNeLux, U.S. Chapters, Atlanta, Central Virginia, Gulf Coast, Kentucky, New England, New York/New Jersey, Northwest, Rocky Mountain, South Carolina, South Central Indiana, and Southwest

There are seven Chapters hosting meetings from now till the end of the 2011 year, please go to http://www.ismrm.org/smrt/meetings/future-regional-seminars for more information. I want to thank everyone involved with their local chapters for all the hard

work and effort in preparing for these meetings. My goal this year is to encourage anyone who would like to start a SMRT Local Chapter to go for it. I will be glad to mentor you and help in any way possible. I would love to see more international local chapters formed. It is a great venue to introduce Technologist/Radiographers around the world to the SMRT and all the wonderful benefits of being a member of this premier organization. I would encourage each of you to support the SMRT by attending one of the SMRT Educational Seminars, near you this year.

SMRT Chapter Benelux Symposium



Filip DeRidder, R.N.

On 14 June 2011 the Annual SMRT Benelux Meeting was held in Amsterdam, The Netherlands.

The Fourth SMRT Benelux symposium was organized by *Raschel van Luijk* and *Sandra van den Berg* in co-operation with *Filip De Ridder* from Brussels, Belgium.

The meeting was hosted by the Radiological Department of the Academic Medical Centre and was held in the auditorium of the hospital. 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 120 participants from all over The Netherlands and Belgium. The program was divided into several parts: The morning sessions covered an abdominal MRI program, while the afternoon

discussions touched on more advanced MRI, such as MR Spectroscopy, total body MRI and wrist imaging. Sandra van den Berg and Raschel van Luijk opened the meeting with a word of welcome and the usual announcements. This was followed by an introduction by Professor Dr. J. Stoker. We were very pleased to see Raschel and Sandra as the day moderators. They did a magnificent job and gave an excellent quiz presentation at the end of the day for the motivated participants.

The walking dinner allowed for attendees to meet, network, share ideas and concerns. A brief walk outdoors was refreshing and cleared the mind for the afternoon session.

The presentation of *Dr. Maas*, MRI and professional sports players, was outstanding and well appreciated by the attendees. For most participants his presentation was very interesting, especially the outcome of the interactive quiz. An item to remember

of the interactive quiz was that soccer players and gymnasts were the most demanding patients in the MRI environment, at least within the Benelux. We are wondering if the rest of the MRI world has the same thoughts.

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 Fourth MR Benelux Meeting was a great success.

On behalf of the SMRT we would like to thank all the MRI technologists of the Academic Medical Centre for their help and support. Special thanks go out to *Mirjam Evers-van Bavel* for her work. And last but not least, Jennifer Olson for her help in making this meeting a success. Thank you all. S

SMRT Educational Seminars Home Study Program



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

"For this issue, we have selected three articles that outline MR imaging techniques in the pediatric patient population."

We are pleased to present the SMRT Educational Seminars, Volume 14, Number 2: "Pediatric Magnetic Resonance Imaging." This is the 52nd accredited home study developed by the SMRT, exclusively for the SMRT members. The accreditation is conducted by the SMRT that acts as a RCEEM (Recognized Continuing Education Evaluation Mechanism) for the ARRT. Category A credits are assigned to each educational symposia, which can be used to maintain one's ARRT and AIR (Australia, New Zealand and Tasmania) registries. For this issue, we have selected three articles that outline MR imaging techniques in the pediatric patient population. The first article discusses the fundamental building blocks of imaging the pediatric liver as well as advanced techniques. The second article is a very comprehensive review of pediatric MR urography. The third and last article describes the importance and techniques to quantify adipose tissue in children. We hope that this issue will provide a valuable update in the imaging of the pediatric patient, certainly one of our more rewarding and challenging areas in MRI.

As stated by the author of our first article, "Imaging evaluation of the liver and biliary system is evolving rapidly. At our institution, MRI has replaced CT and ERCP in almost all situations as the preferred modality." Whether or not you are currently imaging pediatric patients on a regular basis, we believe this article will give you some insight into possible solutions for challenges in abdominal MR

SMRT Educational Seminars Volume 14, Number 2

Pediatric Magnetic Resonance Imaging.

imaging as well as advanced techniques that you will be using in the near future if not already. Dr. Vasanawala is well known and highly regarded by MR imaging technologists and radiographers for his knowledge in MR physics and principles and his ability to understand and address the daily challenges that they face.

According to the authors of our second article, "Magnetic resonance urography (MRU) represents the next step in the evolution of uroradiology in children because it fuses superb anatomic and functional imaging in a single test that does not use ionizing radiation. MRU has advantages over other modalities in that it generates tissue contrast from a variety of sources. In addition to spin echo T1 and T2 images, dynamic imaging is performed in conjunction with the injection of a gadolinium-based contrast agent (GBCA) in order to assess the concentrating and excretory functions of the kidney." This is a very comprehensive and detailed review that is sure to provide you with new techniques and applications as well as basic tips and helpful information

Our third article is from Sweden and describes a technique to employ MR imaging and automated quantification of adipose tissue distribution in children. This may prove valuable indeed as this is a serious problem that affects us worldwide. "Many children establish overweight or obesity in early childhood and there is a real risk that these individuals will remain overweight and obese throughout life. Body mass index (BMI) correlates with overweight and obesity and is an indirect marker of metabolic risk in adults. However, BMI does not fully reflect body fat distribution and may be less powerful as a predictor of health risk. A large waist circumference is known to increase mortality independent of BMI." Thanks to techniques like 2-point and 3-point Dixon that clearly and accurately separate fat tissue from water, we are seeing a resurgence in the development of similar yet more advanced sequences. These are variations of the Dixon technique but implemented as rapid acquisitions that also provide in-phase and out-of-phase images.

Many thanks to *Michael Kean, R.T.* from Melbourne, Victoria, Australia, for acting as our Expert Reviewer for this home study issue and the accompanying quiz that provides the continuing education credits.

Thanks to *John Totman*, SMRT
Publications Chair from Nottingham, UK, for directing and supporting the home studies program

Thanks also to Jennifer Olson, Associate Executive Director, Mary Keydash, Publications Director, and the staff in the Berkeley, California, USA office of the ISMRM/SMRT 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 (Philips Healthcare) who generously support our home studies program, the SMRT Educational

Seminars. Their continuing investment advancing technologist and radiographer knowledge brings quality continuing education to the SMRT membership worldwide. SI

SMRT ELECTRONIC-ONLY HOME STUDIES

For the past thirteen years, the SMRT home studies have provided our members with a convenient way to obtain continuing education (CE) credits. Quarterly issues containing several articles provide credits awarded through the completion of a quiz that accompanies each home study. 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 home study, which can be used to maintain one's ARRT advanced registry and are approved for AIR (Australian Institute of Radiography) continuing professional development (CPD) activities. SMRT members located in other countries who are interested in investigating the possibility of having our home studies, printed

or electronic, approved for continuing education or professional development should contact Jennifer Olson, Associate Executive Director of the ISMRM/SMRT in Berkeley, California, USA at jennifer@ ismrm.org for additional information.

The home study articles, selected by members of the SMRT publications committee, are obtained from peer-reviewed journals or written specifically for our publication by technologists, scientists or clinicians working in the field of magnetic resonance imaging (MRI). The quiz is written and expertly reviewed by members of the publication committee, volunteers from the SMRT and ISMRM membership or selected clinicians and scientists. The topics have included a variety of interests from basic physics and

principles to clinical applications and anatomy and physiology atlases. Recent issues are available to members in both printed and electronic format

As a method to provide an increased number of CE credits to the membership without increasing costs, electronic-only home studies are now available through the SMRT website. As a means to minimize costs and to focus on becoming more environmentally conscious, SMRT members will see an increase in electronic-only home studies and a reduction in the number of pages in our printed publication.

Exciting future plans include video home studies for SMRT members to be easily accessed at our website so please stay tuned.

Vol.	No.	Electronic Home Studies Title	Category A CE Credits	Date
E-1	1	Safety of Magnetic Resonance Imaging in Patients with Cardiovascular Devices	1	September 2008
E-2009	1	Use of Contrast Agents in MR Imaging of the Spine	1	January 2009
E-2010	1	Techniques in Spine MR Imaging	1	June 2010
E-2010	2	Susceptibility-Weighted MR Imaging (SWI)	1	November 2010

ISMRM/SMRT Staff in Montréal Quebec Canada



From top row to bottom row, left to right: Roberta A. Kravitz, ISMRM Executive Director; John Celio, Administrative Assistant; Sandra Daudlin, Director of Meetings; Mariam Barzin, Director of Finance; Julia White, Accounting Coordinator; Kristina King, Registrar; Robert Goldstein, Director of Education; Sally Moran, Director of Electronic Communications; Stephanie Haaf, Education Coordinator; Linda O-Brown, SMRT Coordinator; Liz Tharpe, Membership and Study Group Coordinator; Jerusha Rich, Director of Membership and Study Groups; Mary Day, Office Manager; Allison Barbour, Electronic Communications Coordinator; Melisa Martinez, Meetings Coordinator; Mary Keydash, Director of Publications; Jennifer Olson, Associate Executive Director



Meeting attendees interact in the registration lobby.



An invitation is extended to attend the 2012 Annual Meeting in Melbourne, Victoria, Australia.

Associated Sciences Program at RSNA 2011

Associated Sciences Courses

Sponsored by the Associated Sciences Consortium

(This Live activity has been approved for *AMA PRA Category 1 Credit*™ and Category A+ credit for technologists)



Monday, November 28

MSAS21 8:30 AM - 10:00 AM
Implications of the Changing Face
of Health Care: Aging and the Shift
of Population

Claudia A. Murray, *Moderator* David R. Gruen, MD Robert M. Kulis

MSAS22 10:30 AM - 12:00 PM Implications of the Changing Face of Health Care: Delivery and Regulatory Impacts

Charles Stanley, RT(R)(CT)(MR), *Moderator* Abraham Seidmann, PhD Christine J. Lung, CAE

MSAS23 1:30 PM - 3:00 PM Changes in the Scope of Practice: Gaps and Overlaps

Steve Vogt, MSRS RT(R)(MR)(CT)(BD), Moderator
Donna T. Long, MSM, RT(R)(M)(QM)
Linda Gough, M.R.T.(R.)
Lynne Roy, MBA, MS, CNMT, FSNMTS

MSAS24 3:30 PM - 5:00 PM
Medical Imaging Radiation
Exposure Origins, Consequences,
and Control: Optimization of
Radiation Dose

Ellen Lipman, MS, RT(R)(MR), CAE, *Moderator* Rob Goodman, MB BChir Kathlyn A. Slack, BSC

Tuesday, November 29

MSAS31 8:30 AM - 10:00 AM
Ethics in the Era of Health Care
Reform

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

MSAS32 10:30 AM - 12:00 PM
Understanding Health Literacy
and the National Standards on
Culturally and Linguistically
Appropriate Services (CLAS)

Ellen Lipman, MS, RT(R)(MR), CAE, *Moderator* Michael D. Ward, PhD, RT(R) Brenda A. Battle

MSAS33 1:30 PM - 3:00 PM Impacts of Emerging Practice Models

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

MSAS34 3:30 PM - 5:00 PM
Picking Up the Pieces: Forensic
Radiography Following Mass
Disasters

Susan Crowley, BAppSc(MI), MRT(R) MA Ed, Moderator Gerald J. Conlogue, MHS, RT

Wednesday, November 30

MSAS41 8:30 AM - 10:00 AM Imaging Facility Design in an Age of Diminishing Resources

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

MSAS42 10:30 AM - 12:00 PM Creative Strategies for Marketing: Keeping It Legal

Donna Blakely, MS, RT(R)(M)(CRA), *Moderator* Peggy Martin, CRA W. K. Davis Jr, JD

Also on Monday:

AAPM/RSNA Basic Physics Lecture for the Radiologic Technologist

Monday, November 28, 1:30 PM – 2:45 PM CT Dose Control and Optimization

Douglas E. Pfeiffer, MS, *Moderator* Dianna Cody, PhD James M. Kofler, Jr, PhDd

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.

Registration Information

Registration is required to attend the Associated Sciences programs at RSNA2011.RSNA.org.

Advance discounted registration for the RSNA annual meeting ends November 4, 2011. Register now to get the hotel of your choice.

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

Sponsoring Organizations

- AHRA: The Association for Medical Imaging Management
- American Institute of Architects Academy of Architecture for Health (AIA-AAH)
- American Society of Radiologic Technologists (ASRT)
- Association for Radiologic & Imaging Nursing (ARIN)
- Association of Educators in Imaging and Radiologic Sciences, Inc (AEIRS)
- Association of Vascular and Interventional Radiographers (AVIR)

- Canadian Association of Medical Radiation Technologists (CAMRT)
- The College of Radiographers (CoR)
- International Society of Radiographers and Radiological Technologists (ISRRT)
- Radiology Business Management Association (RBMA)
- Section for Magnetic Resonance Technologists (SMRT-ISMRM)
- Society of Nuclear Medicine Technologists Section (SNMTS)



UPCOMING CALENDAR OF EVENTS PLEASE VISIT HTTP://ISMRM.ORG/SMRT FOR CURRENT CALENDAR AND ACTIVITIES

is published by the International Society for Magnetic Resonance in Medicine, and produced for the benefit of the SMRT membership.

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13-14	6 th Annual Meeting of the SMRT Australia/New Zealand Chapter
August	Brisbane, Australia
6–9	ISMRM Workshop on Mapping Functional Networks for Brain Surgery
September	Milan, Italy
15	Northwest SMRT Local Chapter Quarterly Meeting
September	(City TBA), WA, USA
17	SMRT New England Regional Educational Seminar
September	Boston, MA, USA
24	20 th Anniversary: SMRT Atlanta Chapter Regional Educational Seminar
September	Atlanta, Georgia, USA
8	John A. Koveleski 5 th Annual Memorial Educational Seminar
October	Hershey, PA, USA
13–16	ISMRM Workshop on Neuroimaging Biomarkers of Psychiatric Disorders:
October	What Are They? Hotel Schloss Montabaur, Montabaur, Germany
15-16	SMRT 2011 President's Regional Educational Seminar
October	Stanford, CA, USA
22	Northwest SMRT Chapter Regional Educational Seminar
October	Tacoma, WA, USA
29	Kentucky SMRT Local Chapter Meeting
October	Covington, KY, USA
8	Northwest SMRT Local Chapter Quarterly Meeting
December	(City TBA), WA, USA

2012

20–22 February	ISMRM Workshop on Fat Water Separation Long Beach, California, USA
10 March	South Carolina Chapter Educational Seminar Greer, SC, USA
5–6 May	SMRT 21st Annual Meeting Melbourne, Australia
5–13 May	ISMRM 20 th Annual Meeting & Exhibition Melbourne, Australia
6–8 September	ISMRM Workshop on MR Safety in Practice: Now & In the Future Lund, Sweden

