

SDMS News Wave is published to inform SDMS members of meetings, events and policies as well as trends and issues in the sonography profession. Comments, questions or concerns about the articles appearing in SDMS News Wave, should be directed to [newswave@sdms.org](mailto:newswave@sdms.org).

## Current Trends in Echocardiography

**Technological advances mean cardiac sonographers play a greater role in helping to diagnose, treat heart disease**

By Beth W. Orenstein

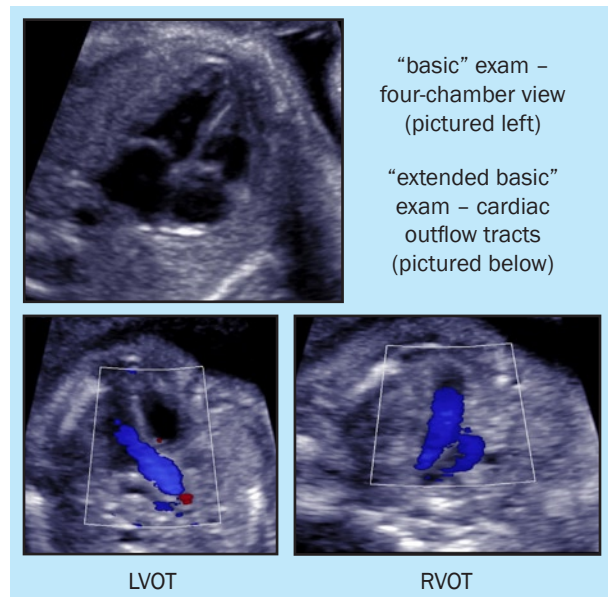
Over the past 10 years, advances in transducer technology and image processing have come fast and furious and have changed the practice of echocardiography.

Members of SDMS who specialize in echocardiography say many of the recent advances are exciting because they allow sonography to play an even greater role in the early detection and state-of-the-art treatments for heart disease and thus for patients to live longer, healthier lives.

Here are some of the many trends in fetal, pediatric and adult echocardiography that SDMS members are excited about:

### Fetal Echocardiography

Sonography has been used since the mid-1980s to help identify congenital heart defects during the second trimester. The “basic” examination of the fetal heart involves a four-chamber view – evaluation of the right and left atrial and ventricular chambers and their respective valves. In the past several years, there has been a movement in the obstetric ultrasound community to encourage obstetric sonographers to perform



the “extended basic” exam which includes the cardiac outflow tracts. The outflow tracts consist of the main pulmonary artery exiting the right ventricle and the aorta exiting the left ventricle.

“With the proper training and education, imaging the outflow tracts and demonstrating their relationship to each other only increases scanning time by a few minutes,” says Lisa M. Allen, BS, RDMS, RDCS, RVT, FAIUM, the

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Ultrasound Coordinator for the Regional Perinatal Center at SUNY Upstate Medical University in Syracuse, N.Y. “Once you obtain the apical four-chamber view of the heart, the outflow tracts can easily be obtained by angling or sweeping the transducer toward the head of the fetus.”

Adding the outflow tracts to departmental protocol increases the ability to detect congenital cardiac abnormalities that may not be apparent in the four-chamber view. “If you supplement the four-chamber view of the fetal heart with the addition of the outflow tracts, you can potentially increase the detection rate of congenital heart defects from approximately 60% to 90%,” Allen says.

The fetal echocardiography community also is abuzz over three-dimensional (3D) and four-dimensional (4D) ultrasound and the potential of this technology to significantly improve the evaluation of the fetal heart. Spatiotemporal Image Correlation (STIC), a 4D application, allows for evaluation and manipulation of the heart in real-time, Allen says. Today’s ultrasound equipment allows sonographers to gather a volume of data from which they can create detailed 3D images of the tiny fetal heart which is constantly in motion. With computer manipulation of the data sets, the images also can be viewed in 4D, allowing physicians to see the entire fetal heart cycle from start to finish. The 4D image includes the workings of the heart chambers, the fluttering of the heart valves, and the flow of blood in the heart and its vessels. “This fascinating technology really gives you a whole new perspective,” Allen says.

Today, the ultrasound machines equipped with 3D and 4D capabilities are found mostly in major centers, but Allen predicts that eventually most, if not all, obstetric facilities will offer the technology – even the private doctors’ offices. “I suspect that 3D and 4D evaluation of the heart including STIC may someday become the standard of care for fetal echocardiography,” she says.

Congenital heart defects are the most common of all birth defects with a reported incidence of 8 per 1,000 births. “When heart disease is diagnosed prenatally, it allows for proper counseling of the parents, delivery at a tertiary care center, and involvement of the appropriate medical professionals to optimize the outcome,” Allen says. “An unexpected congenital heart defect can be life-threatening. If the defect is diagnosed prenatally, there is a significant decrease in infant morbidity and mortality.”

There’s also a new registry for fetal echocardiography. The American Registry of Diagnostic Medical Sonography (ARDMS) has introduced the Registered Diagnostic Cardiac Sonographer (RDCS) in fetal echocardiography. The new registry reflects “a growing trend to increase the knowledge and educational opportunities for sonographers,” Allen says. Multiple interactive tutorials, dedicated conferences, and educational products have emerged to support this growing specialty, she says. Recently, SDMS released a National Certification Review in Fetal Cardiac Sonography.

### **Pediatric Echocardiography**

One of the most significant advances in pediatric echo over the last decade is moving to a digital format, says Joy Guthrie, DHSc, RDMS, RDCS, RVT, RCS, RVS, ROUB, Ultrasound Supervisor/Technical Director for Community Regional Medical Center in Fresno, California. “This is no different from adult echo in some sense,” she says. “But it is a significant advance in pediatrics because the digital format allows for instantaneous comparison of previous studies. That’s critical to pediatrics because there are so many conditions that you need to follow sequentially – pre- and post-repair. With videotapes, comparisons were subjective at best.”

The advent of pediatric transesophageal (TEE) probes also has been a big advance for pediatric echo, Guthrie says. “Transesophageal probes provide an unimpeded sonographic visualization of the intracardiac structures. They’re useful in visualizing very fine valvular abnormalities, the thoracic aorta, vegetations and thrombus in the atrial appendage. It is also useful in detecting subtle anatomic variations seen in congenital heart disease.”

Pediatric-sized TEE probes make the exams possible, Guthrie says. “In the past it wasn’t possible because the adult probe was just too big to put down the baby’s or child’s esophagus. Now the probe is small enough to successfully manipulate it in children and get superb images.”

Because the new sonographic imaging equipment and better surgical techniques allow clinicians to detect and repair more cardiac abnormalities earlier, patients are living longer. As a result, “as a sonographer, you’re doing a lot more work with young adult patients who have had a repair for some form of congenital heart disease,” says Brooke K. Harland, Med, RDCS, RVT, an echo and vascular sonographer with Cardiology Associates of Kentucky in Lexington.

In the past, Harland says, pediatric cardiac sonographers worked mostly with younger children because many didn't survive into adulthood. Today, she says, improved surgical techniques have created a growing population of adults with congenital heart disease that require specialized follow up. For example, in the past, patients born with hypoplastic left heart syndrome – a congenital condition where the left side of the heart (mitral valve, left ventricle, and aorta) does not develop completely – were palliated with a series of very complex surgeries that served as a bridge to an eventual heart transplant. Today, improved techniques and different approaches such as a “hybrid” repair have eliminated the need for one of the surgeries thereby reducing the risk of cardiac bypass and allowing the patients to grow. “Patient care has improved because of these advanced techniques,” Harland says. The original pathways used for the repairs – the Norwood, Glenn, and Fontan operations – are still used today and have allowed patients to survive into their 20s and 30s.

Pediatric cardiac sonographers also may be seeing more teenagers who are planning gastric bypass surgery – as childhood obesity has become an epidemic. “A lot of centers are performing gastric bypass procedures on teenagers and they want a baseline assessment of cardiac anatomy and function to rule out structural heart disease or cardiomyopathy as well as assess the teen's cardiac function,” Harland says.

### Adult Echocardiography

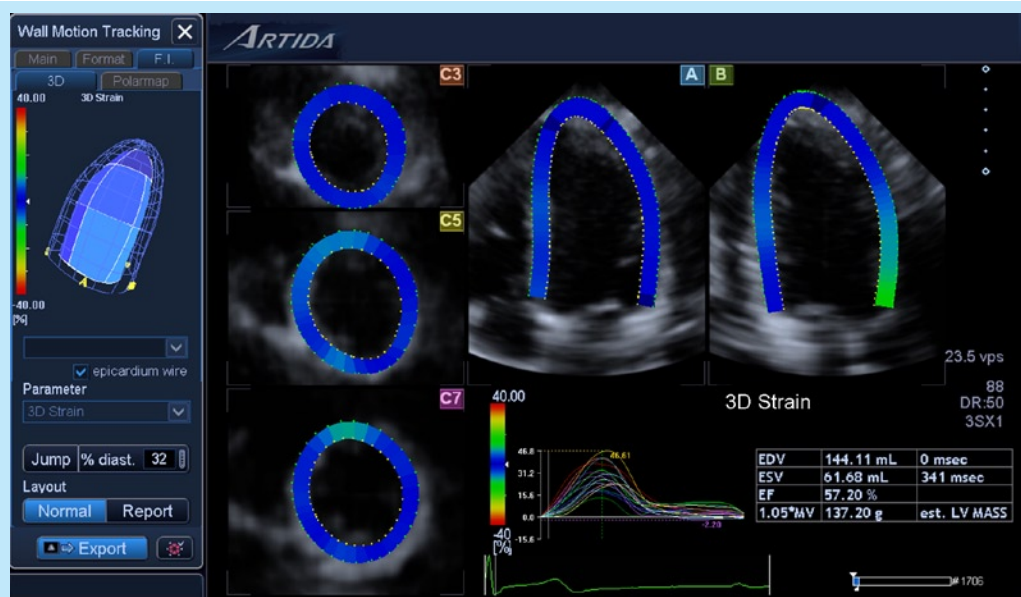
The adult echo world is abuzz about 2D and 3D

speckle tracking, relatively new techniques for the assessment of heart function and strain imaging, says Jeffrey Hill, BS, RDCS, FASE, a clinical and research sonographer at the University of Massachusetts Medical Center in Worcester, Massachusetts. Speckle tracking evaluates both regional and global function by measuring the deformation of the heart muscle. “To give a historical perspective, in the early 2000s, color Doppler strain imaging was successfully applied in different disease states such as ischemic, infiltrative and hypertrophic cardiomyopathy. For the first time, the use of strain imaging was able to reduce the subjectivity of visual assessment for ventricular function, by applying direct measurement to the myocardium,” Hill says. “In 2003, Yang and coworkers were able to identify intrinsic dysfunction in regions of the heart muscle that appeared normal by visual inspection. These abnormalities were most apparent in hypertrophic cardiomyopathy where the strain patterns were virtually opposite of what we would have expected. It was a real eye-opener,” Hill says.

However, there are technical issues and limitations with color Doppler strain imaging. The technology is based on Doppler principles, which include angle and frame rate dependency. In addition, color Doppler strain imaging is limited to the apical views, which represents only one of three “vectors” (longitudinal shortening) of myocardial deformation. “The advent of 2D speckle tracking around 2004, 2005 was a seminal breakthrough for quantification of myocardial function and strain imaging,” Hill says. Unlike color Doppler strain imaging, 2D speckle tracking is

*“The adult echo world is abuzz about 2D and 3D speckle tracking, relatively new techniques for the assessment of heart function and strain imaging”*

– Jeffrey Hill, BS, RDCS, FASE.



based on conventional B-mode acoustic backscatter, permitting tracking of myocardial reflectivity or “speckles” frame-by-frame throughout the cardiac cycle. This technique is non-angle dependant and less frame rate dependant making it easier to acquire compared to color Doppler strain imaging. “For the first time we are able to quantify myocardial function from the three vectors of myocardial deformation, which includes radial thickening, circumferential shortening and longitudinal shortening, by echocardiography. Keep in mind that previously these vectors could only be evaluated by cardiac MRI tagging, the gold standard for the assessment of myocardial function,” Hill says.

Speckle tracking is readily available on and off-cart on the latest ultrasound systems. Most importantly, Hill adds, speckle tracking technology is much easier to use for the sonographer compared to the color Doppler technology.

Still, a major shortcoming of 2D speckle tracking is acquiring 2D information from a 3D structure - the heart is a three-dimensional dynamic structure that demonstrates a 40% change in deformation from the short axis (radial thickening) and 20% deformation in the long axis (longitudinal shortening) on average, Hill says. “What we have realized is that some of the speckles can be potentially lost by moving out of ultrasound plane into the third dimension, which can limit the evaluation of myocardial deformation by 2D speckle tracking. We now have 3D speckle tracking derived from the 3D volumes (See figure 1).” This technology has revolutionized echocardiography and myocardial analysis by capturing all the speckles within the 3D dataset, Hill says.

“The ‘sky’s the limit’ with new 3D technology, as we are able to assess ejection fraction (EF) volumes and myocardial deformation from a single 3D dataset,” Hill says. An inherent limitation of 3D is the frame or “volume” rates are fairly low and typically do not exceed 30 voxels per second. Although it is unknown how low of frame or volume rates are needed for accurate speckle tracking, greater than 40 frames per second are recommended for 2D speckle tracking, “and we would use the same frame/volume rates for 3D speckle imaging as well,” Hill says. Also 3D speckle tracking appears to be more dependent on image quality than 2D speckle tracking.

“Where are we heading?” Hill asks. “To a world of 3D imaging,” he answers. However, he says, “The only way we can move forward is by improving 3D image

quality and volume rates, along with improvements in 3D assessment of valvular regurgitation and stenosis. I do think someday, the echocardiogram that takes 45 minutes to complete will only take 5 minutes to complete and the sonographer will then move to a workstation and work offline with the 3D model. It will be ‘mind over muscle’ for cardiovascular sonographers in the future as there will be more sophisticated software to process and less scanning time.”

Another area where cardiac sonography is playing a new and important role is in cardiac resynchronization therapy (CRT.) In CRT, a stopwatch-sized device is implanted into the chest and connected by leads to the heart’s left and right ventricles. Through electrical impulses, the device resynchronizes heartbeats, allowing blood to be pumped more effectively through the body. The cardiac sonographer can provide data from imaging that first tells the cardiologist whether the patient is a candidate for resynchronization therapy and, second, if the patient is, how the cardiologist can best optimize the pacing of the heart, Hill says.

Another trend in pediatric and adult echocardiography, Harland says, is sonographers spending more time in the cardiac catheterization lab. “It used to be if you had a hole between the two top chambers of the heart, you had to have open heart surgery,” Harland says. Today, cardiologists might be able to do the repair percutaneously with a transcatheter device. An echocardiogram is required at the same time to guide the procedure. So cardiac sonographers and cath lab technologists work together, she says.

Likewise, Harland says, cardiac sonographers are spending more time in the MR suite. “With the advent of 3D echo, there’s a lot of crossover between those two fields.” The crossover has meant additional training for sonographers, especially those who didn’t have radiology in their backgrounds, she says.

Cardiac sonographers also may find themselves working in satellite offices, Harland says. Thanks to advances that have made ultrasound equipment smaller and more portable, “you may find yourself taking a laptop-sized machine and driving 100 miles to where there is no hospital or cardiologist and you spend your day there. I’ve heard of places that want cardiac sonographers to spend two days at a satellite site or to fly somewhere to do echo for the day or the week.” When the portable ultrasound machines first came on the scene, they were expensive and

didn't offer high quality imaging, Harland says. But as they have improved, and as more probes have been developed for them, they have had a big impact on how echocardiography as well as other sonographic specialties is practiced.

Still another trend, says Margaret Park, BS, RDMS, RVT, FASE, a research sonographer, at the Cleveland Clinic Heart and Vascular Institute, Cleveland, is the return of contrast in echocardiography. "We've just started to use contrast again," she says. "It's not new, but it's coming back into the field as cutting-edge again." When the FDA placed a black-box warning on echocardiography contrast agents in October 2007, their use dropped tremendously. However, the FDA has since found the agents to be safe and relaxed its restrictions. "Everyone quit using them when they heard about the black-box warning," Park says. "But now there's a push to use them again – not just at major institutions but also at local hospitals and even in doctor's offices."

Because of the technologic advances, procedure volumes and continued need for proper supervision in the field of sonography, Carol Mitchell, PhD, RT(R), RDMS, RDCS, RVT, program director at the University of Wisconsin Hospital and Clinic School of Diagnostic Medical Sonography Echocardiography/Vascular Option in Madison, hopes to see the profession establishing new roles for advanced practice.

Advanced practice is not a new concept for diagnostic medical sonography, Mitchell says. In 1999, Hall et al published an article entitled, "The Ultrasound Practitioner: A Proposal: Response to the SDMS for the Development of a Middle Care Provider in Ultrasound Imaging," in the *Journal of Diagnostic Medical Sonography*. "The roles for sonographers proposed in these publications could open the door for the discussion on a career ladder for the clinical sonographer," she says.

Beth W. Orenstein is a writer for SDMS.



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# Letter From the President

By Charlotte Henningsen, MS, RT(R), RDMS, RVT, FSDMS

## SDMS: Many Activities, One Message

There are any number of activities that the Society is either engaged in currently, or planning, during 2010. We have a new SDMS Foundation that in its first six months of operation approved over \$65,000 in grants and scholarships to deserving members. Our Foundation is looking to exceed that number this year, through its Annual Conference grants, Educational Scholarships, and Certification Examination Grant program. All of these Foundation programs support either directly or indirectly the primary focus of all SDMS activities program...supporting the establishment of certification standards. Our primary objective is a simple one: motivate congressional decision-makers to establish mandatory certification. The Foundation's Certification Examination Review Grant program is our attempt to assist sonographers in meeting their goals by making these funds available to SDMS members who are preparing to take one of the national certification exams.



In recent months GE has announced the marketplace release of a hand-held ultrasound scanner that has been described as the "new stethoscope of the 21st century." While we applaud the continued evolution of the technology, and what it can mean for our patients, we also understand a fundamental truth about the importance of how this technology will be employed; **anyone who holds a transducer to provide ultrasound examinations needs to be trained and certified.** The patients we serve deserve that this quality control standard be put in place by those persons who have the oversight responsibility to ensure patient safety. Taxpayers who foot the bill for federal healthcare programs deserve that their tax dollars be effectively applied by limiting reimbursement for ultrasound examinations to those who have met the certification standard. We do not object to others using the benefits generated from ultrasound technology; we just believe that the same standard should be applied to all providers whether they be physicians, nurses, EMT's, or sonographers...education and certification.

The SDMS Annual Conference (AC) in 2010 is scheduled for Denver October 14-17. We extend an invitation to all SDMS members to join us in Denver. Regardless of your sonography specialty area, whether it is OB/GYN, Cardiac, Vascular, or Abdominal, the cutting edge information on clinical updates and applications will be offered at the Denver meeting. The SDMS AC is a wonderful opportunity to learn, swap ideas, and expand your network of sonographer colleagues from throughout the country. Once again, the SDMS Foundation can help. There are Foundation Annual Conference grants available after June 1, 2010 to SDMS members specifically designed to help SDMS members have the AC experience. We encourage you to explore these options listed on the Foundation's website: <http://www.sdmsfoundation.org/programs.aspx>

During the SDMS AC you will also hear about the association's primary objective; support for federal-level standards for mandatory certification. It is our center piece of activity. It is our focus. It is the keystone of our strategic plan. We welcome your voice and support to help get the message out...anyone who holds a transducer should be certified and have demonstrated minimal level competency by having successfully completed a credentialing process through one of the national sonography registry bodies.

On Friday, February 26 the U.S. House of Representative's Energy & Commerce Committee convened congressional hearings to take testimony on issues related to patient safety and medical imaging. While the focus of the hearings was primarily addressing the issue of ionizing radiation and recent incidents of over-radiating patients that had been picked up in the media, we were able to have our written testimony submitted by the Chair Emeritus of the Committee, Representative Dingell of Michigan. Our message was simple and to the point, not all patient safety issues are a matter of ionizing radiation; patients can be and are harmed because the individual performing their ultrasound examination is neither educated, nor certified to perform the work required. The members of the committee have the ability to change that environment now by establishing federal standards to require appropriate certification and education for providers of medical imaging services, including sonographers.

Sincerely,

Charlotte Henningsen, MS, RT, RDMS, RVT, FSDMS  
SDMS President

## **SDMS Member Benefit Spotlight - SDMS Sonographer Salary and Benefits Survey Report and SDMS Sonography Educator Salary & Benefits Survey Report**

***What is the annual income for the average sonographer?***

***What do sonographers who hold more than one credential get paid?***

***What is the average number of scans being performed per day and by what specialties?***

***What benefits are employers paying for?***

Do you want the answers to these questions and more? SDMS has the answers.

On a daily basis, SDMS staff would receive calls from SDMS members asking these questions and at the time, we did not have the answers they needed, you needed. So the Society decided to conduct a survey of its members and get the answers. We wanted the capability of providing our members with useful and broad-based data covering all relevant areas associated with sonographer income and benefits, and related practice issues.

In May 2008, SDMS released the SDMS Sonographer Salary and Benefits Survey Report and SDMS Educator Salary and Benefits Survey Report. The reports provide the answers you need and even better are FREE to SDMS members.

SDMS members have the capability to download their personalized SDMS Sonographer Salary and Benefits Survey Report or SDMS Educator Salary and Benefits Survey Report in the Members Only area of the website.

You can access your copy of the SDMS Sonographer or Educator Salary & Benefits Survey report at <http://www.sdms.org/members/salary.asp>.



*Access to the SDMS Sonographer Salary and Benefits Survey Report and SDMS Educator Salary and Benefits Survey Report is an exclusive SDMS member benefit and are not available to non-members.*



## SDMS Foundation Announces First 2010 Scholarship Recipients

The Society of Diagnostic Medical Sonography (SDMS) Foundation's Board of Directors is pleased to announce the first 2010 SDMS Foundation Scholarship Program recipients. The SDMS Foundation's scholarship program provides a \$2,500 scholarship to a deserving sonography student just beginning their career in diagnostic medical sonography. Another \$2,500 scholarship is awarded to a deserving experienced sonographer who is continuing their education by pursuing an advanced sonography-related degree.

**Constance Besaw from Middleton, Wisconsin** is a 2010 SDMS Foundation scholarship recipient. Ms. Besaw is enrolled in general/vascular program at the University of Wisconsin Hospital and Clinics School of Diagnostic Medical Sonography. She will graduate in August 2011. The accredited program offers general, vascular, and cardiac sonography programs and is based in Madison, Wisconsin.

**Rhonda Keller from Greenville, South Carolina** is also the recipient of a 2010 SDMS Foundation scholarship. Ms. Keller is enrolled in the Northcentral University's Master of Education Degree in Higher Education Leadership and expects to graduate in December 2010. Northcentral University is based in Prescott Valley, Arizona. Ms. Keller has worked as a sonographer for more than 18 years and found she loved teaching along the way. She hopes to use the

Master's degree she earns to help her better address the different learning philosophies among college students.

The SDMS Foundation received more than 50 applications for this round of its scholarship program. Each application was objectively scored based on the responses provided on the scholarship application. In addition, each applicant submitted an essay that addressed why they were an excellent candidate for the scholarship, their three to five year professional plan, and how they planned to use their education for the betterment of the sonography and healthcare community. The essays were scored anonymously by a panel of sonographers and the scholarship recipients were selected based on their combined total scores.

The SDMS Foundation will award another round of scholarships later this year. The application deadline for the next round is July 31, 2010. Additional information and applications for 2010 SDMS Foundation grants and scholarships is also available on the SDMS Foundation website ([www.sdmsfoundation.org/programs.aspx](http://www.sdmsfoundation.org/programs.aspx)). The SDMS Foundation charitable programs depends on donations from individual SDMS members and the sonography community. To make a donation to the SDMS Foundation, visit: [www.sdmsfoundation.org/donor.aspx](http://www.sdmsfoundation.org/donor.aspx)



### Congratulations to the February iPod Touch Winner!

Congratulations to **Mary O'Connor** of Houston, TX. Mary is the winner for our Membership Renewal Campaign for February 2010! Her name was picked randomly from all February members that renewed membership online from January 1 to January 31.

Any member that renews their membership ONLINE within 30 days of receiving their FIRST renewal notice email will be automatically entered into a drawing to win an Apple® iPod Touch.

- Members must renew online to eligible for drawing
- Drawings will occur on the first of each month
- Promotion valid January 1 through December 31, 2010

# SDMS is excited to announce the 2010 SDMS Annual Conference Sponsorship and Exhibit Program



SDMS is the largest and fastest growing association in the world dedicated to all specialty areas of sonography. The 2010 Annual Conference will be held October 14-17, 2010 in Denver Colorado. We project an early sellout of exhibit and hotel space for the meeting.

The conference offers over fourteen exhibit hall hours, six hours of dedicated exhibit hall time, which includes the Exhibit Hall Opening Reception and refreshment breaks.

Make sure your company has a 'presence' at this prestigious event. If decision makers in the sonography industry are your target audience, you can't afford to pass up this opportunity!

We hope your company will take advantage of this opportunity. Sponsorships and booth space will be processed and assigned in the order that forms (including payment) are received. We recommend an expeditious response to insure your premiere exhibit hall space.

For more information please go to:

<http://www.sdms.org/meetings/exhibitors/>

## SDMS Foundation Receives IRS Tax-Exempt Status

The Society of Diagnostic Medical Sonography (SDMS) Foundation has been notified that its application to the U.S. Internal Revenue Service (IRS) for tax-exempt status under the Internal Revenue Code as a public charity (aka 501(c)(3) organization) has been approved. The designation by the IRS is retroactive to the SDMS Foundation's formation on June 30, 2009. The IRS designation as a public charity ensures that individual and corporate donations made to the SDMS Foundation may be deductible to the extent permitted by law for federal income tax purposes (consult your tax advisor for more information). Each donor to the SDMS Foundation receives a receipt that can be used as proof of donation for tax purposes.

The mission of the SDMS Foundation is to provide educational and scientific research support through grants, scholarships, and other charitable programs to the medical community and public, relating to Diagnostic Medical Sonography. The SDMS Foundation also fosters professional learning and excellence by working to improve the field of Diagnostic Medical Sonography. For further details on the SDMS Foundation's grants and scholarships, visit <http://www.sdmsfoundation.org/programs.aspx>.



### It's simple to make a donation to the SDMS Foundation:

1. As part of your annual SDMS membership renewal (online or by mail)
2. Online: <http://www.sdmsfoundation.org/donate.aspx>
3. By mail: SDMS Foundation, 2745 Dallas Pkwy Ste 350, Plano, TX 75093-8730.

# New Member SCAN



**Kathryn Zale** is currently a senior sonography student at The Ohio State University. She graduated from Miami University of Oxford, Ohio in 2004 with a Bachelor of Arts degree in English/journalism and another in Russian. Between

2004 and 2005 she worked in Moscow, Russia. In addition to Kathryn's interest in travel and different cultures, another passion of hers is martial arts. In 2004, she obtained her black belt in taekwondo and since had the opportunity to study many different kinds of martial arts including judo, hapkido and capoeira. In the fall of 2007 Kathryn married and moved to Columbus, Ohio. Her husband is also a student at Ohio State, earning his PhD in Horticulture specializing in breeding and genetics of orchids, phlox and magnolias. They enjoy photography, hiking and traveling together.

When asked what inspired Kathryn to choose a

career in sonography, she replied "I grew up around ultrasound." Her father has sold ultrasound equipment for over 30 years and growing up she loved 'Take your Daughter to Work' days. Unfortunately, she just never felt encouraged during school to study science. It was not until years after graduating from Miami did she finally heed her parent's advice and signed up for an anatomy course. It turns out parents do know best! Kathryn instantly fell in love with anatomy and physiology and knew then that sonography was a perfect fit. Since being in the ultrasound program at Ohio State, her professor, Dr. Kevin Evans, fellow classmates and clinical instructors have been a constant source of support and inspiration.

Kathryn expressed her favorite benefit of the SDMS has been the JDMS and online access to archived journals. It has been a tremendous help for writing class papers and just to learn more about what is new and upcoming in the field. Other benefits she enjoys include updated information on legislative issues pertaining to sonography, as well as the national certification examination reviews, which was helpful prior to taking the physics registry. She enjoyed the annual meeting in Nashville and the opportunity to present her research through the student poster competition. Kathryn also mentioned that once she is credentialed, the CME online tests and SDMS CME Tracker will be beneficial.

Kathryn, welcome to the SDMS!



## Upcoming SDMS Webinars



Participate in live presentations or watch the recordings at your convenience. Then take the test for instant CME credit, **absolutely free** for SDMS members.

If you are unable to participate in these live webinars, visit <http://www.sdms.org/members/webinars.asp> for information on viewing a recording of the webinar.

**Registration:** The SDMS Webinar Series is FREE to current SDMS members and is not available to non-members (For information on joining SDMS, visit <http://www.sdms.org/membership/> )



All SDMS Webinars are tracked by *SDMS CME Tracker*.

<http://www.sdms.org/members/webinars.asp>

### Understanding the Other Imaging Modalities

**Date:** Thursday, March 11, 2010

**Time:** 8:00 pm (Eastern); 7:00 pm (Central); 6:00 pm (Mountain); 5:00 pm (Pacific)

**CME Credits:** 1.0 SDMS CME Credit (OT)

**FEATURED SPEAKER:** Salvatore LaRusso, M.Ed. RDMS, RT(R)

### Contrast in the Echo Lab

**Date:** Thursday, April 8, 2010

**Time:** 8:00 pm (Eastern); 7:00 pm (Central); 6:00 pm (Mountain); 5:00 pm (Pacific)

**CME Credits:** 1.0 SDMS CME Credit (AE)

**FEATURED SPEAKER:** Allen Borowski, RDCS, FASE



# SDMS Fellow Spotlight

*This is a continuing series of interviews of our distinguished SDMS Fellow members.*



**Stephen M. McLaughlin, BS, RT(R), RDMS, FSDMS**

**Year awarded fellow status:** 1999

On January 8, 2005, Steve, a colleague and friend, died after a 19-month battle with brain cancer. Steve served on

the SDMS Board of Directors for over ten years as a Regional Director, President-Elect, President, and Past President.

In addition to his Board service, he served the association and sonography community in a multitude of roles: committee chair, Board liaison, national certification exam proctor, local ultrasound society president, and counselor.

Steve's goals as SDMS President were to grow membership and have Diagnostic Medical Sonography recognized as a profession by the United States Department of Labor. In 2001, Steve achieved that goal. Once Diagnostic Medical Sonography was recognized as a profession, Steve

began to educate students and sonographers on the importance of being recognized as a profession.

When Steve passed away, the SDMS Board of Directors felt it was important to keep Steve's legacy alive so in 2006 they created the Stephen M. McLaughlin Memorial Lectureship to honor sonographers whose primary focus is on sonographer professionalism. The lectureship is presented at the SDMS Annual Conference each year. The recipient is recognized at the SDMS Awards Dinner by the SDMS Board of Directors, colleagues and friends.

Recipients of the lectureship must be an Active SDMS member in good standing, actively involved in the profession and a luminary in the field of sonography with a distinguished and notable career.

To date, we have had the honor of presenting the Stephen M. McLaughlin Lectureship to:

Donald Milburn, RDCS, RVT, FSDMS

Terry DuBose, MS, RDMS, FSDMS, FAIUM

Joan Baker, MSR, RDMS, RDCS, FSDMS

Kevin Evans, PhD, RT(R)(M)(BD), RDMS, RVS, FSDMS

## SDMS Product Spotlight – SDMS now offers MedLearn's recently updated 2010 Ultrasound Coder!



Are you mystified by the coding and billing requirements for diagnostic ultrasound procedures? Fear not, MedLearn's Ultrasound Coder book will guide you through the intricacies! This timely resource summarizes Medicare coverage policies and billing guidelines.

- Guidance related to biopsy, aspiration, needle localization and vascular-access procedures

- Covers non-invasive peripheral vascular coding
- Divided into diagnostic ultrasound, ultrasound guidance procedures, echocardiography (fetal and non-fetal), non-invasive vascular diagnostic studies and intravascular ultrasound sections, each with a list of CPT codes and billing tips
- Addresses recent code additions, including new codes for ultrasound and screening for aortic aneurysm

To purchase this product, please go to: <http://www.sdms.org/store/ProductDetails.aspx?ProductID=45>

# SDMS Welcomes New Members

## January 2010

Amy Acuncius	Jeanine Carroll, RDMS	Theresa Ellis, BS	Maria Hernandez, RT(R)(M), RDMS, RVT
Debra Adams, RDMS	La Tosha Carter, RDMS	Sara Emery, BS	Paula Hill, RT(R), RDMS
Robbie Adams	Marrey Carter, RDMS, RVT	Monica Fisher, RT(R), RDMS	Jeremy Hinojosa
Linda Ahlborn, RT(R), RDMS	Portia Carver, RDMS, RVT	Lise Fishman	Patsy Hobson, RDMS
Dersana Ajit, RDMS, RVT	Constance Casey, BS, RDMS, RDCS, RVT	Gina Flores	Lee Hoffer, RDMS, RVT
Marion Allen, RDMS	Herman Celestine, RDMS, RVT	Traci Flowers	Andriah Holley-Smith
Tanya Amos, RCS	Kathleen Chase, RDMS, RVT	Timothy Gahara, MS, RDCS	Stephanie Hollis
Martin Andrzejewski, RT(N), RDMS, CNMT	Jie Chen	Tammy Galang, RDMS	Andrea Hooks, BS, RT(R), RDMS
Taeko Aoki	Judith Cho, RDMS	Jocell Garcia, RT(R), RDMS	Nathan Hughes, BS, RVT
Carmen Arguelles, RT(M), RDMS	Amzad Chowdhury	Carmen Gardner	Cindy Jarvis, RT(R)(M), RDMS
Shannon Austin, RDCS, RVT, CCT	Kalam Chowdhury	Daisy Garza, RT(R)	Charmel Jeffery, BS
Colleen Baca, RDMS	Michele Christensen, RDMS	Dawn Gawell, RT(R), RDMS	Charissa Johnson
Melaine Barco, RT(R)(M), RDMS, RVT	Erica Cissell, RT(R), RDMS	Pamela Giacalone	Robert Johnson, RDMS, RDCS, RVT
Elaine Baroni, RDMS	Shelley Clark, BS	Vanessa Giannamore, RDCS	Sheila Johnson, RDMS
Edgar Barros, RDMS	Tonja Clemons, RCS, RVS	Simone Gifford-Allen, RDMS	Eloise Jones, BS
Athena Basham, RDMS	Gloria Clover, RDMS	Sarah Giszewski	Myra Jones, RT(R), RDMS
Bridie Baucum, RDMS	Audrey Clunie	Juliana Gnade, RT(R), RDMS	Heather Joplin
Laura Becker, RT(R)(M), RDMS, RVT	Holly Cohick, RT(R), RDMS, RVT	Forouzan Godarzi, BS, RT(R)(M)(CT) (MR), RDMS	Brooke Kangas
Candice Bee, RT(R)	Jill Coleman, RDMS	Sheila Gold, RT(R), RDMS, RVT	Jennifer Keegan, BS, RDMS
Mirela Belecciu, RDCS	Paul Collins, RDMS, RVT	Richard Goldsmith, RDMS, RVT	John Kelleher, RVT
Michelle Bell, RT(R)(M), RDMS	Mary Cooper	Carlos Golston, RDCS	Sheri Kempfer, RT(R)(CT), RDMS, RVT
Constance Besaw	Stacy Countryman, RT(R), RDMS	Janene Good, BS, RN, RDCS	Jennifer Kennedy, RT(R)(M)(CT), RDMS, RVT
Pamela Besse, RT(R), RDMS	Pamela Coyer, RDMS	Divya Goyal, RDCS	Jennifer Kennell
Tracy Biegel, RT(R), RDMS	Skyleen Crawford-May, BS	Melanie Green, RDMS	Michele Kim, BS, RDMS
Malgorzata Bigos, RDMS	Roxie Crump	Kelli Griffin	Dana Kirby, RT(R), RDMS
Douglas Bisig, BA, RT(R), RDMS	Jennifer Culler, CMA	Leslie Griffin	Corinne Klimek, RT(R)(M), RDMS
Christopher Blair, RT(R), RDMS, RVT	Andrea Daniel, MS	Wendi Grosch, BS, RT(R), RDMS	Jessica Kolb, RDCS, RVT
John Blomeyer, RVT	Terry Daniels, RT(R), RDCS	Diane Gulbrandsen, RDMS, RVT	Roland Krahn, BS
Kathryn Blosser	Beth Darby, RDMS	Tracy Guzzo, RDMS	Heather Krotofil
Kathleen Boisseau	Peggy Davidson, RT(R)(M)(CT), RDMS	George Gvazava	Connie Kruger, RN
Mojtaba Borairi, RT(R), RDCS	Renee Deal, RT(R), RDMS, RVT	Mary Claire Haenlein, RDMS	Tatyana Kumanovskaya, RDCS, RVT
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Susan Camp, BS, RT(R), RDMS, RVT	Cherylann Doucette, RDMS	Miranda Hemming	Huong Le, BS
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