

## SPECIAL POINTS OF INTEREST

- Call for Nominations
- CARE Bill
- Upcoming Events



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## President's Message



**NOVEMBER 8-14, 2009**, National Radiologic Technology Week, is now history but it is worth taking a moment to reflect on the continued significance of the time in history commemorated by this week. If not for Professor Roentgen and November 8, 1895, we might well be doing something different with our professional lives today. Would you be in health care? What would health care look like without the discovery of X-Rays? Because of November 8, you and I touch and influence the course of people's health each and every day. Just in case you have not thought about this in a while remember, YOU make a difference. YOUR profession makes a difference. YOUR professional society makes a difference, as well. The WORLD is healthier and life is better because radiologic and imaging professionals exist and are committed to continue growing to meet the challenges of our ever-evolving field.

Consistent with this thought, the MSRT is actively in support of the CARE Bill and solicits your support to help get it passed. If you haven't already done so, email your representative to have them sign onto the bill for support. See David LeClair's article in this newsletter for information on how you can support the profession that changes lives.

The 2010 Annual Conference is scheduled for April 7-9, 2010. The Conference Committee truly wants to plan an event that meets your continuing education needs and leaves you pleased and satisfied. Based on your survey comments, we will again be at the Westford Regency and the date has been moved up to avoid conflict with other events traditionally held in May. Make plans to attend with a colleague.

The Half-Day Seminars have been taking place around the state and have been well received by the attendees. I would be pleased if more of the membership pre-registered as opposed to registering a few days before the event but the seminars have still been well

*Continued on page 2*

## THERE'S NO SUCH THING AS A FREE LUNCH

BY BRIAN MCINTOSH, B.S., R.T. (R)

When a representative from a pharmaceutical or medical device manufacturing company is doing business with hospital or radiology department employees these days,



'There's no such thing as a free lunch', may be a fitting way for the dialogue to open.

Massachusetts has some of the strictest rules in the nation and has put

into statute a code of conduct that ensures "the relationship between pharmaceutical or medical device manufacturers and health care practitioners [does] not interfere with the independent judgment of health care practitioners." This is codified under 105 CMR 970.000, entitled "Pharmaceutical and Medical Device Manufacturer Conduct."

The legislation, as of July 1, 2009, requires pharmaceutical (i.e. contrast media) or medical device manufacturing (i.e. imaging equipment) companies to have a comprehensive code of conduct in place that

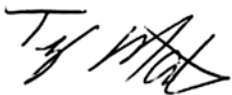
*Continued on page 2*

received. Look inside this newsletter for more in depth information on the seminars and what attendees have had to say about them. You won't want to miss this segment. If you are interested in getting involved with the Executive Board or volunteering on any of the committees, please email the MSRT office at [msrt-ma@comcast.net](mailto:msrt-ma@comcast.net) and let us know your area of interest. Also, our schools and program directors have been doing a great job of involving the students in our Half-Day Seminars. Students, you make a difference.

I'd like to thank the technologists, past and present, who have contributed to *The Exposure* by writing Tech Tip articles and other articles for inclusion. You must check out Brian McIntosh's article on *There's No Such Thing as a Free Lunch*, Maryann Blaine's and Lori Nugent's article on *MRI Safety* and Terrence Licciardi's article on *Heart and Coronary Arteries with Multidetector CT Scanning*. In the next newsletter, we want to see your article. The Commonwealth of Massachusetts is the educational goldmine of the United States and I know we have technologists who have something to share with their colleagues. Email the Editor at [lynne.davis@mcphs.edu](mailto:lynne.davis@mcphs.edu) and let her know your thoughts on an article contribution. This will be a rewarding experience for you.

When you get this newsletter in the mail, the holidays will be recent memories. My hope is that they were safe and pleasant and that you spent time enjoying the company of those you love. On behalf of the MSRT Board, **HAPPY NEW YEAR!**

Sincerely,



Tyler Martin

regulates permissible activities with potential and/or existing customers. Documentation of training in the company code of conduct is required.

Noteworthy within the statute are three major provisions that prohibit what was once customary within a normal business relationship:

**1** Pharmaceutical and Medical Device Manufacturing companies are prohibited from providing meals under any circumstance to hospital/radiology staff unless the meal is modest in nature AND part of an educational or informational presentation which has been requested by the hospital department. All meals must be within the hospital or practitioner's setting to employees only and must be valued at under \$50 per person.

**2** Pharmaceutical and Medical Device Manufacturing companies are prohibited from providing any type of remuneration to a hospital/radiology staff member attending a scientific meeting or educational conference unless that person is being employed as faculty associated with the meeting (i.e. lecturer, organizer of event). This means that the radiology employee (or hospital) is responsible for the costs of travel, lodging, or other personal expenses associated with attendance.

**3** Pharmaceutical and Medical Device Manufacturing companies are prohibited from providing any type of gifts, or "other payments" to customers. Tickets to entertainment events, sporting events, concerts, etc...are all prohibited. The strictest component of the law is perhaps the prohibition of "complimentary items such as pens, coffee mugs, gift cards, etc. to health care practitioners." Fines associated with violations of the statute can be up to \$5,000 for each transaction, occurrence, or event.

So what is allowed in this brave new world of conduct and compliance? There are provisions that allow for reasonable compensation for bona fide services provided by a health care practitioner to the company, i.e. honorariums to a lecturer at a conference. Also, costs associated with travel and lodging expenses for healthcare practitioners receiving training on equipment are allowable so long as a written agreement is in place when purchasing equipment.

There are many details to the law that representatives from pharmaceutical and medical device companies and healthcare practitioners are trying to figure out. For more information, and a complete review of the law, visit [www.mass.gov/dph](http://www.mass.gov/dph) and enter "Code of Conduct" in the search field.

**Brian McIntosh is the Director of Radiology at Faulkner Hospital and can be contacted at [bmcintosh1@partners.org](mailto:bmcintosh1@partners.org)**

**SEE BACK PAGE FOR INFORMATION ABOUT IMPORTANT UPCOMING EVENTS.**

# Anatomy Review of the Heart and Coronary Arteries with Multidetector CT Scanning



By Terrence Licciardi RPA, RT(R),(CT)

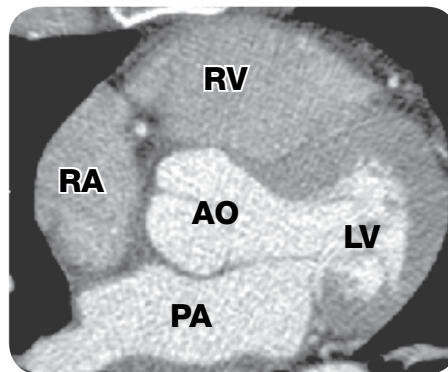
## AS TECHNOLOGY

continues to advance and diagnostic imaging becomes less and less invasive, CT scanning is becoming the modality of choice for evaluation of coronary arteries. Coronary CTA (Coronary Computed Tomography Angiography) provides a safe and accurate alternative to cardiac catheterization in an increasing population. Its accuracy continues to be validated in correlation with cardiac catheterization with sensitivity and specificity of 98% for CTA compared to cardiac catheterization in stenosis greater than 50 percent.

The use of MDCT (MultiDetector Computed Tomography) in evaluating coronary arteries has unique advantages. One is the discovery of additional anatomic information not appreciated at the time of the cath, such as ventricular wall thickness and anomalous arterial origins. Another advantage is plaque characterization described as hard, intermediate or soft.

The first prerequisite, however, of a successful evaluation of the heart and coronary arteries is a mastery of the cardiac anatomy. As radiographers, traditionally, the heart has only been grossly evaluated in both CR and CT. In this article, we will review the relevant coronary anatomy demonstrated during CCTA.

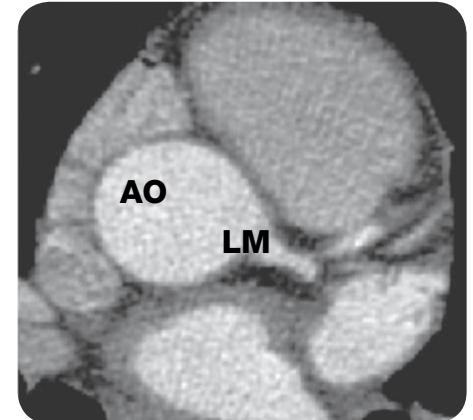
The heart is responsible for moving blood continuously through the cardiovascular circuit. Divided into halves, the right side of the heart receives deoxygenated blood from the body and moves it into the pulmonary exchange where reoxygenation occurs. The blood then returns to the left side of the heart for distribution to the body via the aorta (see Figure 1).



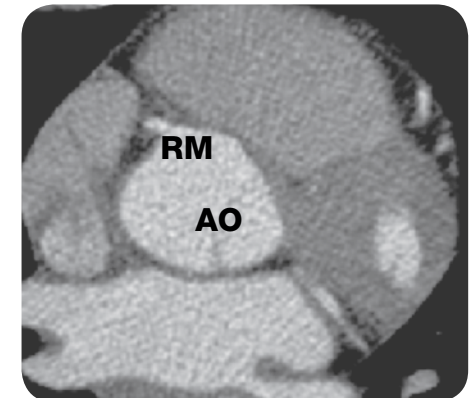
**FIGURE 1** - Cross sectional image of the heart at the level of the pulmonary artery demonstrating RA (right atrium), RV (right ventricle), LV (left ventricle), PA (pulmonary artery) and AO (aorta) – Figures 1-10 courtesy of Salem Advanced CT Imaging. Used with permission.

In order to do its job properly, the muscular heart walls must be continuously supplied with freshly oxygenated blood. This happens via the coronary arteries. In the normal coronary artery anatomy, there are two

cusps in the aorta that give rise to the left (see Figure 2) and right (see Figure 3) main coronary artery.



**FIGURE 2** - Aorta (AO) and the takeoff of the left main coronary artery (LM)



**FIGURE 3** - Aorta (AO) and the takeoff of the right main coronary artery (RM)

Continued on next page



## Comments heard across the membership about *The Exposure* makeover

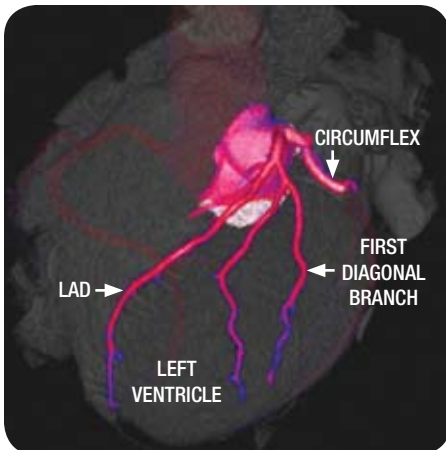
“This looks awesome. GREAT Job.” • “The Exposure looks fantastic.” • “I’m not even in your profession but I picked up your newsletter and read with interest.” • “The Exposure has now emerged as a truly professional looking publication.” • “Did you catch that ONE typo in The Exposure?” • “All I can say is –Bravo. What a professional job on the Bulletin.” • “Nice job.” • “This makes me want to open it up and read it.” • “Awesome. Looks great!!!!” • “Did you spell my name correctly?” • “This is a publication I’ll keep around and refer to because it has useful information in it and it has eye appeal.”



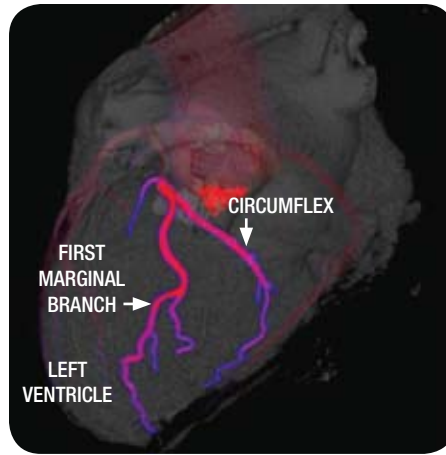
## LEFT CORONARY ARTERIES

The “LAD”, or left anterior descending artery (or anterior interventricular branch of the left coronary artery, or anterior descending branch) passes at first behind the pulmonary artery and then comes forward between that vessel and the left auricle to reach the anterior interventricular sulcus, along which it descends to the incisura apicis cordis (see Figure 4).

- In 78% of cases, it reaches the apex of the heart.
- It supplies the anterolateral myocardium, apex, and interventricular septum.
- The LAD typically supplies 45-55% of the left ventricle (LV).
- The LAD gives off two types of branches: septals and diagonals.
- Septals originate from the LAD at 90 degrees to the surface of the heart, perforating and supplying the intra-ventricular septum.
- Diagonals run along the surface of the heart and supply the lateral wall of the LV and the anterolateral papillary muscle.



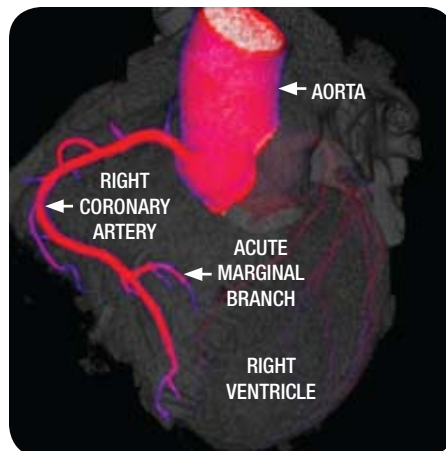
**FIGURE 4** - Left anterior descending (LAD) and its branches



**FIGURE 5** - Circumflex branch and associated diagonals

## RIGHT CORONARY ARTERIES

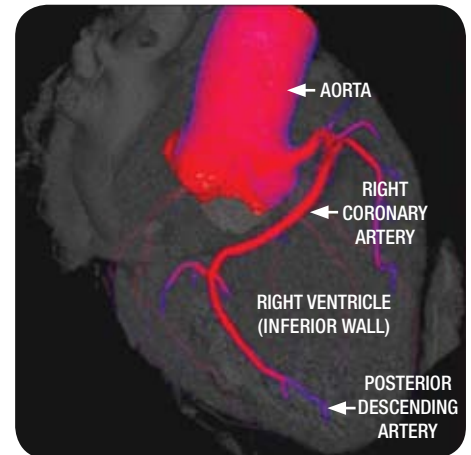
- The right coronary artery (RCA) originates above the right cusp of the aortic valve (see Figure 6). It travels down the right atrioventricular groove, towards the crux of the heart.
- The acute marginal arteries (see Figure 6) branches off the RCA anteriorly in the mid vessel.
- In addition to supplying blood to the right ventricle (RV) (see Figure 6), the RCA supplies 25% to 35% of the left ventricle (LV).
- The RCA also supplies the SA nodal artery in 60% of patients.
- The other 40% of the time, the SA nodal artery is supplied by the left circumflex artery.



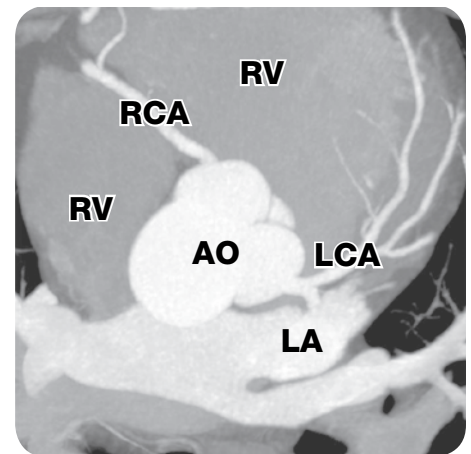
**FIGURE 6** - Right coronary artery (RCA) and the acute marginal branch

## POSTERIOR DESCENDING ARTERY

- In 90% of patients, the RCA (see Figure 7) gives off the posterior descending artery (PDA). In the other 10% of cases, the PDA is given off by the left circumflex artery.
- The PDA (see Figure 7) supplies the inferior wall, ventricular septum, and the posteromedial papillary muscle.



**FIGURE 7** - Right coronary artery (RCA) and the posterior descending artery (PDA)



**FIGURE 8** - This supplemental thick slice axial image demonstrates the relationship between the aorta (AO) and left (LCA) and right main coronary arteries (RCA) also demonstrated are the right ventricle and left atrium (LA).

## CORONARY VALVES

An additional advantage of CCTA is the evaluation of the coronary valves. There are four cardiac valves, the aortic, pulmonary, tricuspid and mitral valve. Each valve has the function of preventing retrograde flow of blood through the heart during contraction.

### Aortic Valve

The aortic valve separates the left ventricle from the aorta (see Figures 9 & 10). As the ventricles contract, it opens to allow the oxygenated blood collected in the left ventricle to flow throughout the body. It closes as the ventricles relax, preventing blood from returning to the heart.

### Tricuspid Valve

The tricuspid valve separates the right atrium from the right ventricle. It opens to allow the de-oxygenated blood collected in the right atrium to flow into the right ventricle. It closes as the right ventricle contracts, preventing blood from returning to the right atrium; thereby, forcing it to exit through the pulmonary valve into the pulmonary artery.

### Mitral Value

The mitral valve separates the left atrium from the left ventricle (see Figure 9). It opens to allow the oxygenated blood collected in the left atrium to flow into the left ventricle. It closes as the left ventricle contracts, preventing blood from returning to the left atrium; thereby, forcing it to exit through the aortic valve into the aorta.

### Pulmonary Valve

The pulmonary valve (see Figure 11) (Pv) separates the right ventricle from the pulmonary artery. As the ventricles contract, it opens to allow the de-oxygenated blood collected in the right ventricle to flow to the lungs. It closes as the ventricles relax, preventing blood from returning to the heart.

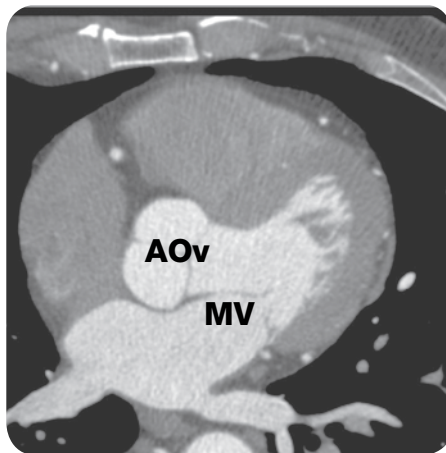


FIGURE 9

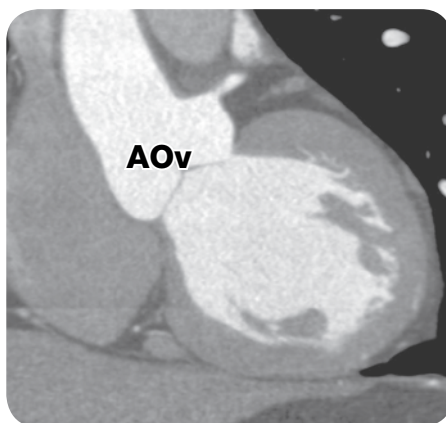


FIGURE 10

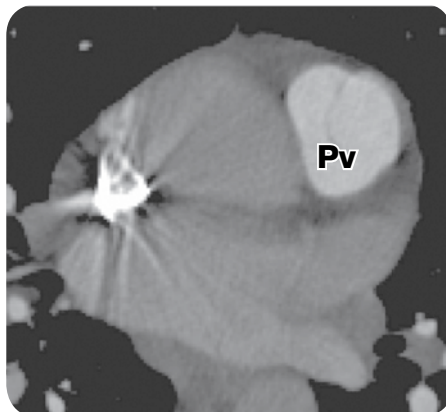


FIGURE 11

**FIGURES 9-11** - Axial and coronal images demonstrating normal aortic valve, tricuspid valve and pulmonary valve. (AOv/ TsV/ Pv).

Hopefully, this has given you an introduction to, or review of the coronary anatomy utilizing MDCT. In a subsequent article, we'll look at evaluation and analysis of the coronary arteries with this remarkable technique.

Special thanks to Anne Marie Edwards RPA, RT (R) (CT), General Manager and Chief of CT Scanning for the use of all images included in this article.

**Terrence Licciardi RPA, RT (R) (CT)** is a Radiology Practitioner Assistant at Salem Radiology and can be reached at [tlicc@verizon.net](mailto:tlicc@verizon.net).

## Submissions to The Exposure



*The Exposure* welcomes submissions for possible inclusion in the newsletter. Typically, the newsletter is published five times a year in January/February, March/April, June/July, September/October and November/December. Receipt of information prior to the month of publication insures a better chance of inclusion. Letters to the editor, significant events happening in your Imaging Department, professional promotions, imaging related puzzles, article contributions, technologist obituaries, human interest stories connected to the profession are examples of what we'd like to include in the newsletter. Email the editor at [lynne.davis@mcphs.edu](mailto:lynne.davis@mcphs.edu) with ideas you'd like to share.

## Massachusetts General Hospital Now



**Sponsor of the 2010 MSRT Annual Conference Cocktail Hour**

# Treasurer's Report

DECEMBER 2009

By Karl Ellison, B.S., RT(R)

## FEDERAL TAXES HAVE BEEN FILED



and State annual reports have been sent to the Commonwealth on-time. Again, our accountant has provided significant direction and insight for our association. Not much else is happening financially speaking except for some 1/2-day seminars and the printing of *The Exposure*. Some individuals who have received certain amounts over the year will be issues a 1099-

MISC form to be compliant with IRS requirements, and to protect our non-profit status.

The budget for the year was approved after some time was spent cutting out all unnecessary expenses. This year we'll have a deficit budget (we'll spend \$700 more than we'll bring in) due to the higher cost of - everything. But the board felt this was reasonable given the spending cuts we'll endure. There will be absolutely no reduction of services to our members. There will be a focus on gaining new members to offset this deficit. There will be one greatly expanded service - a newly designed website with on-line CEUs coming in 2010!

## MASSACHUSETTS SOCIETY OF RADIOLOGIC TECHNOLOGISTS

### Income & Expense

AUGUST THROUGH DECEMBER 2009

	AUGUST - DECEMBER
INCOME	
100.00 - MSRT - Income	17,424
300.00 - Conference Income	500
<b>Total Income</b>	<b>17,974</b>
EXPENSE	
200.00 - MSRT Expenses	25,131
400.00 - Conference Expenses	240
<b>Total Expense</b>	<b>25,372</b>
<b>Net Income</b>	<b>-7,397</b>

## CALL FOR NOMINATIONS **We need YOU!**

Our Society operates on the dedication of volunteers. Volunteers help organize seminars, manage committees, work at our Annual Conference and serve as members of the Executive Board.

Annually, we reach out our membership to ask you to become a volunteer. Specifically, we are looking for volunteers to serve as Executive Board Members.

Nominations are being accepted for all of the following Executive Board positions

President  
President-Elect  
Vice President  
Secretary  
Member-At-Large  
Regional Delegates (5 Positions)

If you would like to serve as a board member or on a committee or if you have held an office previously and wish to serve again, please contact the MSRT office ([msrt-ma@comcast.net](mailto:msrt-ma@comcast.net)) to indicate your interest and to find out more information.

Deadline for Nominations is February 15, 2010.



**THANK YOU**



**MEDICAL X-RAY SYSTEMS**  
**EQUIPMENT • SUPPLIES • SERVICE**

The MSRT thanks Jason J. Olenio, RT(R), Vice President of Associated X-Ray Imaging Corporation, for hosting the Continental Breakfast at the Half-Day Seminar held at Northern Essex Community College on November 7, 2009. If not for Associated X-Ray Imaging's sponsoring of this event, the seminar would have been canceled due to low pre-registration numbers. As it turns out, 46 technolo-

gists and students were able to attend a spectacular CE event for National Radiologic Technology Week.

Associated X-Ray Imaging donated a Weekend Get-A-Way to Grand Summit Resort in North Conway, MA. Registered Technologist and seminar attendee, Susan Giles, was the winner of this fabulous gift.



*Tom Graziano, RT,R, Account Representative for Associated X-Ray Imaging Corporation, tells the audience about the North Conway Weekend Get-A-Way and pulls the winning name from the bag. Winner, Susan Giles, receiving gift from Tom Graziano, while Half-Day Seminar Coordinator, Pat Willett, looks on. See more seminar photos on page 18.*

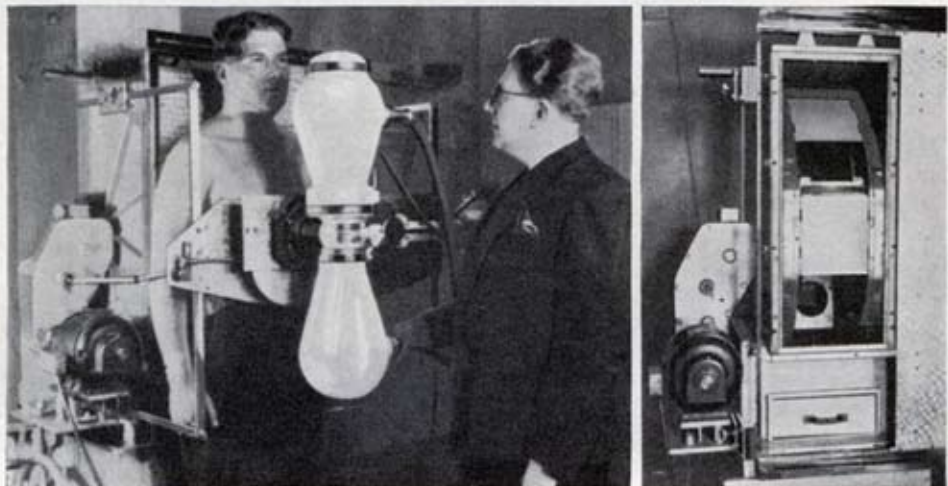
**A BLAST  
FROM OUR PAST**

**1939**

From *Popular Science* July 1939

Submitted by Karl Ellison

## New "Camera" Makes X-Ray Movies



Taking X-ray movies of a patient. Right, view of film-carrying mechanism showing plates on revolving drum

**M**OTION pictures made with a rapid-fire X-ray "camera" devised by a Belgian radiologist will help physicians to study and to diagnose the ailments of moving body organs. Instead of making single shots, the machine exposes a series of large X-ray films in quick succession. This is done by mounting the specially slotted films upon a motor-

driven revolving drum, seen within the machine in the right-hand view above. For examination, the resulting sheaf of pictures may then be transferred to motion-picture film and run off in a projector at any desired speed, so that the movements of the internal organs, as they appear on the film, are vividly shown on a conventional screen.



## The CARE Bill By Dave LeClair BS RTR

**The Consistency, Accuracy, Responsibility and Excellence in Medical Imaging and Radiation Therapy**, known as The CARE bill was introduced in the House of Representatives by Rep. John Barrow (D-Ga.) on Sept. 25, 2009 as H.R. 3652. The CARE bill will increase health care quality and reduce costs by ensuring that all people using ionizing radiation will be qualified to do so.

It is now the responsibility of all Radiologic Technologists to recruit cosponsors for the bill as quickly as possible! By developing the list of cosponsors as soon as possible, we are sending a strong message to Congress that quality health care is important.

**To achieve this goal, it is crucial that you contact your representative TODAY and tell them to call Hill Thomas in Rep. Barrow's office to sign on as a cosponsor.** If your congressional representative is a past cosponsor of the CARE bill, he or she will be familiar with the bill and will be receptive to signing on again; however, we cannot just rely on him or her to automatically sign on again. It is important that you contact their office so they know it is important to you. How do you find out who your representative is and how do you contact them? Go to <http://capwiz.com/asrt/home/>. or <http://www.yourcongressourhealth.org>. You can also call the Capitol switchboard at 202-224-3121 and ask to be connected to your representative's office.

This is the opportunity that we have been waiting for – A chance to do a VIRTUAL march on Capitol Hill. Now is the best chance we have to make progress on the CARE bill but we need all imaging technologists and therapists to help us achieve our goal while health care reform is a hot topic. Please call or email your representative's office today.

If you have any questions about the CARE bill, please don't hesitate to contact me. For more information about the CARE bill and to find out the names of current cosponsors, go to <http://www.thomas.gov>.

Thanks for supporting our profession,

Dave LeClair BS RTR  
ASRT Advocacy Committee



### THE MSRT PAYS TRIBUTE TO

## Edward M. Kennedy

**I**N AUGUST, the Massachusetts Society of Radiologic Technologists joined everyone from around the country and the world to reflect on the loss of our health care Senator,

Edward M. Kennedy (D-Ma). He had always been a tremendous advocate for improved health care in our state and our country. This has been particularly noted through his efforts for the Radiology Community with our own "CARE" bill. We have been very fortunate in Massachusetts to have had Senator Kennedy represent us as health care professionals. During the many visits with Senator Kennedy's office by members of the MSRT during the RT in DC program, we were always reassured by his legislative staff that he was fighting for our

cause and was constantly looking for a way to get the CARE bill passed. We would always leave with the reassurance that the Senator was on our side in his tireless attempt to accomplish this. His role as the introducing co-sponsor of the CARE bill in 2005 and 2007 was well received by his colleagues in Massachusetts, as depicted in phrases such as "if Kennedy's for it, then I'm for it." It is unfortunate that he didn't live long enough to see the bill through to the President's desk; but it WILL BE THERE one day due to his efforts. He truly believed in our cause to improve patient care and safety. He will be greatly missed as we make plans to return to Washington to finish our job.

Dave LeClair BS RTR  
MSRT Governance Chairman



# MSRT Board Meeting Minutes

FIRESIDE GRILLE MIDDLEBORO, MA • OCTOBER 17, 2009

## Meeting Called to Order: 9:20 a.m.

### Board Members Present:

Tyler Martin, Jim Lampka, Kevin Reynolds,  
Shannon Barron, Kate Weiss,  
Lisa Fanning, Karl Ellison, Dave LeClair,  
Pat Willet, Lynne Davis

- Minutes from June's meeting accepted as written.

## PRESIDENT'S REPORT

- Charter with ASRT has been approved and signed by Ty. We are just waiting to receive the actual charter.

## TREASURER'S REPORT

- Taxes are done
- AR180 Annual Report is done and will be sent next week
- Motion made to run budget prior to October meeting and to have done for June meeting. Renewals will be added and minor adjustments will be made. Motion seconded. Board voted to run budget for June meeting.
- Budget in deficit of about \$5K – board reviewed and voted on the following changes:
  - ASRT House of Delegates meeting – members in attendance will pay for their own meals
  - RT in DC – members in attendance will pay for their own meals
  - Eliminate business cards for board members
  - Changes allowed for a deficit of \$3,800
- Renewal notices – will print in exposure and advertise at the conference to renew; will mail out renewal notices only for members who have not renewed in order to cut costs on postage

## CONFERENCE COMMITTEE

- Westford Regency, April 7th – 9th
- Theme: "Laws and Ethics of Radiology"
- Jim to contact Bob Walker and/or Pat Hayward as a keynote
- Board agreed to continue to host the Dance – members will help to chaperone
- MGH Imaging will sponsor the cocktail hour
- One speaker already confirmed
- The idea was brought up to have the 2010 Conference at a site that offered more for families so members may be more apt to attend if their families can come and have something to do

## SEMINAR UPDATE

- Oct 17th
  - Fireside Grille
  - Profit – \$871.88
  - Attendees – 72 (10 students, 1 Education Councilor)
- Nov 7th
  - Northern Essex Seminar at the Haverhill Campus
  - One Radiation Protection lecture
- Jan 2010
  - Western MA seminar in Holyoke
  - 4 lecturers confirmed
- Feb 2010
  - Mass College of Pharmacy
  - Host in conjunction with afternoon seminar for SMSRT

## OLD BUSINESS

- 2178 Bill has had no movement
  - ASRT has reached a compromise with PA's in that they need 80 hours of education, physician sign off and CEUs
  - Dave to follow up on whether this is fluoro only and if radiation procedures and safety will be covered on their boards.
- CARE Bill – introduced 9/25/09 and is attached to Health Care Reform Bill
  - Dave encouraged everyone to contact their representatives to sign on as co-sponsors of the Bill

## NEW BUSINESS

- Membership Drive
  - Karl to draft letter to send to hospitals the latest copy of the Exposure
- Website Management
  - Hire someone to update website and Mary Anne will update it
- Kate to contact friend to see if interested in updating
- Mary Anne will take an online course to maintain website once the software is determined

Meeting adjourned: 11:53 a.m.

# MRI Technologists, the Last Line of Defense in MRI Safety



By Maryann Blaine MAT, RT (R) (MR) & Lori A. Nugent, B.S., R.T. (R) (MR)

**M**ANY may see obtaining diagnostic MRI studies necessary for proper diagnoses as the primary role of a MRI technologist, but ensuring the safety of patients, staff, and visitors in the MRI facility is vital. The technologist's role is one of vigilance. Technologists must use their knowledge of safe MRI practices to educate patients, colleagues, and visitors to the MRI facility. Adherence to these safe practices is of the utmost importance and must take precedence over any requests to hurry things along or to take short cuts.

The powerful magnetic field of a superconducting MRI scanner is responsible for the alignment of hydrogen nuclei which exist in abundance in the human body and are useful in MR imaging. Average magnet strength of 1.5 Tesla is used in MRI imaging which is much stronger than that of the strength of the earth's magnetic field which is .00005 Tesla. This extremely strong magnetic field is one of the chief safety concerns within the MRI department since it is invisible and always present. In fact, many accidents in MRI have occurred when it seems as though the magnet is 'off'. Most people know that the MRI machine makes a lot of noise, so there is often an assumption that if the noise stops the scanner is off. This is not the case. Despite the fact that there are DANGER signs on the floors, walls, and doors in every MRI department many people assume the magnet is off if there is not a patient on the table or they do not hear the noise. Unfortunately, these assumptions have proven deadly.

The MRI technologist has an understanding of the dangers present in the MR environment and realizes that the responsibility to keep the environment safe through communication, screening, and education belongs to the technologist who is trained in MR safety. One vital part of MR safety is the communication between the patient and the technologist. Thorough review and completion of a MR safety screening form prior to admittance provides the technologist with vital information about the individual. This information includes whether or not they have any metal objects with them, metal implants or devices inside them, as well as the possibility of any internal or external electronic devices which may or may not be MRI safe. It is also important to screen each patient 2-3 times before they enter the MRI scan room, which can be frustrating for patients, their families, and their caregivers, but it is essential. Most often this frustration can be overcome by offering the patient a brief explanation regarding the dangers of the magnetic field. The MRI technologist is the last line of defense as to who is allowed into the MRI exam room as well as which items are MR safe to bring into the room. The technologist must not abdicate that role to anyone for any reason. The task of screening each and every patient, individual, or item which might enter the MRI exam room is crucial.

MRI facilities can assist the technologists by providing comprehensive MR safety training for all hospital staff and local emergency personnel. MR safety should be part of all orientation programs for all personnel. Many of the accidents that have occurred were a result of ancillary personnel entering the room to assist with the care and monitoring of the patient. Also, the administration and radiologists must

support the technologists by providing strict policies and procedures with regard to MR safety, as well as requiring adherence to the policies.

Safety in MRI is a critical aspect which at times may be overlooked by either hospital staff or patients who come to a MRI facility. Unfortunately, the seriousness of safety in MRI can be observed when this responsibility is not carried out, and harmful or possibly even deadly outcomes occur. Through the practice of improving patient communication and education, as well as continued efforts towards education in MR safety for medical facility personnel these injuries and incidents will cease to exist.

To learn more about MRI Safety please visit these websites:

Joint Commission website:

[http://www.mednovus.com/SentinelEventAlert\\_no38.pdf](http://www.mednovus.com/SentinelEventAlert_no38.pdf)

Issue 38, February 14, 2008

Preventing Accidents and Injuries in the MRI Suite

"Dangers in MRI" video:

[http://www.youtube.com/watch?v=\\_IBxYtkh4ts](http://www.youtube.com/watch?v=_IBxYtkh4ts)

**Maryann Blaine MAT, RT (R) (MR) is the Program Director for the MRI Program at Massachusetts College of Pharmacy and Health Sciences and can be contacted at [maryann.blaine@mcphs.edu](mailto:maryann.blaine@mcphs.edu).**

**Lori A. Nugent, B.S., R.T. (R) (MR) is the MRI Clinical Coordinator at MCPHS and can be contacted at [lori.nugent@mcphs.edu](mailto:lori.nugent@mcphs.edu).**

# Job Openings

**Title:** CT Technologist - Per Diem **Location:** Weymouth, MA **Job Type:** Per Diem **Schedule:** As Needed / Performs computed tomographic procedures to aid physicians in the diagnosis of disease. Processes exposed films via laser printer, critiques images, transports patients, cleans equipment and performs related clerical duties as required. Performs duties of radiologic technologists as required. Education: Certification as a CT Technologist. Registration with the American Registry of Radiologic Technologists and a CPR certification required by the State. Two years of CT scanning experience. Work requires the ability to analyze and solve complex technical problems requiring the use of basic technical principles plus in-depth, experienced-based knowledge. Requires good communication skills in order to explain instructions and procedures to patients, visitors and employees, to comfort patients and their families and to conduct formal classroom training programs.

**Title:** Mammography Tech I (per diem)\* **Location:** Kenmore Square - Boston, MA **Job Type:** Per Diem, **Schedule:** As needed / Performs mammography exams in accordance with MQSA, state regulations, and with health centers' established policies and procedures. Education: Graduate of an accredited radiography program. Must be licensed in Radiography for a minimum of one year and have successfully passed the ARRT exam in Mammography. CEU documentation required for licensure must be provided. Must be able to lift 50 pounds and possess the physical stamina and agility required to operate equipment and to effectively assist patients.

**Title:** Radiology Tech (per diem) **Location:** West Roxbury, MA **Job Type:** Per Diem **Schedule:** As needed / Performs and assists in a variety of standard and specialized radiographic examinations and procedures. Demonstrates competency in all age groups and works in accordance with established policies and procedures. Education: Graduate of an accredited radiography program and registry eligible. Must be licensed in Massachusetts as a radiologic technologist. CEU documentation required for licensure must be provided. Must be able to lift 50 pounds and possess the physical stamina and agility required to operate equipment and to effectively assist patients.

**Title:** Sonographer (2 positions) **Location:** Kenmore Square - Boston, MA **Job Type:** Per Diem, **Schedule:** M-F, 7:30am-4:00pm/ occasional weekends **Location:** Weymouth, MA **Job Type:** Part Time, **Schedule:** Tuesdays 8am-4:30pm / A Registered Diagnostic Medical Sonographer (RDMS) performs diagnostic and special procedure ultrasonography in accordance with established policies and procedures. Education: Completion of an accredited diagnostic medical sonographic program and ARDMS certified. CEU documentation required for certification must be provided. Must be able to lift 50 pounds and possess the physical stamina and agility required to operate equipment and to effectively assist patients.

**Title:** Radiology Assistant (3 positions) **Location:** Peabody, MA **Job Type:** Part Time / **Schedule:** Wed 1:00 - 5:00; Th & Fri 8:30 - 5:00 / **Location:** West Roxbury, MA **Job Type:** Part Time **Schedule:** 9:30am-6pm (flexible) / **Location:** Weymouth, MA **Job Type:** Part Time **Schedule:** Wed & Fri eves ( 5pm - 9pm) & Sat 7 am to 3:30 pm / This is a great position for a Radiology student to become more familiar with the workings of a Radiology Department. It gives the student the an opportunity to learn about Harvard Vanguard as an organization and to build relationships with staff. Under supervision, works in all non-technical radiological and administrative support functions within the Department of Radiology (including mammography and ultrasound). Demonstrates a high level of competence in all support roles and the ability to work independently. Provides excellent customer service and support to patients, clinicians, and technologists. Typically reports to the Radiology Coordinator. Education: High school graduate or equivalent. Three to four weeks of full time work per year to cover vacations. Prior experience in a clinical setting and familiarity with medical terminology preferred. Strong interpersonal, customer service, time management, computer and organizational skills required. Previous experience in a job requiring the ability to multi-task and prioritize activities preferred. Note: Position may require lifting an average of 30 pounds of radiology files; also includes bending and reaching for files. Must be able to work for extended periods in a confined low light area. Position may also require working with X-ray developing chemicals and exposure to chemical fumes.

If you are interested in these or other positions we have open, please apply online to  
**[www.harvardvanguard.org/jobs](http://www.harvardvanguard.org/jobs)**  
or you can email [Brenda\\_Thompson@vmed.org](mailto:Brenda_Thompson@vmed.org) with your inquiry.

 **Harvard Vanguard  
Medical Associates**  
Atrius Health






## MCPHS Means Health Care

Massachusetts College of Pharmacy and Health Sciences is the oldest institution of higher education in the City of Boston and lives up to that history by educating top-notch health professionals.

The School of Radiologic Sciences is excited to offer the following programs to ARRT-certified technologists who want to further their careers:

**Master of Radiologist Assistant Studies – NEW IN 2010**  
**Computed Tomography Certificate**  
**Magnetic Resonance Imaging Certificate**

MCPHS' School of Health Sciences also provides a degree completion program for practicing professionals without a bachelor's degree who are looking to further their education and professional opportunities.



**MCPHS is now accepting applications for the CT and MRI certificates as well as the MRAS program.**

Applications received for these programs before April 15, 2010 will be reviewed for a summer term start in May 2010.

### **Boston, MA Campus**

179 Longwood Avenue  
Boston, MA 02115  
Phone: 617.732.2850 | 800.225.5506

[www.mcphs.edu](http://www.mcphs.edu)

## Visit Us in 2010

To learn more about our graduate, certificate, and degree-completion programs, attend one of our Radiologic Sciences Open House events. The Dean of the School of Radiologic Sciences and the directors of each program will be available to answer questions about each curriculum. Tours will be available, and light refreshments served.

### **Radiologic Sciences Open House Dates**

**Wednesday, January 20, 2010 / 4:00-6:00 PM**  
**Wednesday, March 24, 2010 / 4:00-6:00 PM**  
**Wednesday, May 19, 2010 / 4:00-6:00 PM**

### **To register, or if you have any questions:**

Please contact Tara Hennessy, Associate Director of Transfer and Graduate Admission, at [tara.hennessy@mcphs.edu](mailto:tara.hennessy@mcphs.edu), or by calling the Office of Admission at **800.225.5506**.

**MCPHS**  
MASSACHUSETTS COLLEGE of PHARMACY and HEALTH SCIENCES

# Educational Update: Scholarships

## The MSRT has four scholarships that are awarded at the Annual Conference:

Scholarship	Amount Awarded	Sponsor
Florence M. Wakefield, RN, RT (R) Scholarship	\$500	Massachusetts Society of Radiologic Technologists
Oliver E. Merrill Scholarship	\$1,000	Massachusetts Society of Radiologic Technologists
Quarter Century Club Scholarships	\$500	Quarter Century Club
Quarter Century Club/ Professor James V. Lampka Scholarship	\$750	Co-sponsored by the QCC & Professor James V. Lampka from REGIS College

Applications can be downloaded from the MSRT website at [www.msrt-ma.org](http://www.msrt-ma.org). Applications to the MSRT Scholarships need to be submitted by email, then followed by a hard copy, and postmarked no later than March 1, 2010.

Individuals entering into a Radiologic Technology Science program can also apply for a scholarship offered by the ASRT. Applications need to be submitted by email, then followed by a hard copy, and postmarked no later than February 1 of each year.

## ASRT Entry-level Student Scholarships

Title	Amount	Number Awarded	Qualifications
Jerman-Cahoon Student Scholarship	\$2500	5	Outstanding radiologic sciences student of any modality who maintains a 3.0 GPA (core curriculum)
Royce Osborn Minority Student Scholarship	\$1,000	5	Minority outstanding radiologic sciences student of any modality who maintains 3.0 GPA (core curriculum)
Varian Radiation Therapy Student Scholarship	\$5000	19	Outstanding radiation therapy student who maintains 3.0 GPA (core curriculum)

To find out more about these scholarships, go to the ASRT website at [www.asrt.org](http://www.asrt.org) and click on Scholarships.

Respectfully submitted,  
Katherine Weiss BS/BM RT(R)(CT)(ARRT)  
Educational Coordinator



## ASRT Howard S. Stern Scholarship Recipient

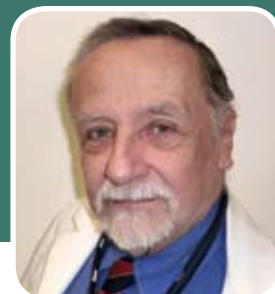
**JEREMY HERRINGTON**, MSRT member from Chelsea, Massachusetts, and an MRI Technical Manager at Massachusetts General Hospital is an ASRT Scholarship Recipient. This scholarship will help pay for his return to school to complete a master's degree in Health Administration at Suffolk University.

Recipient Quote: "I am extremely passionate about patient care and look to lead. Obtaining a management position has given me an introduction to leadership within a large and complex organization; however, while this 'hands-on' approach was extremely beneficial, I understand that the educational component is just as important. I am looking to 'raise the bar' pertaining to standards of care and without a master's degree, I would be unable to achieve my professional goals. ...At my current pace, it would take me seven years to get my degree. The Howard S. Stern Scholarship will expedite the completion of my master's program."

**Follow Jeremy's lead and apply for a scholarship today. It could take your career to the next level.**

# Radiologic Technology Licensing in Massachusetts: A Brief History

By James V. Lampka, MS RTR



*This article will be published as a three-part series.*

In the late 1960s and '70s, like New York and New Jersey, Massachusetts initiated the process of filing Bills in the state legislature to require the licensure of those practicing Medical Radiography, Nuclear Medicine Technology and Radiation Therapy in the state. Each year, the Massachusetts Society of Radiologic Technologists Executive Board diligently identified both Senate and House sponsors and filed that year's session's Bill. Unlike our neighboring states which did enact licensure, sadly, after each year's submission and optimism about passage, each bill mysteriously seemed to die at the end of that year's Legislative Session. Finally, in the late 1980's, working in concert with the Massachusetts Department of Public Health Radiation Control Office, our Bill passed both houses, and in the early 90's was signed into law by then Governor, Michael Dukakis. The narrative below is intended to provide a historical record of the processes and procedures utilized to ensure that Massachusetts would join the growing number of states enacting similar legislation.

## 1. Types of Licensure Legislations:

On our first five or six filings, the MSRT had adopted the form of licensure legislation where a state "Board of Registration of Radiologic Technology" would be created analogous to those in existence for Nursing, Medicine, etc. Also characteristic of this form of licensure legislation was the inclusion within the actual bill itself, of all of the rules and regulations specific to the practice of individuals being licensed within the various professions.

As we became more sophisticated in our understanding of Massachusetts political processes, we learned that the political powers at the time were totally against the establishment of any additional medically related "Boards of Registration". Primary among their motivations were the concerns over the proliferation of more governmental bureaucracies and the additional costs to the state for setting up and maintaining additional registration boards. It became abundantly clear to us that if we insisted on establishing our own registration board, we were doomed to die in Committee (the House's and Senate's Ways and Means Committees) and never achieve licensure.

We also learned that including all rules and regulations within a bill passed into law would severely hamper any changes we wished to effect as our professions continued to grow and change. To change any of the rules and regulations would require submitting amendments to our law and opening it up to amendments made by our many "detractors" thereby decimating our law and/or rendering it meaningless.

It was at this juncture that we decided to adopt the other legislation model, that is the granting of the executive power and authority for the administration of licensure activities associated with the Radiologic Technologies to an existing state governmental agency. In our situation, the arm of any of the various state agencies which was most closely related to our professions and which could most logically administer our licensing regulations was the Commonwealth of Massachusetts Department of Public Health Radiation Control Program.

Therefore, our subsequent Bills were relatively simple in nature: The main elements of our Bills, including the one passed and signed into law, are:

- a) The Radiation Control Program was charged with creating, implementing and maintaining all policies, procedures, rules and regulations relative to the Licensure of Radiographers, Nuclear Medicine Technologists and Radiation Therapists.
- b) The establishment of an Advisory Commission to the Radiation Control Program, consisting of a majority technologists but also physicians from the three fields and a public sector member to assist the Radiation Control Program in developing / promulgating and managing these rules, regulations and procedures.
- c) The establishment of a dual requirement for eligibility for licensure:
  - Graduating from a JRCERT (or equivalent accreditation agency) accredited school of Rad., NMT, Therapy
  - Passing a state licensure exam which shall be no less stringent than that of the American Registry of Radiologic Technologists.
  - The establishment of a Continuing Education requirement for licensure renewal.
  - The establishment of a scope of practice for each profession no less stringent than those adopted by each profession's respective national professional organization.

In the late 1980s, our bill, containing these same five elements finally was passed and signed into law.

*(To be continued in the next edition of The Exposure)*

**Professor Lampka is the Director of the Medical Radiography Program at Lawrence Memorial / Regis College and can be reached at [JLampka@lmh.edu](mailto:JLampka@lmh.edu).**





*The Fireside Grille in Middleboro, MA, was the place to be on October 17th for the Half-Day Seminar.*

## 72 Record Number of Technologists Attend the Fireside Grille Seminar

**"This was an 'out of the ordinary' – extraordinary breakfast."**

**"Dr. Patrick Burke in his Radiation Protection lecture made radiosensitivity and human oocytes, which is a difficult subject to make interesting, very interesting."**

–Lionel Mondesir, RT,R,CT,ARRT (Cambridge Health Alliance-Somerville Hospital)

**"Dr. Tauss gave a GREAT Pain Management talk."**

–David Barros, RT,CV (Morton Hospital).

**"The first speaker, Mr. Paul Russell, said that, 'As an RT we are 21% less likely to receive cancer.' That fact will stay with me for a while. Also, Dr. Burke's presentation on oocytes was really informative. It is amazing to find out how resilient the body is when it comes to protecting the eggs and producing the healthiest offspring."**

–Nickolas Sorel, Student RT (MCPHS).

**"This was the best CE Seminar I've been to in a while. The speakers were relevant. Their subjects were timely. The facility was nice and the food was great! What more could you ask for?"**

–Patricia Pocitis, RT (Pittsfield).





*Seminar attendees enjoyed listening to speakers and conversing with colleagues during breaks.*

## 46 Attend NECC Half-Day Seminar

Northern Essex Community College and Pat Willett, MSRT Regional Delegate, Professor and Clinical Coordinator of the NECC Radiography Program, hosted the Half-Day Seminar on November 7, 2009. Comments from attendees:

**“Susan Wald-Thomas, Nurse Practitioner, spoke on the H1N1 Influenza 2009 in her presentation on Pandemics & Influenza: Risks in Medical Imaging. She discussed the EXTREME importance of a ‘Fit**

**Seal Check’ for the N95 Respirators. Without this check, you’re wasting your time by having it on. This lecture will stay with me for a long time.”**

–Robert Laskey, RT (Holy Family/Parkland).

**“Half-Day Seminars are always informative and a nice way to meet fellow technologists that you haven’t seen in a while. They are just 4 hours—not too long. I liked the Customer Care presenta-**

**tion because it is true, patient are now customers. Treating patients kindly is the best feeling!**

–Michelle Sweeney, RT (Beverly Hospital).

**The Apple Danishes and Clementines were a nice touch to the morning. Dr. George Inglis’ talk on Image Gently & Step Lightly was insightful. He talked about reporting every patient’s dose in their Patient History for the future.”**

–David Loguidice, Student RT

# What Did You Do for National Radiologic Technology Week?



## Roxbury Community College Radiography Program

For NRTW Roxbury Community College sponsored a “Meet and Greet” on November 10th at The Shattuck Hospital. First year students brought their families, friends and significant others to the event. The was an opportunity for students to “show and tell” what they’ve been learning and for faculty to meet the family members and friends. Oh course, light refreshments were served. Georgeann Jenkins-Program Director

.....

## FACULTY POSITION OPENING ANNOUNCEMENT

The Lawrence Memorial / Regis College Medical Radiography program is seeking to fill a full-time faculty position. For more information visit our MSRT Website at [www.msrt-ma.org](http://www.msrt-ma.org) or contact James V. Lampka, MS, RTR, Director of the program by email at [jlampka@lmh.edu](mailto:jlampka@lmh.edu).



*Dr. Jason White, PhD, presenting on Radiation Protection*

## Massachusetts College of Pharmacy & Health Sciences School of Radiologic Sciences

On November 4, 2009 the Massachusetts College of Pharmacy and Health Sciences School of Radiologic Sciences held its 6th Annual Madam Curie Lecture Series event. This event, commemorating National Radiologic Technology Week, is held each year in honor of our clinical affiliate staff as an appreciation for their continued support of the radiologic science programs. A light dinner was served and two CE presentations were given. Guest speakers, guest speakers, Jorgan Hansen, MS presented on Brachytherapy in a Modern Radiation Oncology Department & P. Jason White, PhD presented on Hiroshima and Nagasaki: The Basis for Evolving Standards in Radiation Protection. Sixty technologists from our clinical affiliates and 80 students representing the MRI, Nuclear Medicine, Radiography and Radiation Therapy programs were in attendance.







## North Shore Community College

The North Shore Community College Radiologic Technology students celebrated National Rad Tech Week by attending a Pizza Party at the Prince House of Pizza.



*Nathan Tanzie and Laurie Giovannucci display the NRTW backpacks that they won in the annual raffle.*

## Quinsigamond Community College

*Family Night* is a traditional NRTW event for students in the QCC Radiologic Technology program and was held on Tuesday, Nov. 10th this year. Students brought their family members in to meet the program and clinical faculty and see the Imaging Lab. Several families watched as their “student” manipulated the radiographic equipment to image a phantom or favorite toy brought in by their children or siblings. The images were made on film, so they could

bring them home for “show and tell” and with CR equipment. Families were quite impressed with the knowledge and skills the students demonstrated, especially first year student with just two months of experience.



*First year student, Brad Bocash, explains the radiographic equipment to his wife, Robin.*



*First year student, Heather Charron, prepares to image a favorite doll belonging to her daughter, Hailey.*



*First year student, Lisa Housand, explains the control panel to her husband, Brian.*

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Lynne Y. Davis, EdD, RT(R)  
lynne.davis@mcphs.edu



November 7th Half-Day Seminar  
Speaker, Lynne Randell, RT,R,ARRT  
with her daughter.  
Ms. Randell spoke on  
*Customer Care in Diagnostic Imaging.*

READ MORE ON PAGES 7 & 16



## Our Mission

The Massachusetts Society of Radiologic Technologists (MSRT) is a non-profit organization dedicated to the professional growth and development in the Radiologic Sciences. The Society is committed to the advancement of radiologic technology by promoting high ethical standards, improving the quality of patient care, maintaining high standards of education, and providing quality continuing professional development opportunities for all medical imaging and therapy professionals. Our mission shall not be restricted by any consideration of nationality, race, color, sex, or creed.

## **IMPORTANT**

### **MSRT MEMBERSHIP**

Now is a great time to renew your MSRT Membership.

Share this newsletter with a colleague and encourage them to **join just in time** for the upcoming Annual Conference.

Let the editor know at [lynne.davis@mcphs.edu](mailto:lynne.davis@mcphs.edu) and we'll publish your name in the newsletter.

You can print the form from our website at <http://www.msrt-ma.org/>. Click on MEMBERSHIP.

# **2010**

## **Annual MSRT Conference**

# **SAVE THE DATE**

## **APRIL 7-9, 2010**

**Westford Regency Inn & Conference Center  
Westford, MA**

### **THE NEXT**

## **Half-Day Seminar**

has been tentatively scheduled for  
**February 27, 2010**

Massachusetts College of Pharmacy & Health Sciences

All seminars provide four CEU's and are from 8:00 a.m.-12 noon with a continental breakfast served.

Fee for members is \$40  
\$80 non-members which includes membership. On-site registration is available for an additional \$10.

Visit [www.msrt-ma.org](http://www.msrt-ma.org) and click on 2010 Calendar to register for the Half-Day Seminars or email the MSRT office at [msrt-ma@comcast.net](mailto:msrt-ma@comcast.net).

**www.msrt-ma.org**

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