Tracking Cumulative Radiation Exposure from Diagnostic CT Imaging – A Worldwide Challenge

By Jackie Allen, CNMT

Diagnostic computed tomography (CT) is one of the most commonly requested procedures in medical imaging today. It saves millions of lives annually and contributes to a declining death rate. Conversely, it is the largest and most significant source of increasing exposure to patients from medical radiation. Tracking and minimizing radiation exposure from diagnostic CT imaging has become a hot button issue in hospitals and imaging centers across the country and throughout the world.

Accrediting agencies are now heavily focused on identifying and resolving factors that contribute to avoidable radiation dosing. Adherence to the “as low as reasonably achievable” guidelines; awareness of dose limits; equipment safety; quality controls; adequately trained and informed staff; and improved communication to avoid repeat or unnecessary imaging must be in place to aid the effort to eliminate avoidable dosing. Agencies such as The Joint Commission, the American College of Radiology (ACR), The US Food and Drug Administration (FDA) and others are working hard to establish policies that promote safety and minimize exposure to patients.

The FDA’s Center for Devices and Radiological Health (CDRH) is responsible for setting quality standards for X-ray emitting medical devices. The CDRH, in partnership with the international CT community, works with the International Electrotechnical Commission committees to ensure that equipment is designed to maximize diagnostic information while minimizing unnecessary radiation dose. The CDRH’s health focus is to promote the idea that whenever a patient is exposed to an X-ray it be the right exam, for the right reason at the right time.

A driving desire throughout the medical imaging community is to develop and implement ways of uniformly tracking cumulative medical radiation dose in population-based databases. This is a highly complex notion that could create endless logistical, medical and legal issues. Some facilities have begun instituting in-house or individual health system wide processes for monitoring and tracking cumulative radiation exposure. These tracking programs have been valuable in that patients and ordering physicians can be alerted when a threshold has been reached within the organization. Unfortunately, with the new strategy, the PDEF will help to create a complete program for funding professional development opportunities including:

- The Mickey Williams Minority Student scholarships
- SNMTS Leadership Academy

Continued on page 3, see CT Exposure
Get Your Abstracts in Ink for Miami Beach

By Nancy M. Swanston, CNMT, RT (N), Vice Chair, SNMTS
Abstracts Committee

Technologists and technologist students—come join us in one of the nation’s hottest spots, Miami Beach, FL, for the 2012 SNM Annual Meeting, June 9-13. Your involvement can enhance discussion on the latest topics in medical imaging. It’s a brilliant opportunity for members to not only attend an educational extravaganza of approved continuing education hours, but also relish the experience of submitting an abstract. In addition, there is a strong likelihood one will come face to face with a myriad of contacts from across the profession to build new relationships.

For the last several years we have had colleagues share their research and ideas through the abstract process leading us to review over 100 pieces annually. Authors can submit abstracts as an oral presentation/poster or poster only. This year we have simplified the categories for submission to cover a multitude of subject matters. Winners are recognized at the SNMTS Business Meeting and are featured in The Journal of Nuclear Medicine Technology and Uptake following the meeting. It is a brilliant way to enhance one’s academic prowess.

Don’t delay; start preparing now because the deadline is quickly approaching. The online submitter closes for technologists on January 6, 2012. Technologist students in approved nuclear medicine technology programs have an extended deadline to early February. Travel awards can be obtained for qualifying individuals to ease the financial burden of presenting the material.

Heat up your summer by coming to our host city of Miami Beach. It can be hot, but there are plenty of ways to relax and unwind on and off the beach. After the program each evening there will be a plethora of establishments waiting for us to enjoy—almost every type of entertainment available and dining for even the elitist foodie. On behalf of the entire SNMTS Abstracts Committee, we hope you will not just attend the Annual Meeting but submit an abstract too. Come join in the fun while enhancing your professional development!

SNMTS Education Update

By Mark H. Crosthwaite, MEd, CNMT, PET

The SNMTS Education Committee had another outstanding Educator’s Forum at the 2011 SNM Annual Meeting with a myriad of presentations on topics such as writing and publishing scientific papers, how to use the Transition Resource Manual for nuclear medicine technologist programs that wish to develop a baccalaureate curriculum, clinical education with the use of distance education, a review of state-required licensing for computer tomography, and the application of novel educational tools in the new millennium. In addition, there were presentations by the Nuclear Medicine Technology Certification Board (NMTCB) and the Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT) and a student luncheon that focused on how to sell yourself (as a student) in a tight economy.

In the works for the SNMTS Education Committee is a Technical Standards Template and Guideline that should be finalized and approved at the next Mid-Winter Meeting in January 2012.

There has been significant progress with the initial pilot program that was implemented last year to transition nuclear medicine technology programs to the baccalaureate level. Because of

SNM has launched a new patient focused web site, discovermi.org. The site includes information about nuclear medicine and molecular imaging and how it can play a critical role in the detection, treatment and management of diseases. Please share with your patients.

Continued on page 4, see SNMTS Education Update
there is no reliable tracking mechanism when a patient receives additional radiation-emitting diagnostic studies at outside facilities.

On the international front, in 2009 the International Atomic Energy Agency launched its Smart Card. The Smart Card is an electronic card that contains patient information that includes radiation exposure history. The card is actually a digital signature that enables the user to access exposure data and history online. A patient-accessible Web site can serve as a virtual card. At this point, exposure tracking programs have been implemented in a number of countries but are covering only a few dozen hospitals, at best. Finland is said to have an extensive tracking system throughout the Helsinki county region. Sweden and Denmark are said to have similarly extensive programs, as well. Other countries are formulating plans to establish nationwide PACS to access radiologic exam data across the board.

Earlier this year ACR instituted the National Radiology Data Registry “Dose Index Registry.” This data bank allows facilities to submit patient dose information for every radiologic exam that is performed. Patient information is kept anonymous. The registry’s purpose is to compare doses against national benchmarks referred to as Diagnostic Reference Levels. When a facility exceeds these established thresholds, it is alerted. Facilities are compared regionally and according to facility type. For a fee, the registry will provide additional tools to assist with improving practice as well.

The Centers for Medicare and Medicaid Services has mandated that beginning in January 2012 all freestanding, non-hospital facilities that provide advanced imaging services (CT, MRI, PET, nuclear medicine) must receive ACR accreditation. Previously, there were no accreditation requirements in place for this type of facility.

The Joint Commission is strongly focused on raising awareness among health care staff and patients of the risks of cumulative radiation dosing. Hospitals are being asked to implement processes that will provide guidance to referring physicians for ordering scans more appropriately and requesting other techniques such as MRI or ultrasound when they can adequately produce the diagnostic information that is needed. Close adherence to proper dosing and assurance that dosing protocols that provide reference doses based on anatomy, purpose and patient size are in place is also required. The Joint Commission also endorses the Alliance for Radiation Safety in Pediatric Imaging’s national “Image Gently” campaign. “Image Gently” emphasizes the importance of tailoring doses to a patient’s size—a factor that is extremely important to the safety of children. Documentation of dosage or exposure to each patient included as a part of the summary report of findings must be present in the patient record.

The National Institutes of Health has commissioned vendors of its newer model CT and PET/CT imaging systems to include radiation dose tracking software. Newer systems on the market, in general, do not come with this capability, but all vendors have now produced systems with Dicom compliant software for dose monitoring during the CT scan and dose data input to the Dicom header. Although this information is useful in estimating the amount of radiation produced, it does not present an accurate measure of dose to the patient given the variations in body size. What is actually produced is a measure of radiation across the field of view. It is useful comparative data for determining how to minimize imaging parameters, reduce dose to the body and still ensure image quality.

Manufacturers are in the process of developing and implementing a number of additional means of reducing CT dose to the patient. Adaptive dose shielding blocks the beam from exposing tissue above or below the scan range or area of interest; automated organ-based current modulation reduces the beam for a portion of the gantry rotation when passing over sensitive organs such as the thyroid; automated kV modulation reduces kV when exposing body parts with less attenuation, i.e., thorax; and iterative reconstruction may be a promising technique for reducing noise and artifact. At this time, some of these features are individually available in newer systems but have not been evaluated together to determine what combinations of techniques and parameters will result in the lowest dose with the highest image quality. When they become available as multiple features, it is anticipated that exposure from CT imaging may be reduced by one-half.

The magnitude of the medical radiation exposure issue has inspired a wealth of information and input on the subject from every corner of the global imaging community. There is great enthusiasm emerging throughout the industry to implement new techniques for improving radiation safety in the manufacture and use of CT equipment and imaging techniques. Most important is the generation of worldwide interest in improving radiation safety management and mindset.

CT Education Offered at SNM Mid-Winter Meeting in Orlando, FL

By Kathy Thomas, CNMT, PET, FSNMTS

Studying for your computed tomography (CT) exam? Need to refresh or enhance your knowledge of normal or abnormal/pathological findings using CT? The SNM Correlative Imaging Council is here to help! The council is once again offering nuclear medicine professionals an opportunity to enhance or expand their knowledge and expertise in CT with its acclaimed CT Case Review Session which will be offered at SNM’s Mid-Winter Meeting in Orlando, FL.

The CT Case Review Session:
• Is a CME and VOICE-approved educational program.
• Offers a practical, case-based approached to CT education presented by experienced, board-certified radiologists with demonstrated teaching skills.
• Covers head, neck, abdomen/pelvis and musculoskeletal anatomy using a total of 100 cases that can be used for potential credentialing.
• Is included in your Mid-Winter Meeting registration. Be sure to register for the CT Case Review Session on your registration form because space is limited!

TAG...You’re It!

By Michele Egberts, CNMT

Advocacy by definition is the act of pleading or arguing in favor of something. We often hear our membership say that it really isn’t that important for them to contact local or state officials on behalf of our profession. The reality is, every other modality group—radiology, ultrasound, MRI and others—is making its case before public officials every day. If nuclear medicine and molecular imaging fails to do the same, it will be left out of the mix when decision time comes.

We must go to state and federal legislators and regulators to talk to them about issues that affect nuclear medicine and molecular imaging. We must take ownership and fight for the continued growth of our profession on all levels. Many issues need to be addressed: the growth and acceptance of the Nuclear Medicine Advanced Associate program, enforcing the nuclear medicine technologist’s role in PET/CT and SPECT/CT, and supporting the Consistency, Accuracy, Responsibility and Excellence in Medical Imaging bill, to name a few. The key to effective advertising is seeing the same message over and over, and it’s no less important with advocacy. We need to help our regulators and legislators understand our issues and give them reliable information. These officials have many difficult decisions to make, and if they are going to support our causes, then we must provide the information that allows them to justify their actions.

One of the SNMTS Advocacy Committee’s charges is to identify and develop a group of nuclear medicine technologist representatives—at least one from each state—who are knowledgeable and willing to go to bat for the profession. We have started creating such a group called our state Technologist Advocates Group (TAG) Team. Why do we need such a group? Well, because the “squeaky wheel gets the grease!” We need to be the voice that influences decision-makers. TAG Team members will be able to immediately inform the SNM whenever an issue concerning nuclear medicine and molecular imaging arises within their state and bring it forward to the Advocacy Committee. They will be the point people when it comes time to reach out to state and federal regulators and educate them about our profession, as well as show the positive impact nuclear medicine and molecular imaging has on local communities. We should never miss an opportunity to sing the praises of our profession. In addition, we will know who to go to when we have a particular question about state regulations and legislation.

What do we need from you? We need a group of motivated technologists from each state who are willing to “plead and argue in favor” of nuclear medicine. There can be multiple individuals in the state’s TAG Team, but we will need to identify one individual to be the state TAG leader. This person will be point person for the SNMTS. If you are interested in moving your profession forward and are willing to fight for your rights as a nuclear medicine technologist, please contact either Jesse Schoolnik, SNM government affairs manager, at jschoolnik@snm.org or Michele Egberts at greaternmysnmts@hotmail.com. TAG...you’re it!

SNMTS Education Update continued from page 2

The JRCNMT has developed new accreditation standards that were initiated in January of 2011 and the policy and procedures manual is now available online. One of the more significant changes to our standards is related to outcome assessment, which was a mandate from the Council for Higher Education Accreditation. This new standard requires ALL educational programs, including nuclear medicine technology, to routinely evaluate and publicly publish a program performance (see Standard D2). This mandate went into effect on September 1, 2011. Please visit www.jrcnmt.org for more information on this and other related topics.

Results from the 2009 Task Analysis for the NMTCB have made their way to the editing of Components of Preparedness (COP) within the entry-level certification exam that was initiated January 1, 2011. Perhaps the most significant change is in the need for increased exam content in the area of CT, to include the use of oral and IV contrast. For more detailed information visit www.nmtcb.org.

Other changes in the entry-level certification exam include:

- Iso-Quality Testing, Inc. has replaced ACT as the testing administrator. This transition has been seamless and has actually added additional testing sites.
- All exams are now 90 questions—no less, no more.
- Students will no longer be allowed to flag an examination question.
SNMTS President’s Message continued from page 1

- Professional development scholarships
- Travel awards for students to SNM’s Annual Meeting
- State Technologist Advocacy Group (TAG) Program
- Support for the SNMTS plenary session at the Annual Meeting
- Research grants
- Educators Committee Transition Task Force

In addition to its refined strategy, the PDEF launched a new logo, materials and Web site. Over the next several months, you will see a host of various marketing initiatives, including notices on all our social networking sites—Facebook, Twitter and LinkedIn—as well as e-mail blasts to the membership, a Google ad, direct mail pieces and a button on the SNM homepage.

The basis of the fundraising plan will be to offer industry sponsors a variety of levels at which to contribute to the PDEF. But it doesn’t have to stop there! SNMTS members can now get involved too. For more information about the PDEF and to learn how to get involved, visit www.snm.org/pdef. While you are there, feel free to push the big red button to complete the donation form or apply for any award or grant for which you may be eligible!

This is a huge opportunity for the SNMTS to grow and expand our professional development offerings. Our new tagline—Give. Learn. Lead.—explains it all. By giving to the PDEF sponsors are providing learning opportunities for technologists. By learning, they will lead!

My goal is for the PDEF to be able to sustain SNMTS for most, if not all, of its professional development needs. Professional development is so important in our field and I look forward to building on the current offerings of the SNMTS through new programs and activities funded by the PDEF.

My sincere thank you to all industry sponsors and SNMTS members for contributing to this fund!

What if every person seeking quality care in their health management looked to the practice of nuclear medicine and molecular imaging to find excellence?

What if industry and advocates combined their strengths to prepare nuclear medicine technologists for the professional demands of a changing and developing healthcare industry?

What if….together we make it happen?

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VOICE Box
Sara Johnson, MBA, CNMT, NCT – Chair, SNMTS Continuing Education Committee and Jannine Henderson – SNM Associate Director of Education

**VOICE Credit Online Application Submission**

To support the SNMTS’ move towards a more “green” administrative environment, the SNM CE Center will be used to submit all VOICE and CME applications. Effective March 1, 2012, printed applications will no longer be accepted. All sponsors of VOICE and CME activities will enjoy the benefits of a digital application process for the submission of applications for live and self-study activities electronically in SNM’s CE Center. Online submission follows the same process as the hard copy VOICE application.

**Application Features**

- Applicants will be able to update faculty information. The financial and US Food and Drug Administration disclosure requirements have been removed from the process.
- Curriculum vitaeas (CVs) are not necessary and cannot be uploaded. A brief biography that includes information to support the faculty expertise relevant to the topic will be entered manually (or by using a cut/paste method from the speaker’s CV); however, in many cases, speaker information is already in the CE Center, thus saving time in the application process.
- The applicant and faculty will receive confirmations of the information entered, allowing faculty time to make any updates or corrections to their information. Once the deadline is reached, it will be assumed that faculty information is correct.
- A “Save” feature allows you to complete the application in a time frame that meets your busy schedule. Once a section of an application is completed, it can be saved, allowing an individual to return to the application as many times as needed until it is completed in its entirety.
- Payment of the application fee by credit card (American Express, Visa or MasterCard) is required at the same time the application is submitted. If you need to pay by check, please email Ashley Wallace at awallace@snm.org for instructions.
- Upon completion of the CE activity, the sponsor will submit participant information via a spreadsheet template that will be provided with the approval documentation. The data from this spreadsheet template will be uploaded into the database and will fulfill the organizer’s requirement to verify participant activity. To receive a VOICE credit certificate, participants will be required to evaluate the activity online. Sponsors also have the option to do their own evaluation. However, a participant spreadsheet must be submitted to SNM.
- Please remember that in accordance with the VOICE Guidelines, online applications MUST be submitted at least four weeks prior to the activity. Late applications (less than four weeks) will NOT be accepted.

**Revision of the VOICE Guidelines**

In compliance with the ARRT RCEEM policies for directed readings, home study courses and Internet activities reported in a biennium, the VOICE Guidelines for a VOICE program or RCEEM reference number in a biennium have been revised to read as follows:

“Continuing education credit for a VOICE program or RCEEM reference number associated with a live lecture will only be allowed once in any biennium. A VOICE program or RCEEM reference number for a directed reading, home study course or Internet activity will be allowed once and may not be repeated in the same or any subsequent biennium.”
SNMTS Education Update continued from page 4

- Arrangement in the exam content includes:
  - The removal of hemocytometer, wet film, venogram, schillings test, 123I serum albumin/RISA and 125I Iothalamate.
  - The addition of CT-related questions, its relationship to PET, and the application of oral and IV contrast.

For more information visit the PD section of the NMTCB’s Website. As a reminder, it is important to note that starting January 1, 2016, all entry-level applications for the certification exam will require the student to have graduated from a programmatically accredited program.

Related to certification, NMTCB has successfully implemented the Nuclear Medicine Advanced Associate certification exam which was administered for the first time at the 2011 SNM Annual Meeting.

For those of us in academia it has been another interesting year with the continuing evolution of the imaging profession. Our knowledge base continues to broaden to include information from other imaging modalities, now including CT and the utilization of non-radioactive pharmaceuticals (contrast). As an educator, if your background was not in radiology, your initial knowledge base might seem incomplete, so again we become the learner. Also on the horizon is MRI and its soft tissue fusion with PET. Outstanding! Furthermore new radiopharmaceuticals for cardiac, brain and oncology are coming online in the areas of PET and general imaging. An exciting time, yes, but keeping up with it is the challenge. In sync with these professional demands, our accreditation and certification agencies continue to update exam content and develop new educational standards. All of this is vital for a graduating student to be successful in today’s job market. At the fulcrum of activity is our professional organization, the SNMTS. Through networking, communicating information, legislating on the Hill, and administering continuing education, I am pleased to report that our leadership continues to support our needs not just in the education arena, but also in our overall imaging profession.

Focus on the Fellow: David Gilmore, MS, CNMT, NCT, RT(R)(N)

By Laura A Wall, MBA, CNMT, NCT, RT(N)

For David Gilmore, MS, CNMT, NCT, RT(R)(N), giving back to the profession is his way of saying “thank you” to a field that has provided him with limitless opportunities. Starting out as a radiology student, David was first introduced to nuclear medicine during his training at Bluefield State College in Bluefield, WV, by Mark Collins, CNMT, whom David says, “allowed me to do a lot more than most (radiology) students and I just fell in love with nuclear medicine.” After receiving an Associate of Science in Radiologic Technology degree in 1993, David went on to study nuclear medicine technology at Roanoke Memorial Hospital in Roanoke, VA. While working as a nuclear medicine technologist, David returned to Old Dominion University in Norfolk, VA, for a Bachelor of Science degree in Health Sciences in 1999, followed by a Master’s of Science in Education from Virginia Tech in Blacksburg, VA, in 2001.

Currently an assistant professor and chair for Medical Imaging at Regis College just outside of Boston, MA, David also serves as the program director for the nuclear medicine program. Echoing the sentiment of many other program directors and educators, he loves his job and the impact he has on our future technologists. David takes great satisfaction from being involved in not only influencing the direction of nuclear medicine student education but also being “involved in the future of educational changes for other radiology-based modalities.” Prior to Regis College, he was the program director for Beth Israel Deaconess Medical Center, School of Nuclear Medicine in Boston, MA. Not always an educator, David started out as a nuclear medicine technologist at Lewis Gale Medical Center in Salem, VA, subsequently spending a few years in industry working for both Bristol-Myers Squibb Medical Imaging and also Bracco Diagnostics, followed by a position as operations manager of imaging for Massachusetts General Hospital.

Enjoying a busy life outside of nuclear medicine, David is joined by an amazing partner who he describes as being extremely supportive of the amount of time and travel needed for all of his nuclear medicine activities. David’s hobbies include scuba diving, traveling the world, gardening and being entertained by two new kittens, Violet and Mazzie and an older cat, Noble. When looking to the future David hopes to be “a bit more relaxed than today, or should I say less busy!”

Part of the 2009 class of SNMTS Fellows, receiving the honor has personal meaning to David, “It’s a great accomplishment and very rewarding and fulfilling to me! It is proof that the countless hours in committee meetings, on conference calls and days spent traveling were all worth it.” Now being included in a group of people to whom David has looked for guidance and encouragement throughout the years is in his words “awesome.” According to David, becoming a Fellow is not hard and simply requires active participation in the SNMTS. In the New England Chapter he continues to be involved in committee work focused mostly on education while at the national level he has served on all of the committees. His tireless work as chair of the Program Transition Committee earned David the Presidential Distinguished Service Award in 2011. As SNMTS president (2007-08), David was able to share his enthusiasm for nuclear medicine with technologists and physicians around the world. To further his service to nuclear medicine, he is also involved in the Association of Educators in Imaging and Radiologic Science, the American Society of Radiologic Technologists, the Nuclear Medicine Technology Certification Board, the Joint Review Committee on Educational Programs in Nuclear Medicine Technology and the American Society of Nuclear Cardiology. Passionate about moving the profession forward, David states that “it is critical for our profession to increase the level of education not only for things such as professional status, but also for opportunities for future technologists—research, management, education, advanced molecular imaging. The list goes on and on.”
## Thursday, January 26, 2012

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Organization</th>
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<tbody>
<tr>
<td>8:00 a.m.</td>
<td>Lung Cancer Staging, I-131 Therapy and PET-Based Somatostatin Receptor Imaging</td>
<td>ACNM</td>
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<tr>
<td>8:00 a.m.</td>
<td>Molecular Imaging of Dementia: Current Status and Controversies</td>
<td>SNM Center for Molecular Imaging Innovation and Translation</td>
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<tr>
<td>1:00 p.m.</td>
<td>Health Care Reform, Nuclear Medicine Training and Infection Imaging</td>
<td>ACNM</td>
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## Friday, January 27, 2012

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<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>7:30 a.m.</td>
<td>CT Case Review – Head and Neck</td>
<td>SNM Correlative Imaging Council/ACNM</td>
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<tr>
<td>12:45 p.m.</td>
<td>CT Case Review – Chest</td>
<td>SNM Correlative Imaging Council/ACNM</td>
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<tr>
<td>6:30 p.m.</td>
<td>What is the Future? Revised USP Chapter 823 and PET Monographs</td>
<td>SNM Radiopharmaceutical Sciences Council</td>
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<tr>
<td>8:00 a.m.</td>
<td>Organizations of Nuclear Medicine</td>
<td>ACNM with SNM Academic Council</td>
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<tr>
<td>1:00 p.m.</td>
<td>Advanced SPECT &amp; PET/CT/MR: Hype or Hope</td>
<td>SNM Computer and Instrumentation Council</td>
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<tr>
<td>6:30 p.m.</td>
<td>Update on NMAA: One Future, Now Reality</td>
<td>SNM Advanced Associate Council</td>
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## Saturday, January 28, 2012

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<tr>
<td>7:30 a.m.</td>
<td>CT Case Review – Abdomen and Pelvis</td>
<td>SNM Correlative Imaging Council/ACNM</td>
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<tr>
<td>12:45 p.m.</td>
<td>CT Case Review – Musculoskeletal System</td>
<td>SNM Correlative Imaging Council/ACNM</td>
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<tr>
<td>6:00 p.m.</td>
<td>MRI Case Review</td>
<td>SNM Correlative Imaging Council</td>
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<tr>
<td>8:00 a.m.</td>
<td>Musculoskeletal Disease: F-18 PET, FDG PET &amp; SPECT-CT</td>
<td>SNM General Nuclear Medicine Council</td>
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<tr>
<td>1:00 p.m.</td>
<td>Advances in Neuroimaging</td>
<td>SNM Brain Imaging Council and Young Professionals Committee</td>
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<tr>
<td>6:00 p.m.</td>
<td>Predicting Response to Therapy: What is the Role of Ischemia Hibernation and Scar Imaging?</td>
<td>SNM Cardiovascular Council</td>
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<tr>
<td>8:00 a.m.</td>
<td>PET Oncology: Current Clinical Practice and Pointers</td>
<td>SNMTS</td>
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<tr>
<td>1:00 p.m.</td>
<td>Integrating Imaging into Therapeutic Clinical Trials</td>
<td>SNMTS</td>
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<tr>
<td>6:00 p.m.</td>
<td>Nuclear Cardiology Practice Improvement</td>
<td>SNMTS</td>
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## Sunday, January 29, 2012

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<tr>
<td>8:00 a.m.</td>
<td>Translating Molecular Imaging into Clinical Practice</td>
<td>SNM Cardiovascular Council</td>
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<tr>
<td>8:00 a.m.</td>
<td>Cancer vs. Inflammation</td>
<td>SNM Radiopharmaceutical Sciences Council</td>
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<tr>
<td>8:00 a.m.</td>
<td>General Nuclear Medicine</td>
<td>SNMTS</td>
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<tr>
<td>10:15 a.m.</td>
<td>Cardiology</td>
<td>SNMTS</td>
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Learn about pharmacologic stress testing in patients with bronchoconstrictive disease in the latest Tech Tips.

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