

Editor: Sam Gabriel, MD

President' Message
Michael A. Wilson, MD



Michael A. Wilson,
MD

This is my first letter as president of the Central Chapter of the Society of Nuclear Medicine (CCSNM). I want to discuss current physician activities at several meetings about securing the future of NM by strengthening the training of NM imagers, and the role the CCSNM plays in education. All Technologists are aware of the Central Chapter (CC) Road Shows, and the success story they represent to the CC Technologist Educational effort.

At the Association of University Radiologists and the Society of Nuclear Medicine annual meetings this year, there was much discussion as to the future of nuclear medicine imaging specialists and their training. At the SNM meeting over 60% of the Program Directors (PD's) of NM Residencies attended – a phenomenally large turnout, evidence of the training PD's concerns. Over the recent past, there have been changes in the Accreditation Council for Graduate medical Education (ACGME) Residency Review Committee NM curriculum requirements. Now the NM residents need to complete a three year NM training program to get their specialty American Boards in NM (ABNM) with shorter NM specific training periods for radiologists (1 year additional ACGME approved NM training) or other board certified physicians such as Internal Medicine or Pediatrics specialists (2 years additional ACGME approved NM training) in order to get the ABNM diploma in addition to their own specialty board diploma. The third year training addition for solely NM trained physicians was added to include cross-sectional imaging training to assist interpretation of PET/CT and SPECT/CT imaging (6 months), to prepare for the PET/MRI hybrid imaging that is "coming down the pike", and to start the process to learn Molecular Imaging.

It is important to put these training requirements in context with the reading of nuclear medicine images. Perhaps 85% of general NM studies are read by imagers with radiology training. The current radiology specialty training requires only 4 months NM/PET experience, compared to 30+ months for future ABNM only diplomates. We already know that about 85% of nuclear cardiology is read by cardiologists, who also have about 4 months of specific nuclear cardiology training.

The concern of NM residency PD's and the graduates of their training programs is the lack of employment opportunity for these very well-trained NM imagers that graduate from NM
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**Need a great way to spend a Fall Saturday?
CCSNM Fall Road Shows**

Are you looking for a fun way to spend a Saturday this fall? Are you in need of CE credits? There is a place where you can see old friends, make new friends and receive four CE credits. The annual CCSNM Road Shows are here again! The Road Shows are a half day seminar held on one Saturday between September and November in the following states: IL, IN, MI, MN, OH and WI. There will be four one hour lectures on topics geared toward the Nuclear Medicine Technologist. These topics are created in response to direct feedback received from technologist at the CCSNM Spring Meetings. These topics are made by technologist for technologist. So, come on out and find out what is new and exciting in Nuclear Medicine.

As the Chair of the Continuing Education Committee, the Road Shows would not be possible without the help my co-Chair, Antonella Guardiola, the CCSNM and the wonderful host in each state that make these shows

In this issue of the CCSNM Newsletter:

- **Column by CCSNM-TS President-Elect, James Timpe**
- **Paul Cole Scholarships Awarded**
- **Image Standardization and Harmonization: What Is The Fuss About?**
- **Six Sigma: What Is It?**
- **Message from SNM-TS President, Kathy E. Hunt, MS, CNMT**

CCSNM President's Article continued...

programs, when they are not readily able to cross cover services with their radiology counterparts. This is a real problem as manifest in a recent informal poll of NM residency PDs. This emphasizes the importance of the development of a plan to remedy this problem that will require changes in training program requirements to obtain excellent NM imagers. This may result in a new combined Radiology/Nuclear Medicine specialist who is double boarded but has much more extensive NM training that currently double boarded radiologists obtain.

This has been taken seriously by NM PD's and many of these individuals are actively putting forth suggestions that range from strengthening the current Radiology graduate training requirements along the line of the three levels the American Society of Nuclear Cardiology (ASNC) training standards for cardiologists to read Nuclear Cardiology. The ASNC three tiered system has been accepted by most credentialing committees and by the NRC. Perhaps a similar tiered system should be in place for radiologists with grandfathering of the present practitioners at the level they already practice at.

On a brighter note, I must report that the most recent Central Chapter meeting in Fort Wayne was an unqualified success. Incredibly well prepared and run, by the local coordinators, it provided an opportunity for meeting ones technologist and physician colleagues while having access to the NM vendors, and receiving excellent educational experience. The quality of the content and the presentation of the educational material were superb. I recall from my prior stint as President of the Central Chapter (1995-1996) when I graduated through the Program Chairman route to the presidency, that the educational effort of the Central Chapter was then excellent. My last two years of regular attendance confirms the educational content remains exceptional. Perhaps more of the Central Chapter membership should take advantage of this.

The topics covered were diverse and included the entire range of NM experience. Presentations related to reimbursement, expected growth in NM, the development of micro SPECT/PET/CT with bimodal and trimodal hybrid machines discussed. Respiratory gating was described in detail. Great reviews of MPI and Therasphere/Sirsphere therapy was presented. We were updated on the Technetium shortage together with potential fixes, just prior to the shortage worsening that followed the meeting. There were fascinating historical lectures; discussion of quality issues in PET, the role of our scans in radiotherapy patients, and even hybrid PET/MRI was discussed in detail. A controversial issue was proposed: contrast material should be used with every PET/CT scan, and if this were the case contrast induced nephropathy was explained. As a physician I was incredibly impressed with the quality of presentations. I am certain these meetings provide the most exceptional educational efforts available to practicing nuclear imagers, technologist and physician alike.

Mark Your Calendar for These Upcoming Meetings

2010 CCSNM and MVSNM Joint Fall Educational Meeting

October 2-3, 2010

Governance Day on the October 1st

Hyatt Regency St. Louis at the Arch

St. Louis, Missouri

CCSNM 2010 Fall Road Shows

Maywood, IL

September 18, 2010

Indianapolis, IN

October 9, 2010

Milwaukee, WI

October 9, 2010

Washington Court House, OH

October 16, 2010

Grand Rapids, MI

October 16, 2010

Minneapolis, MN

October 16, 2010

2011 SNM Mid-Winter Meeting

January 20-23, 2011

Palm Springs, CA

CCSNM 2011 Annual Spring Meeting

March 25-27, 2011

Governance Day on the March 24th

Doubletree Hotel Magnificent Mile

Chicago, Illinois

2011 SNM Annual Meeting

June 4-8, 2011

San Antonio, TX

CCSNM 2011 Fall Educational Symposium

Tentative: October 15-16, 2011

Governance Day on the October 14th

Grand Traverse Resort

Traverse City, Michigan

SNM

Advancing Molecular Imaging and Therapy

SNMITS

Advancing Molecular Imaging and Therapy

2010 Paul Cole Scholarships Awarded

The SNM's Education and Research Foundation and the SNM Technologist Section have awarded a series of Paul Cole Scholarships to students in the Central Chapter. Included in the awards is a \$1,000 grant provided by the Central Chapter Technologist Section (CCSNMTS) and a number of awards funded by SEMATA, the Southeast Michigan Associates and Technical Affiliates. The recipients are listed below by category.

Bachelors Degree Program

Daniel Carter; University of Findlay - Nuclear Medicine Institute, funded by the Central Chapter Technologist Section

Angela Krajniak; Ferris State University
Paige Onweller; Ferris State University

Certificate Program

Joel Graham; Mayo School of Health Sciences

SEMATA Paul Cole Scholarships

Diana Frantti; William Beaumont Hospital Schools of Allied Health

Julia Krupitzer; William Beaumont Hospital Schools of Allied Health

Thomas Mulcahy; William Beaumont Hospital Schools of Allied Health

The Paul Cole Scholarship is named in memory of Paul Cole, CNMT, who served as President of the SNM Technologist Section (SNMTS) in 1986 and was known as a champion of education for technologists.

To be eligible for the Paul Cole Scholarship, candidates must:

- Demonstrate a financial need
- Be enrolled or accepted in an institution accredited through the Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT). The award is open to students in associate, baccalaureate and certificate level programs.
- Have a minimum cumulative GPA of 2.5 or better (on a 4.0 scale) or B average in a nuclear medicine technology core curriculum.

This is the fourth year the Central Chapter Technologists have provided funding to the Paul Cole Scholarship Fund.

*Plan to attend the
2010 Joint Meeting of the
Central Chapter and
Missouri Valley Chapter
Society of Nuclear Medicine*

October 2-3, 2010

Hyatt Regency at the Arch
St. Louis, MO

SNM's Technologist Section Announces Award Winners

Technologists recognized for outstanding education and service to the nuclear medicine profession

Reston, Va.—SNM's Technologist Section (SNMTS)—an international scientific and medical organization—recognized the contributions and work to the field of nuclear medicine and molecular imaging during its 57th Annual Meeting in Salt Lake City. Several awards ceremonies were held to recognize the value that SNMTS members play in advancing the diagnosis and treatment of heart disease, cancer and neurological conditions.

"It is a pleasure to honor the contributions made by these talented nuclear medicine technologists," said Kathy Hunt, MS, CNMT, SNMTS president and assistant professor and program chair of nuclear medicine technology, division of allied health at Baptist College of Health Sciences in Memphis, Tenn. "Nuclear medicine is a vital element of today's medical practice, and these award winners embody the dedication and commitment needed to advance our profession within the health care system."

SNMTS Outstanding Educator Award

Norman E. Bolus, CNMT, MPH, was named the 2010 SNMTS Outstanding Educator. The Outstanding Educator Award recognizes an SNMTS member whose contributions and knowledge have advanced and promoted the field of nuclear medicine technology through outstanding work in education. Bolus received \$750 and was presented with a plaque.

Bolus is the director of the nuclear medicine technology program at the University of Alabama at Birmingham in the School of Health Professions, where he is also an assistant professor in the department of clinical and diagnostic sciences. His career in nuclear medicine began in 1989, when he worked as a technologist at the University of Alabama at Birmingham Hospital's nuclear medicine department. Bolus made the jump to education a few years later and has held several roles as an educator, including teacher's assistant, instructor, assistant professor, clinical coordinator and program director.

Bolus has been involved with SNMTS by serving on many committees, including the Educational Curriculum Guide Task Force, Educators Transition Task Force, NMAA Committee, Student Membership Task Force. This year, he served as chair of the Educators Committee. Recently, Bolus developed a podcast on thallium stress test protocol to provide SNMTS members with a quick refresher on how to use alternative testing for radionuclides that are not available.

Presidential Distinguished Service Award

Danny A. Basso, CNMT, NCT, FSNMTS, manager at Cardiac Imaging of Augusta, Augusta, Ga., was awarded the SNMTS Presidential Distinguished Service Award. This award recognizes an SNMTS member who has demonstrated outstanding service and dedication to the field of nuclear medicine technology. Basso was presented with a plaque.

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Award Winners Continued ...

As chair of the SNMNTS Advocacy Committee and a member of the SNM/ACNM Joint Government Relations Committee, Basso has been instrumental in providing SNMNTS with support and guidance on issues that affect the regulation, legislation, practice standards and reimbursement of nuclear medicine. Over the past several years, Basso has been involved with SNM and SNMNTS in several capacities of leadership, including serving on the SNM House of Delegates and the SNMNTS Executive Board. In addition, Basso serves as a director-at-large of the SNM National Council of Representatives and Board of Directors.

Basso belongs to the Southeastern Chapter of SNMNTS and recently served as treasurer of SNM's Cardiovascular Council. He has also served as a member of the editorial board for *Uptake*—the SNMNTS newsletter—and a member of the Publications Committee. He also serves as associate editor of the *Journal of Nuclear Medicine Technology*. Basso is also a past chair of the Nuclear Medicine Technology Certification Board.

SNMNTS Fellowship Awards

The following individuals were inducted into the Fellow category. These are members of the SNMNTS who have demonstrated leadership and have made a significant contribution to the profession of nuclear medicine technology at the national level. SNMNTS selects Fellows based on demonstrating exemplary contributions in the following areas: participation in professional activities, education, professional experience, professional contributions and civic activities.

Fellowships are awarded at the SNMNTS Annual Business Meeting each year during SNM's Annual Meeting. SNMNTS Fellowship awardees receive a memorial plaque and pin signifying their Fellow status.

Rebecca A. Sajdak, CNMT, RT(N), FSNMNTS, is a senior staff technologist and computer specialist at Loyola University Medical Center in Maywood, Ill. She is currently a delegate-at-large for the SNMNTS National Council of Representatives and served on the Nominating Committee, which oversees the nomination and election process for the organization. She also serves on the Technologist Educators Subcommittee for SNM's Clinical Trials Network. She previously served on the Continuing Education Committee and Bylaws Committee. Sajdak received an associate of science degree from the nuclear medicine program at Triton College, Northlake, Ill., and a Bachelor of Arts from Loyola University in Chicago.

LisaAnn Trembath, MSM, CNMT, CCRA, NCT, FSNMNTS, most recently served as manager of medical affairs at Collectar, a radiopharmaceuticals company in Madison, Wis. Trembath has been active nationally in SNM and SNMNTS, and has served as president and chair of the Finance Committee for SNM's Central Chapter SNMNTS. She has served as a member of the SNM Brain Imaging Council, the Scientific and Teachings Committee and has chaired the Government Relations Committee. She also served as a member of the Nominating Committee for the Wisconsin Society of Nuclear Medicine Technologists and as a reviewer for the *Journal of Nuclear Medicine Technology*. She currently chairs the Site Orientation Committee for

SNM's Clinical Trials Network. She received a bachelor's degree in natural science from Concordia College, St. Paul, Minn., and a master's degree in science of business management from Cardinal Stritch University in Madison. Trembath is a certified nuclear cardiology technologist (NCT) and certified clinical research associate (CCRA).

Leo A. Nalivaika, MBA, CNMT, RT(N), FSNMNTS, is the educational coordinator/clinical instructor in the nuclear medicine technology program at Worcester State College, Worcester, Mass. He is also the senior staff nuclear medicine technology program at Worcester State College, Worcester, Mass. He is also the senior staff nuclear medicine technologist at the University of Massachusetts Medical Center. Nalivaika is active within the New England Chapter of SNMNTS and has held numerous professional positions, including chief editor of the *New England Journal of Nuclear Medicine Technology* and historian emeritus. He received a bachelor's degree in natural science/nuclear medicine technology from Worcester State College and a master's in business administration from Anna Maria College in Paxton, Mass.

Royal T. Davis, CNMT, RT(N), FSNMNTS, has been the technical director of the nuclear medicine division at Children's Hospital, Boston, for more than 30 years. He is a graduate of the St. Barnabas School of Nuclear Medicine Technology. He has published 13 peer-reviewed journal articles, five book chapters and has presented abstracts at dozens of international, national and local meetings. He has organized the pediatric technologist teaching sessions at the SNM annual meetings for many years. He has recently coauthored several articles on dose reduction in children and is a member of the dose reduction committee of SNM's Pediatric Council. Davis has also served as a reviewer for the *Journal of Nuclear Medicine Technology*.

Mark Wallenmeyer, MBA, CNMT, RT(N), FSNMNTS, is an assistant professor/clinical coordinator for the Nuclear Medicine Imaging Sciences program in the College of Health Related Professions at the University of Arkansas for Medical Sciences in Little Rock and served as the 2008–2009 president of SNMNTS. A past president of both the Missouri Valley Chapter of SNMNTS and the Southwest Missouri Society of Nuclear Medicine, he has held—and continues to hold—numerous committee appointments. Recently, he was selected as the Missouri Valley Chapter Executive Director and chair of the Transition Task Force for the SNMNTS.

SNMNTS President's Plaque

Cybil J. Nielsen, MBA, CNMT, is the nuclear medicine technology program coordinator for Jefferson Community and Technical College in Louisville, Ky. In recognition of her service as the 2009–2010 SNMNTS president, she was awarded the SNMNTS President's Plaque and gavel.

Nielsen served as the president of the Southeastern Chapter of SNMNTS in 2007–2008 and has held numerous committee appointments. She served as chair of the SNMNTS Educator's Task Force and a member of the SNMNTS Advanced Practice Task Force. For three consecutive years,

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Award Winners Continued ...

she was an SNMITS state health policy liaison. She has also served as co-chair of the SNMITS Entry Level Taskforce and as a member of the SNMITS Awards and Grants Committee. Nielsen received a master's of business administration from Indiana Wesleyan University in Marion, Ind., and a bachelor of health science in nuclear medicine technology from the University of Louisville, Louisville, Ky.

JNMT Best Papers for 2009

The *Journal of Nuclear Medicine Technology (JNMT)* selected the following three research papers to win the "Best Papers for 2009" category. The first-place winner received \$500 and a plaque, the second-place winner received \$100 and a plaque and the third-place winner received a plaque.

First place:

Tezontl Rosario, Michel C. Öllers, Geert Bosmans, Dirk De Ruyscher, Philippe Lambin, and Andre Dekker
Phased versus mid-ventilation attenuation corrected respiration correlated PET for patients with non-small cell lung cancer. *J Nucl Med Technol.* 2009;37:208–214.

Second place:

Danny Basso, Gregory Passmore, Michael Holman, Ward Rogers, Leslie Walters, Thomas Zecchin, and Jayme Butler
Semiquantitative Visual and Quantitative Morphometric Evaluations of Reduced Scan Time and Wide-Beam Reconstruction in Rest-Gated Stress SPECT Myocardial Perfusion Imaging. *J Nucl Med Technol.* 2009;37:233–239.

Third place:

Norman E. Bolus, Remo George, Johnnee' Washington and Bradley R. Newcomer
PET/MRI: The Blended-Modality Choice of the Future? *J Nucl Med Technol.* 2009;37:63–71.

For more information and for photos of the award winners, visit <http://interactive.snm.org/index.cfm?PageID=9831>.

Image Standardization and Harmonization:

What is the fuss about?

By Lisa Ann Trembath, CNMT

You may have been to meetings lately where you have heard the terms "standardization" and "harmonization" spoken by frustrated investigators who have learned the hard way that doing a multi-center trial and getting consistent imaging turns out to be much harder than they predicted. Even the FDA is getting into the picture (no pun intended), by saying publicly that lack of standardization across sites is leading to suboptimal results in clinical trials. What do these terms mean, and how do they affect nuclear medicine?

Standardization is a term used for the assurance that a PET image (or any medical image) from one site is essentially the same as from another. Because research mostly uses quantitative measurements, standardized imaging means that a change in a calculated measurement such as SUV has the same relative meaning as from data at all sites involved in the protocol. The practice of clinical medicine can be different from the practice of research – what is an acceptable, diagnostic and useable medical image for patient care may not be acceptable for quantitative research analysis.

There are several key sources of non-standardization – poor quality, variation in acquisition/processing protocols, and variations in interpretation of the data. Poor quality imaging is an issue beyond the scope of this article; however, suffice it to say that the entire nuclear medicine community has a responsibility to produce excellent quality data for our patients. Variation in interpretation is an issue that many research sponsors are tackling by having a central reader or core lab that interprets the image data, separated from clinical interpretation at the site. But variation in acquisition and processing protocols is something that to which the Clinical Trials Network is asking investigators to pay close attention.

If a multi-center research protocol requires specific imaging parameters, even if those parameters vary from your routine clinical practice, it is imperative that research patients are imaged according to the protocol's prescription. Some sites have learned the hard way that research patients need to be flagged in some way at the reception desk or in the electronic medical record requisition, so that a technologist who is performing the scan will understand that the research imaging protocol applies. Too often, investigators review research subject data, and find that the images were acquired in the institution's standard protocol, but not according to the research protocol requirements. The impact of this is dramatic – the subject's image data will be separated from the multicenter trial data, and might not even be included in the analysis. How would you like to be a patient who volunteered for a research study, and find that your data cannot be used because the site performed the study improperly?

Here are some practical tips to help with image standardization across multi-center trials:

- Make sure all technologists in the department are trained on the research protocol, so that no matter who actually scans the patient, the correct procedure is followed
- Develop a method to "flag" research patients, either at the scheduling desk or somehow in the requisition paperwork.
- Follow the protocol specifications for imaging, even if they differ from your institutions standard procedure.
- If the protocol does not provide enough detail to fully explain the required procedure, contact the sponsor for complete information.

When the nuclear medicine research community improves image standardization, there will be a greater likelihood of harmonization. Harmonization is a way to describe that a particular imaging procedure can be used as a marker across clinical trials, and not simply for one clinical trial. A good example of a technique that is harmonized is mammography. Researchers can make generalized statements about the use of mammography in patient care because the technique is standardized from site to site, and mammography research results from any one study can be generalized to mammography in general. The future of PET and nuclear medicine lies in our ability to provide both standardized and harmonized data to the FDA, clinicians, and the general public.

Technologist Section News

Editors: Edward Melvin, NMTCB, Mary Tichelaar-Goddard, CNMT and Teresa Taggart, CNMT

CCSNM-TS President's Message

Thinking "Lean" in Nuclear Medicine

James Timpe, RT(N)(MR)
CCSNM-TS President-Elect



James Timpe, RT
(N)(MR)

Today, you can't turn on a TV or open a newspaper without seeing another reminder of today's healthcare imperatives: reform, reimbursement cuts, and the explosion in the use of expensive medical imaging. What does all of this mean to hospitals and in particular to Nuclear Medicine professionals? It simply means that over the next months and years we are going to be expected to deliver top quality care at the lowest possible cost to the consumer. But don't we do that

already? Everyone is busy all the time. No one has extra personnel built in to their departments "just in case" and we all try to keep isotope costs down any way we can. So, what is the next step to becoming an efficient unit to maintain the relevance of our field and continue to contribute in a significant way to the diagnosis and treatment of patients? The only way to accomplish these goals in the age of healthcare reform is to embrace the techniques of operational improvement used for decades in the manufacturing and commercial sector of our economy.

You may have heard of the famous GE operational improvement techniques such as Six Sigma and DMAIC. These have been applied by healthcare consultants and hospitals for some time now and tend to focus on data collection and standardization. These are all good things but are not enough to truly revolutionize a department. One of the additional techniques that is being applied in the healthcare setting today is known as Lean. Lean began at the Toyota Motor Company and has been widely used in the manufacturing industry to improve operations and output without adding additional resources. Lean focuses on eliminating the wasteful steps of a process in order to focus on the value added functions that benefit the customer. As opposed to an executive driven approach or "top down" initiative, Lean can be described as a "bottom up" initiative because it involves the people who know the work the best working to improve it.

A typical Lean event involves a consultant or other facilitator who leads a group of individuals with direct involvement in a process or department to create a new process in a short time, often just a day or two. Participants map out the process in the current state, identify wasteful steps and work-arounds, create an ideal or future state and then make a plan to implement that state as soon as possible. There

are many kinds of waste in our daily operations that we never see because we don't take the time out to really think about it. For example, is the hot lab located a city block from the stress lab, causing delays while a technologist runs back and forth all day to retrieve doses? Do technologists have to fill out manual paperwork and then enter data into a computer system? Are patients scheduled centrally or do technologists take time out from scanning to perform these functions? Do we use 2 scanners 8 hours a day or one scanner 16 hours a day? These are the kinds of questions that might be asked in a Lean event focused on improving a Nuclear Medicine operation. The most important question: what can you do right now to eliminate that wasteful step or time wasting rework and improve your efficiency?

We have all been asked to do more with less or "work smarter", but seldom is this followed with any useful suggestions on how to accomplish results! By tailoring the techniques used in other industries, we can become better at providing safe and effective patient care to more people while maximizing our limited resources. In this way, we will be ahead of the latest health reform, reimbursement cut or quality care initiative that may come out of Washington. In the current climate, it only makes sense to stay "Lean" and maintain the health of our profession and our patients!

Six Sigma: What is it?

By Mary Tichelaar-Goddard, CNMT
Tech Section Editor

There is a "new" quality/efficiency tool that has been used in the manufacturing industry for many years that is now being applied to medicine. It uses many of the Quality Assurance/Management/Improvement techniques that we are already familiar with.

The process of Six Sigma actually had its beginnings in 1809 when Carl Gauss, a German mathematician, introduced the Bell Curve. The Bell Curve represented the variations in a controlled process and the amount of deviation from the ideal that was acceptable. Does this sound familiar? Manufacturers have used this process to streamline their production and make less waste (i.e. Motorola, Ford, etc.)

The process and its variations are evaluated by several techniques. A fishbone diagram, T-Tests, control charts and design of experiments. Many of these evaluations are defined under a DMAIC model. Let me define the model. D-Define opportunity is making a statistical goal. M-Measure performance is a collection of measurable data and may take the longest of the evaluation.

Six Sigma Continued...

A-Analyze opportunity is the way of using statistical tools to evaluate that data. I-Improve performance is accomplished by making changes to the process or processes. Lastly, C-Control performance is achieved by keeping a monitor in place and assuring efficient operations.

The Six of Six Sigma is a scale to evaluate the quality of a process based on deviation or defect calculations. Six is the level of least deviation and the most efficient level. This is the level that everyone attempts to achieve. Many industries have different minimal levels of function with one being the least efficient.

Now that your mind is totally numbed by the mention of statistical analysis, I will review the yellow, green and black belts. Now you may ask what does Karate have to do with analysis? The belt designation is for the persons that oversee the process of evaluation and monitoring of the Six Sigma process. A Yellow belt is a person who has the basic, essential training that can apply some of the elements of the Six Sigma methodology. This may be a leader in the department or a lower level manager. The green belts are persons with more advanced Six Sigma training that qualifies them to solve the majority of process problems and they may manage projects that are not overly complex. This leaves the Black belt to guide the other "belts" in their tasks and oversee the Six Sigma processes and evaluations. The teams and levels are a group effort to streamline and improve processes. There should be persons on every level involved in the effort and this creates an environment of quality and excellence.

Finally, you may ask why we need this in healthcare when we already have so many regulatory agencies? Medical facilities have actually been using this methodology for the past 10 years! It tries to make us more efficient and more cost effective. Lean thinking can be applied to many aspects of healthcare. To some it may mean, ordering one test or lab panel at a time. This will take more time, but it also can save money by eliminating needless tests. Other applications may be shortening length of stay for certain diseases, reducing the number of IV antibiotics, reducing preparation time of IV medications, reducing billing and accounting mistakes/duplications, reducing operating theatre start times and redesigning work stations to reduce the time and effort to complete tasks. The Six Sigma concept can make things run more smoothly and efficiently.

So be prepared and start thinking about streamlining things.

Central Chapter News Looking for Writers/Editors By Edward Melvin, Newsletter Editor



Edward Melvin, NMTCB

Do you have an article in mind, would you like to try your hand at writing one? Do you have a tip to share with your colleagues in the Central Chapter. The Central Chapter is large, from northern Minnesota to southern Ohio. This is a dynamic chapter with many dynamic members. The energy and ability our officers and committee members bring to the table is truly something good to behold.

There are four editors for the newsletter sharing responsibilities for producing three issues a year. Teresa Taggard, CNMT, Mary Tichelaar-Goddard, CNMT and myself are responsible for the Technologist side, Paresh Mahajan, MD watches over the physician side.

Those of us on the publication committee would like your thoughts and ideas. With your help News from throughout the chapter can be collected and presented to all.

If you would like to participate, please contact edward.melvin@osfhealthcare.org or mhedland@bacon-hedland.com.

Thank you.

Clinical Trials Network By Rebecca A. Sajdak, BA, CNMT



Rebecca A. Sajdak, BA, CNMT

Salt Lake City, Utah, was a premier site, one of the best in recent SNM history, for the 2010 annual meeting. From the absolute beauty of the mountains to the historical sites with amazing architecture displayed in the temple square, this capital city provided a magnificent backdrop for a busy educational forum. The meeting provided a wide array of topics for continuing education with lectures and workshops to cover the full spectrum of nuclear medicine interests.

One of the hottest new endeavors of the SNM and SNMTS is their clinical trials network which is designed for physicians, scientists, sponsors, and technologists. Multiple categorical seminar series, workshops and lectures served as an educational resource as well as a networking mechanism to gain harmony with all nuclear medicine research sites. Each day of the five day conference held various lectures on performing research. For example, on Saturday the entire day was dedicated to the doctor and staff who want to do research and become involved in the most critical part of performing good research. This workshop was designed to demonstrate what is involved in molecular imaging in clinical trials.

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Clinical Trials Network Continued...

The two days prior to the meeting kickoff proved to be a very productive time for the Clinical Trial Network (CTN). Committees met to finalize preparation of a series of lectures designed for anyone interested in doing research. Critical decision-making by these committees resulted in informative sessions involving every aspect of research from quality control to documentation of study results. Groups of technologists and doctors just like you spent many hours in committee to design and implement the educational component and the site preparation as well as to secure moderators, speakers and vendors. The CTN subcommittees for technologists consist of volunteers from all aspects of nuclear medicine who help create educational lecture series, for example, those available on the SNM website. Click on the educational tab from the main page at www.snm.org to view informational lectures which all researchers can use as a readily available source of knowledge.

There are many ongoing activities behind the scenes that are moving the CTN forward. Many committees comprised of dedicated volunteers collaborate to share their knowledge and create a network of finely tuned research individuals, all focused on bringing their specialty to the network. The committee's creativity resulted in a list of lectures for physicians, physicists, technologist and students geared at advancing the SNM in molecular research. For example, the Imaging Phantom Subcommittee is responsible for optimizing the procedures for implementing a quality control device that all sites involved in research will utilize.

If you have special expertise and feel that you could contribute to the society in regard to research, welcome aboard! Just visit the SNM.org website and participate in one of the most exciting aspects of nuclear medicine: following a concept through all phases of clinical trials, resulting in a marketable product and knowing that the data you collaborated was of highest quality. To work with scientists in R & D can be a very rewarding experience.



In attendance at the SNM-TS Executive Board in Salt Lake City, UT, from left to right: Bottom Row: Lisa Riehle, TS Secretary; Aileen Carey, TS President; Nancy McDonald, TS Immediate Past President; James Timpe, TS President-Elect; Top Row: Rebecca Sadjak, TS Director at Large; and Paul Reaume, TS Director at Large

Message from the SNM-TS President

Kathy E. Hunt, MS, CNMT



Kathy Hunt, MS,
CNMT

I have had the pleasure of working alongside my friend and colleague, Cybil Nielsen, MBA, CNMT, since 2006 when I served as president and Cybil served as president-elect of the Southeastern Chapter. We continued working together on the SNM-TS Educator's Committee on the Entry-level Task Force. Last year, I had the opportunity to serve with her again as she assumed the role of president and I assumed the role of president-elect of SNM-TS. Cybil has demonstrated effective leadership skills in guiding our section through tumultuous times. Her commitment to serving the field of nuclear medicine and the technologists she represents has been inspiring. I would like to take this opportunity to applaud her numerous successes during the past two years as she served as president-elect and president of SNM-TS.

Now, it is with great excitement that I enter into the SNM-TS presidency. I have come to understand how important the SNM-TS membership is to the ultimate success of our profession. SNM-TS makes it possible for nuclear medicine technologists to have a voice on issues that have a huge impact on our profession. Over this next year, SNM-TS will continue to look to its membership for expertise in imaging modalities from CT to MRI and advocate for health care issues from credentialing to reimbursement.

This past year has truly been a tough one for nuclear medicine technologists, as we are continually plagued by the decreasing job opportunities. This situation is largely due to the decreased availability of Technetium-99m and decreasing reimbursement for procedures. The pending changes from health care reform and the slow recovery of the economy are not making this time any easier for us. SNM-TS is doing everything it can to support its members during this time. We are constantly monitoring the evolution of health care reform and working diligently to secure the future domestic supply of Mo-99. The Awareness Campaign, "Got ^{99m}Tc?", has been successful in promoting the domestic supply of Mo-99 to the general public, government officials and health care professionals. The passage of the American Isotope Production Act of 2009 is an important issue for our profession, and we must do everything we can to work toward getting this bill passed by the senate.

Other advocacy initiatives involve strengthening relationships between SNM-TS and grassroots NMT organizations. If we combine our efforts, we can have a unified voice to accomplish the goal of advancing our profession. We should also be looking to proactively build relationships with accrediting, credentialing and regulatory

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Message from the SNM-TS President Continued...

agencies to ensure that nuclear medicine technologists have the necessary tools for maneuvering in the changing world of health care. Through these initiatives, I am confident SNM-TS will remain the professional organization of choice for nuclear medicine technologists.

We will also focus on continuing to improve collaboration between the chapter and national levels of SNM-TS on advocacy issues and increase the roles and responsibilities of State Health Policy Liaisons (SHPLs) to include assisting technologists on how to navigate through the legislative policy system within their state. Over the next year, one of my goals is to call on the SHPLs and SNM-TS members to take the lead on working the state level to further develop state licensure for NMTs. Currently, only 26 states have established standards for nuclear medicine technologists. These initiatives can only be achieved by speaking with a unified voice to our regulating agencies, legislators and health care reformers. SNM-TS is the voice representing nuclear medicine and nuclear medicine technologists.

Under the leadership of Cybil Nielsen, year one of the strategic plan is off to a great start! I will work diligently to continue the momentum she has established for our organization. As we take on the myriad of challenges facing us during the upcoming year, I believe if we work together, we can turn these challenges into opportunities and nuclear medicine technologists will come out on the other side—more unified and stronger than ever!

2010 Fall Road Shows to feature “Surviving the Shortage”

The Central Chapter Continuing Education Committee chaired by Cynae Derosé and co-chaired by Antonella Guardiola of Northwestern Memorial Hospital is scheduling a series of six Road Shows in 2010 with the title of Surviving the Shortage. The Road Shows will be held in Minnesota, Wisconsin, Illinois, Indiana, Ohio and Michigan. The topics and learning objectives are as follows:

Course Learning Objectives

At the conclusion of this program, attendees should be able to:

- Discuss marketing strategies for your Nuclear Medicine Department
- Identify efficiencies of SPECT/CT
- Describe the basic principles and benefits of F-18 Bone Imaging
- Discuss the basic principles of USP 797

Individual Learning Objectives

8:00 -9:00 am- **Marketing Your Nuclear Medicine Department**

At the conclusion of this session, attendees should be able to:

- Identify departmental challenges of Nuclear Medicine
- Identify concepts to strengthen the Nuclear Medicine Department
- Discuss marketing strategies

9:00 -10:00 am-

SPECT/CT Efficiency

At the conclusion of this session, attendees should be able to:

- Identify departmental benefits of SPECT/CT
- Discuss methodologies by which SPECT/CT is utilized to increase productivity
- Identify how to increase image quality with SPECT/CT

10:00 -11:00am-

F-18 Bone Imaging

At the conclusion of this session, attendees should be able to:

- Describe the concept and basic principles of F-18 bone imaging
- Identify the benefits of F-18 bone imaging
- Discuss reimbursement for F-18 bone imaging

11:00 -12:00 pm-

USP 797

At the conclusion of this session, attendees should be able to:

- Discuss the basic principles of USP 797
- Discuss departmental strategies for USP 797
- Identify and discuss aseptic techniques

Road Show Dates:

Loyola University Medical Center, Maywood, IL
September 18, 2010

St. Vincent Hospital, Indianapolis, IN
October 9, 2010

St. Luke's Medical Center, Milwaukee, WI
October 9, 2010

Fayette County Memorial Hospital
Washington Court House, OH
October 16, 2010

Lacks Cancer Center, Grand Rapids, MI
October 16, 2010

University of Minnesota Medical Center, Minneapolis, MN
October 16, 2010

Watch your emails and the CCSNM Website for updated information.

*Plan to attend the
**2010 Joint Meeting of the
Central Chapter and
Missouri Valley Chapter
Society of Nuclear Medicine***

October 2-3, 2010

Hyatt Regency at the Arch
St. Louis, MO

*Plan to attend the
2011 CCSNM Spring Meeting*

March 25-27 2011

Doubletree Hotel Magnificent Mile
Chicago, IL

Need to contact us?

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Mark Your Calendar for These Upcoming Meetings

CCSNM Fall Educational Meeting

October 2-3, 2010

Governance Day on the 1st

Hyatt Regency St. Louis at the Arch

St. Louis, Missouri

CCSNM 2010 Fall Road Shows

Maywood, IL September 18, 2010

Indianapolis, IN October 9, 2010

Milwaukee, WI October 9, 2010

Washington Court House, OH October 16, 2010

Grand Rapids, MI October 16, 2010

Minneapolis, MN October 16, 2010

CCSNM 2011 Annual Spring Meeting

March 25-27, 2011

Governance Day on the 24th

Doubletree Hotel Magnificent Mile

Chicago, Illinois

CCSNM 2011 Fall Educational Symposium

October 15-16, 2011

Governance Day on the 14th

Grand Traverse Resort

Traverse City, Michigan

