

Prior Newsletter

[http://snmmi.files.cms-plus.com/docs/councils/AA/AAC%20Summer%202017%20Newsletter Draft%201.pdf](http://snmmi.files.cms-plus.com/docs/councils/AA/AAC%20Summer%202017%20Newsletter%20Draft%201.pdf)

President Address – Darko Pucar, MD PhD

NMAAs currently working in the field have seen the evolution of the profession and are taking new exciting roles that had not been previously envisioned. NMAAs have new and valuable roles in therapy, PET/CT, PET/MRI, expanded duties in procedural supervision and interpretation, clinical management and leadership, and patient interaction that free the nuclear medicine physicians to handle the increasing demands of the busy practice setting. Overall, NMAAs can be instrumental in delivering more valuable nuclear medicine patient care. In this newsletter, you will have the opportunity to hear from our NMAAs and their exciting accomplishments.

We will also discuss the efforts to seek NMAA national recognition as a middle level care giver from key medical organizations. We will discuss this further in a dedicated article. Currently there is much interest from the molecular imaging and general populations in the possibility of a new NMAA educational program, hopefully to be implemented within the next two years under direction of Norman Bolus at University of Alabama in Birmingham. In this newsletter, Norman will provide the update on the progress of these efforts.

We encourage any and all interested individuals to sign up for the NMAA session at the SNMMI annual meeting in New Orleans, LA in June 2020, Monday, June 15 – CE54; 3:00 - 4:30pm, and to contact the SNMMI NMAA Council leadership if you have questions or comments about this exciting career opportunity.

NMAA Training – Norman Bolus, MSPH, CNMT, FSNMMI-TS

With the benefit of their advanced training, current NMAA graduates enjoy new interesting career opportunities, some of which will be discussed in this newsletter. However, at the present new NMAA cannot be trained due to closure of school at University of Arkansas. Fortunately, Norman Bolus is spearheading efforts to open a possible new avenue at the University of Alabama in Birmingham. Currently in the formative stages of the approval process is a proposed Graduate Track option to tag along with the Master of Science in Nuclear Medicine Technology Entry – Level Program. This Graduate Track would allow graduates of our MSNMT Program an avenue for advanced practice as a Nuclear Medicine Advanced Associate. It is our hope and expectation that we can design a way that BS educated students can take advantage of this track, and also be able to apply to the program. Because it is in the early stages, full details are not yet available. Norman and his team are aiming for a Fall 2021 start but this could be delayed. Unfortunately, the way academia works it takes time to bring new programs, tracks and offerings to fruition. So, keep your fingers crossed that they can accomplish this audacious task.

NMAA Job Recognition – Richard Siska, NMAA, MIS, FSNMMI-TS

In order for NMAAs to fully benefit from their advanced training and most optimally contribute to healthcare, official NMAA job recognition by key stakeholders at the national level will be ultimately necessary. In this regard, the AAC is planning to form a task force lead by Richard Siska.

In the beginning of 2019, NMAAs collectively worked together to make a case to the Nuclear Regulatory Commission (NRC) to be recognized as Authorized Users (AUs) albeit a limited scope. While they made a compelling case, the NRC was not ready to proceed at the time.

During this time, we caught the attention of a lobbyist, Joe Rubin, who has had experience lobbying for medical imaging, and he believed we would be able to elicit some national recognition for the NMAA by inserting NMAA language into the Medicare Access to Radiology Care Act (MARCA bill). This seemed like an opportune time since the ASRT and ARRT had been lobbying for the Radiologist Assistant (RA) to get Medicare reimbursement for certain exams and recently had success in getting further than they ever had before. The NMAA language crafted was not focused on reimbursement, simply recognition, which was felt would be easier to adopt and accept given the low volume of practicing NMAAs and reduce the number of those in potential opposition. Realizing the ASRT and ARRT had invested great time and money into their lobbying effort, we felt it judicious to disclose our plan to them. Because of the delicate nature of this endeavor for the RAs and the difficulty of advancing the bill to this point they did not feel it would be prudent to try to insert any new language in the bill at that time. The AAC did honor their request and expressed our support for the RA. The MARCA bill has since been stalled in legislature due to other high-profile time-consuming issues. The contract for the lobbyist will expire shortly.

The AAC has had a few ideas, one of which was to try to insert ourselves through the VA system (which we have previously attempted). The second was to target states where NMAAs currently work or reside. It is already known from the failed attempt from the SNMMI-TS and the ASRT that any national licensure is virtually impossible, and this is why they current are focused on state licensure. Richard Siska has been working sporadically with the Missouri ASRT (MoRST) to insert language for the NMAA in licensure bills for the last 5+ years. Missouri currently has no licensure for any radiologic imaging professional. As of this writing Mr. Siska has been appointed to the Joint Task Force on Radiologic Technologist Licensure in Missouri, which currently includes not only the NMT language but provisions to include the NMAA. There are only two other states with NMAA licensure, Kentucky and Massachusetts. Arkansas also had NMAA licensure at one point, but this may have been revised.

If you know anyone within the VA system that we could use as a contact for advocacy or would like to help on the AAC advocacy task force or have any other information that can help us legislatively, please email me at ricksiska@hotmail.com.

NMAA practice survey – Mary Anne Owen, MHE, ARRT(N), FSNMMI-TS

In order to optimally plan AAC future activities, we have conducted NMAA practice survey. The survey of NMAAs and Residents in practice provides some quantitative data revealing just how NMAAs practice within today's busy imaging professions. The data have been acquired analyzed and summarized by AAC Vice president Mimi Owen and Associated Director for Governance, Teresa Ellmer.

- 33.3% of those reporting supervises 16 to >20 Nuclear Medicine Procedures per week, and 25% of those reporting supervise 1-10 NM procedures per week
- 25% provide Preliminary Interpretation of NM procedure results
- 18.75 provide supervision of 16 to > 20 PET/CT procedures per week
- 12.50% provide Preliminary Interpretation of PET/CT results
- 18.75% provide supervision of 16 to > 20 Nuclear Cardiology Procedures per week, and 25% supervise 1-10 Nuclear Cardiology Procedures per week.
- 31.25% provide Preliminary interpretation to Nuclear Cardiology procedure results
- 37.5% supervise 1-10 Lymphoscintigraphy cases per week
- 25% supervise 1-10 I-131 therapy cases per week
- 25% supervise 1-5 Parenteral NM Therapy cases per week.

These data clearly show that NMAAs are involved in all aspects of NM and Molecular practice, including supervision, and to and preliminary interpretation, tasks that go beyond the scope of the Nuclear Medicine Technologist While this information is useful it only reveals a few quantitative aspects of NMAA practice. NMAAs have also provided a robust qualitative analysis of what they do and the broad effect that they have on the daily operations of NM practice. It is in these pearls that the real value of the NMAA is revealed.

Nuclear Medicine Advanced Associates Practice

NMAAs have evolved in expanded duties in varying areas. Here are some exciting details from the successful practice of our current NMAAs. Blaine Norton, Vicki LaRue, Richard Siska, Krystle Glasgow. We'd love to hear from all other NMAAs in the future, regarding how your careers have evolved. What pathways have you taken? How have you settled into the NMAA role in your practice?

Blaine Norton, MIS, RRA, RT(T), CNMT

Blaine Norton wears many hats in his practice at many small hospitals across the Midwest. As an NMAA, he is supervising stress tests at four hospitals, while having a second person do the same at four more. He had initially tried to hire another NMAA for that position but there was not one in that region. In fact, Blaine has since attempted yet again to hire another NMAA about a year ago but again none were available.

Proper stress supervision requires initial patient assessment, review of current medications, a focused history on why the patient is scheduled for a stress test, and a review of the resting EKG. It also requires monitoring of the patient and EKG/vitals during exercise and recovery, with special attention to EKG changes not only in ST segments, but in the whole rhythm cycle to watch for changes in heart blocks, and axis shifts, as well as for abnormal changes in blood pressure or patient condition. Thorough understanding of each pharmacologic stress agent and its effects with different disease processes, medications, current heart rhythms, and recent diet is essential for ensuring the best medication and protocols possible are selected for each patient, or if a test should be postponed. There are many providers currently supervising stress tests that do not recognize certain rhythms such as a heart block or left bundle branch block, much less the impact those rhythms can have on a test and the patient specifically. Others do not appreciate the significance of patient reaching 85% MPPHR during exercise stress test and sometimes prematurely administer the tracer before the patient reaching the target heart rate. Thus, presence of well-trained NMAA in the field may greatly increase the accuracy of cardiac stress testing and confidence of referring physicians.

Blaine is also an assistant regional manager over multiple facilities across Missouri, Illinois, Kentucky, and Tennessee. The duties of this position include assisting in account development; department growth; PR with the hospital's administration, staff, and referral base; referring provider education; department reviews for record accuracy; and ensuring or providing appropriate communication with the respective state/NRC offices.

Blaine not only works for Numed, Inc. as a technologist, NMAA, and assistant regional manager, but as a health physicist and radiation safety officer (RSO) as well at many/most of their facilities in this region. As JCAH expands its definition or job responsibilities of an RSO beyond that set forth by the NRC, RSOs are finding themselves more and more involved in radiation safety outside of the nuclear medicine department. JCAH has also expanded quality control measures to be conducted inside the nuclear medicine department on the cameras themselves including determining each camera's dead time, efficiency, energy resolution (energy peak and FWHM), and image resolution including the Jaszczak phantom. JCAH suggests these be performed by a health or medical physicist. An NMAA meets the requirements of a health physicist, and while Numed does have a medical physicist that oversees the process remotely and signs off on the reports, having Blaine involved in his area provides a double layer of assurance for quality. As an RSO, Blaine is also responsible once again for communication with the state/NRC during room changes, taking over new departments, license amendments, close-outs, etc just as many technologists are. He is also responsible for annual ALARA reports, ensuring quarterly, semi-annual, and annual testing is performed on time at all of these hospitals, badges are reviewed on a regular basis, with pregnant staff reports being reviewed monthly, etc, as many technologists can attest.

Vicki LaRue, MIS, NMAA

Vicki LaRue is a critical nuclear medicine team member at National Jewish Health, which due to its unique practice scope, has thoracic radiologists without subspecialty nuclear

medicine training. Vicki dictates preliminary findings on all general nuclear medicine, nuclear cardiology, and PET/CT exams. Comparable to all mid-level providers, these findings are then over-read by the attending radiologist for final interpretation and signing. Vicki pre-dictates roughly 90% of all NM studies prior to final sign off by radiologists. Half of her workday is dedicated to reading. Vicki is also tasked with contacting ordering physicians with critical findings, and organize subsequent exam.

Vicki is also responsible for protocoling all NM studies, and verifying clinical correlation and relevance. It is her responsibility to contact ordering physicians to suggest appropriate changes. She performs any necessary clinical workup for NM diagnostic or therapeutic procedures. She administers medications such as morphine and insulin which are not within the scope of the technologist. Vicki is responsible for reviewing patient medication lists, determine any discontinuance of meds, and answer any patient questions.

Vicki serves as a direct contact for any technologist questions. This includes “clearing” studies such as VQ scans for PE probability, potential “stress only” myocardial perfusion imaging, and evaluating acceptable myocardial suppression for PET cardiac metabolic evaluation studies. Vicki also determines acceptable blood glucose levels for complex patients having PET scans.

Delegating these responsibilities to a specialized NM physician extender, allows the radiologists to focus on complex cases, oversee invasive procedures, consult with referring physicians, and prepare for case conferences. Having a skillful NMAA creates invaluable time saving for the radiologists at Vicki’s institution. Vicki is a champion for her NM department. This has resulted with increased nuclear medicine volume, revenue, and staffing at her institution.

Vicki is a long time member of the SNMMI and has served on the board of the Advanced Associate Council, the Educators Committee, Program Committee, Nominating Committee, Councils and Centers, and is a fellow of the SNMMI-TS.

Richard Siska, NMAA, MIS, FSNMMI-TS

Richard Siska opened his second Nuclear Medicine department in 2006 offering general nuclear medicine and nuclear cardiology, in Rolla, Missouri for Mercy Hospital (formerly St. Johns). Following graduate school and obtaining NMAA certification he took over the supervision of nuclear and non-nuclear stress testing in the Rolla facility. Shortly thereafter the internists at the Mercy facility in Lebanon, Missouri were to discontinue their role in the stress lab and Richard was able to step in and take over under their general supervision and work with the wonderful team there to continue offering cardiac services. The Rolla and Lebanon facilities are approximately 54 miles apart.

Supervision of stress testing requires attention to several factors at the same time including patient management, personnel management, exam time management, and medication management. History review, optimal lead placement, heart and lung auscultation, and medication review are key to obtaining an optimal stress test. Richard averages about

1100 pharmacological and exercise stress tests a year between the two facilities. Richard works under the general supervision of his collaborating physicians at each location.

Along with the supervision of the stress testing, Richards duties have included preliminary preparation and dictation of reports for finalization on general nuclear medicine as well as nuclear cardiology and non-nuclear ecg treadmill stress testing, preliminary diagnostic ECG review, checking exams for appropriate use criteria and suggesting alternative exams to the ordering physician, giving preliminary results, ordering and injecting/dosing adjunct medications (including but not limited to morphine, Lasix, aminophylline, adenosine, nitro, albuterol, dextrose drip, Benadryl, epinephrine, regadenoson, esmolol, etc...) as needed [done under general supervision of collaborating physician], and writing policy and protocols. Richard also performs lymphoscintigraphy injections and mapping for the general surgeon for breast and melanoma lymph node biopsy as well as upper and lower extremity lymphedema studies. For lymph node biopsies our preferred injection technique is the sub dermal peri-areolar technique. Richard has also been trained in the quadrant technique, sub areolar and peri-tumoral injection technique with and without the use of ultrasound. In addition to this training, his preceptor trained him in Port-O-Cath studies using contrast injections under x-ray or fluoroscopy to check for patency of the catheter placed for chemotherapy. Richard is also an experienced certified radiographer.

Both locations are one camera operations without PET or therapy at this time, however; Richard stays very busy also serving as the RAM license and Radiology RSO for the Rolla location where he not only assumes the duties typical of what is expected of managing byproduct materials but is also responsible for CT dosimetrics and fluoroscopic dose rate to make sure they are in compliance with ALARA and accreditation programs.

Another duty Richard has assumed in the Rolla location is that of a go to for contrast reactions in MRI and CT prior to involving the physician. Richard's duty is to triage the patient, identify the severity level and if treatment needs to be administered, and coordinating treatment with the physician on duty in the clinic for those with moderate to severe cases. The department is located in a building full of clinics, however; although there are several physicians in the building there is not a radiologist present in the department. Richard also serves as the regions BLS instructor covering Rolla and 5 other towns.

In addition to the clinical duties Richard serves on committees and councils within his organization. He was the first Chair of and currently is a member of the Nuclear Medicine Resource Council at Mercy which brings together NM representatives across the system in 4 states, the Radiation Safety Council in which he is the only non-physicist RSO member, the Radiation Safety Committee, and Rolla Clinic Safety Committee.

Richard is a Past President of the Southwest Missouri Subchapter, Missouri Valley Chapter SNMMI-TS, and Advanced Associate Council. He served several years as the National Council Delegate for the Missouri Valley Chapter as well as on numerous committees on the local, chapter, and national level. He is currently serving on the SNMMI-TS History Committee,

he is the Secretary / Treasurer of the Advanced Associate Council, Chair of the Bylaws Committee of the MVC-SNMMI, and is the Chair –Elect of the Nuclear Medicine Technology Certification Board. He has recently been appointed to the Joint Task Force on Radiologic Licensure for Missouri. He is a SNMMI-TS Fellow.

Krystle Glasgow, CNMT, NMTCB(CT), NMAA

Krystle Glasgow IS Clinical Coordinator and instructor for the University of Alabama at Birmingham (UAB) Master of Science Nuclear Medicine Technology Program, and also teaches within the Master of Science Health Physics Program. She was in clinical practice for 5 years prior to joining UAB. During her time in clinical practice, she worked as a staff technologist and then as Manager of Imaging Sciences for Nuclear Medicine at a local hospital. Krystle has received her Bachelor of Science in Nuclear Medicine Technology with a concentration in Computed Tomography from UAB and her Master of Imaging Science from the University of Arkansas for Medical Sciences (UAMS) for Nuclear Medicine Advanced Associate (NMAA). Krystle is currently a PhD student at UAB in the Health Services Administration Program with a concentration in Health Informatics.

Krystle holds certifications from the Nuclear Medicine Technology Certification Board (NMTCB) including Certified Nuclear Medicine Technologist (CNMT), Certified Computed Tomographer [NMTCB(CT)], and Certified Nuclear Medicine Advanced Associate (NMAA). She is the current SNMMI-TS Secretary, the Southeastern Chapter of the SNMMI-TS current President. Krystle is active in the SNMMI with many committees and the current sitting chair for the TS membership committee; she is an active member of the Advanced Associate Council. Krystle is involved at the state level with the Alabama Society of Nuclear Medicine (ASNMM), and she is a past - President of the ASNMM and a recent graduate of the SNMMI-TS Leadership Academy 2016. Krystle is a past Continuing Education Editor for the *Journal of Nuclear Medicine Technology (JNMT)*.

2019 AAC Board of Directors Elections

Congratulations to our newly elected Advanced Associate Council Board Members and Officers!

Vice President: Mary Anne Owen, MHE, RT(N), FSNMMI-TS

Secretary/Treasurer: Richard Siska, Sr., NMAA, MIS, FSNMMI-TS

Board Member: Norman Bolus, MSPH, CNMT, FSNMMI-TS

Board Member: Daniel Bucklan, MD, MPH

Board Member: Darrin Johnson, MD, CNMT

Immediate Past President: Vicki Larue, MIS, NMAA

The Advanced Associate Council also wishes to express our gratitude for our outgoing AAC Officers and Board Members:

Board Member: Jon Baldwin, DO

Board Member: Katie Neal, BS, MS

Board Member: Cybil Nielsen, MBA, CNMT, FSNMMI-TS

Board Member: Tricia Peters, BS, CNMT, PET, RT(CT)

Save the Date

MWM 2020: January 23-25, 2020 Tampa, Florida

Annual Meeting 2020: June 13-16, 2020 New Orleans, Louisiana