LETTER FROM THE CHAIR

JOANNA R. FAIR, MD, PhD

Welcome back to our Women in Nuclear Medicine newsletter! We’ve been on a bit of a hiatus while everyone has juggled COVID and life, but your committee has been working behind the scenes to continue to promote women in nuclear medicine and take part in the issues that matter to us. In this newsletter, you’ll learn more about workforce pathway programs; see the highlights of SNMMI’s position on parental and caregiver leave in training; learn about one of our technologist leaders who is earning her PhD; and much more.

I am starting my second year as chair of this wonderful group, and it truly is a privilege to help serve as a voice for the women in our specialty. I would love your feedback about issues that are important to you, ways in which we can serve you better, and ideas that you have. Please feel free to reach out to me directly: jfair@salud.unm.edu.

Best,
Joanna

Joanna R. Fair, MD, PhD (she/her/hers)
Chair, Women in Nuclear Medicine Committee, SNMMI
Senior Associate Dean of Graduate Medical Education and DIO, Professor, Vice Chair of Academic Affairs, and Co-Director of DEI, Radiology, University of New Mexico
Workforce pathway programs in medicine introduce students to particular specialties, offering insights into daily work environments, training pathways and educational requirements. As nuclear medicine is a field with minimal exposure for students during the medical school years, workforce pathway efforts may serve useful as a one method to help meet current and future expected staffing shortages.

One successful workforce pathway program has been implemented to encourage women to enter the field of orthopedic surgery. As orthopedic surgery is facing staffing shortages and has a low complement of female orthopedic surgeons (~6% in 2018), a workforce pathway program called The Perry Initiative was initiated in 2009. This program offers a one-day workshop on orthopedic surgery careers to women students during the high school, college, and medical school years. Over 40 medical centers participate nationwide to provide workshops locally. Studies are showing that this effort is increasing interest among women students:

- After college and during medical school, about half of participants remained interested in pursuing orthopedic surgery
- Almost a third of students who participated in the program during high school were “likely” to pursue orthopedic surgery
- Match rates for program participants into orthopedic surgery is 20% (vs. 1% for nonparticipants)
- Overall, since its inception, 240 program participants have matched into orthopedic surgery

These are exciting outcomes for this initiative, and the field of nuclear medicine may benefit from a similar workforce pathway program geared toward introducing students to our field.
At my institution, we recently developed a one-hour introductory seminar on the field of nuclear medicine aimed at college and medical students. This was held during a convenient time for the students during a regular school day. A diverse group of 83 students arrived, with 38 women and 40 men in attendance. Fifty percent of participants identified as those underrepresented in our field. In our evaluation of the program, we found significant improvements in student perceptions of what the field of nuclear medicine encompasses and student ability to pursue nuclear medicine pathway if they desired. One quarter of participants said that they might become a nuclear medicine professional.

So, when you are developing your plans and scheduling your year, consider whether your site could schedule a short workshop for college or preclinical medical students about the field of nuclear medicine, if you don’t already have one. Who knows? It may help attract great students to our field.

Call for Abstracts!

ACNM invites you to **SUBMIT** an original clinical or scientific abstract for the opportunity to present your research during the 2023 SNMMI Mid-Winter and ACNM Annual Meeting, January 26-28 in San Francisco, California.

**Abstracts are now being accepted on the following topics:**
- Aspects of Clinical and Basic Science in Nuclear Medicine
- Correlative Imaging in Nuclear Medicine and Radiology
- Methodology, including Computer Programming or Physics
- Nuclear Pharmacy and Physics
- Nuclear Cardiology
- Radionuclide Therapy
- Quality and Safety in Nuclear Medicine
The Importance of Supporting Family/Medical Leave

Among physicians and medical organizations, there is a rising tide of awareness of the importance of supporting family/medical leave (1-4). There are two big reasons to support adequate leave: equity and wellness. Adequate family/medical leave promotes equity by recognizing the different needs of different genders and family structures and of people with disabilities. Furthermore, participation of both parents in caregiving for a child during a leave improves the distribution of paid work, home and care work, and parental involvement (5).

Second, adequate leave promotes health and wellness by reducing the spread of illness, as we have all seen so clearly during the ongoing COVID-19 pandemic, as well as by decreasing neonatal mortality, promoting on-time immunizations, reducing in maternal psychiatric illness, decreasing intimate partner violence, and increasing rates of exclusive breastfeeding (6-8).

Longer durations of breastfeeding are known to decrease the risk of breast cancer, which is the number one cause of cancer among women. Breastfeeding is also linked to stronger immune systems in babies, lower rates of infant mortality, lower rates of Sudden Infant Death Syndrome, decreased absenteeism from work for parents, and lower risks of ovarian cancer, autoimmune diseases, diabetes, and cardiovascular disease (9,10). Adequate leave also decreases presenteeism, which is when employees are not fully functioning in the workplace due to illness or other condition, and it increases worker retention thereby reducing hiring costs (11-13).

With these benefits in mind, multiple medical organizations have released statements or policies clarifying, supporting, or expanding family/medical leave over the past several years, including The American Board of Medical Specialties (ABMS) (1), the Accreditation Council for Graduate Medical Education (ACGME) (14) the Society of Nuclear Medicine and Molecular Imaging (SNMMI) (15), The American Board of Nuclear Medicine (ABNM) (16), the American College of Radiology (ACR) (17), The Society of Interventional Radiology (SIR) (18), The Association of Program Directors in Radiology (APDR) (19), and many others. The new ACGME policy that went into effect on July 1, 2022 requires accredited training programs to provide six weeks of paid leave for trainees as needed. The new ABR policy that went into effect on July 1, 2021 allows for up to 8 weeks off service per year over the course of radiology training, for most programs equating to 16 weeks of leave during four years of radiology residency (20).
The new ABNM policy that went into effect on July 1, 2021, allows for more flexibility than the prior policy and specifically clarifies that trainees may take up to 0.5 weeks of leave per month of nuclear medicine training if training is under 24 months (16,21). A new ACR resolution approved in May of 2022 encourages all practices, departments, and training programs to strive to provide 12 weeks of paid family/medical leave in a 12-month period for physicians as needed (17). The SNMMI’s statement in support of family/medical leave published in January of 2022 encourages employers to develop transparent leave policies, support employees and trainees in taking leave, and provide lactation support and accommodations during the postpartum period (15).

Nuclear medicine lags behind other medical specialties, including diagnostic radiology, in diversity, equity, and inclusion, with women notably comprising fewer than 20% of nuclear medicine physicians (22). Supporting family/medical leave is one part of a multipronged approach to improve diversity, equity, and inclusion in nuclear medicine. Despite clear data about the benefits of leave, the physician community is only now really starting to create the environment for ourselves that we have known for decades promotes wellness for our patients. The benefits of leave are far-reaching, and adequate leave promotes equity and creates a healthier and more productive workforce.

REFERENCES

12. Center for American Progress, Business Costs to Replacing Employees, 2012
As a Nuclear Medicine Technologist and Educator, I find it important to continue developing innovative ideas and explore topics which support the molecular imaging field. I am currently pursuing my PhD in Public and Social Policy to explore regulations and dig deeper into how these affect patient care. A passion of mine is equality and inclusion. I have an ultimate goal of combining my knowledge of patient care, nuclear medicine, health equity, and policy practice to create a more inclusive way of diagnosing and treating individual patients. With theranostics and multiple new diagnostic imaging agents on the rise, our field is continuing to be an avenue of hope for more personalized patient care.

This research has not come from me alone and I have been fortunate to have many mentors in my time with most of them being informal. I have been privileged to be involved with several SNMMI and SNMMI-TS groups which have given me close working relationships with many amazing individuals. I cannot list all those that have influenced me, but my time with the Women in Nuclear Medicine Groups, the Diversity, Equity, Inclusion Committee, the TS Quality Committee, and the TS Publications Committee have been influential in my professional development.

My time on the SNMMI Board of Directors, TS National Core of Representatives, and the JNMT Editorial Board have given me so much. Some of my biggest cheerleaders and informal mentors in the Nuclear Medicine arena have been (but not limited to): Ejda Bajric, Dr. Crystal Botkin, Dr. Tina Buehner, Dr. Mary Beth Farrell, Ross Frye, Dr. David Gilmore, Dr. William Hubble, Dr. Medhat M. Osman, Leesa Ross, Kathy Thomas, Dr. Austin Turner, Nikki Wenzel-Lamb, and Dusty Yorke. My PhD advisor, Dr. Hisako Matsuo, has also given me insight and opportunity during my PhD pursuit. My current department chair, Dr. Amy Harkins, has given her time and energy to help me succeed and mentor me along my professional path.
My current research is focused on quality patient care in nuclear medicine. Imaging professionals strive for the best patient care. One way to provide quality care is to produce excellent images. Image quality can be verified through equipment quality control and department quality assurance. Routine and proper maintenance on all equipment is vital to ensure excellent patient images. Another way to continue to provide quality patient care is to provide safe and effective working conditions for those providing the individualized care. Radiation safety is vital when an individual could be exposed to radiation. Occupational exposures must be monitored, regulated, and accurately reported. Radiology employees may be exposed to radiation from machines, patients, sealed radioactive sources, and unsealed radioactive sources (1).

Quality patient care includes finding ways to focus on the mind, body, and soul of the individual receiving medical imaging studies. One way to focus on the individual is to be mindful of both their disease and their mental health surrounding their disease. The idea of music as a healing influence which could affect health and behavior is as old as the writings of Aristotle and Plato (2). The American Music Therapy Association (2018) defines music therapy as, “an established health profession in which music is used within a therapeutic relationship to address physical, emotional, cognitive, and social needs of individuals” (3). Few health care professionals have theorized how music therapy may be utilized in a medical imaging or hospital setting for patients who are diagnosed with cancer and receiving treatments. Safety and quality care are paramount to providing the care patients need to diagnose and treat illness and disease. These topics confirm the value of quality workplace practices in a nuclear medicine healthcare settings enable superior patient care.

With these topics as my current PhD focus, I hope to develop these into more inclusive research. I hope to pursue ideas which consider gender norms, race, cultural habits, and body habitus and these effects on nuclear medicine images. I just presented research at the 2022 SNMMI annual meeting titled “Quantitative Perfusion SPECT (QPS) Analysis Using Both Male and Female Normal Databases in an Obese Male Patient: A Case Study” which examined an obese patient using both male and female normal databases during Myocardial Perfusion Imaging (MPI) processing. One goal of this was to show how ignoring gender labels allowed for a more confident assessment of artifactual contribution to perfusion abnormality in an MPI study. Further research could be utilized to explore if gender should be specified when body habitus is utilized.
My current research explores some of these ideas through quality control on nuclear medicine equipment, occupational radiation exposure regulations, and music therapy during studies to see if this impact anxiety. I have published some of these topics through the Journal of Nuclear Medicine Technology (JNMT) and presented this research at the Society of Nuclear Medicine and Molecular Imaging (SNMMI) meetings. I am continuing to hone my ideas to further develop an understanding of the complexities of our individual patients.

References

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Share your achievements with us!

If you have any good news (professional or personal) related to yourself or women colleagues in the field of nuclear medicine, please forward a photo of you in your office (home office is fine) or clinic along with text describing yourself (name, title, institution) and any accomplishments you’d like to celebrate to winmesnmmi.org. We’d love to get to know you and celebrate with you via @women_in_nuclear_medicine on Instagram and @womeninnucmed on Twitter.
The WINM committee is charged with promoting women physicians, scientists and technologists in nuclear medicine and molecular imaging; fostering the development of professional interests; addressing problems encountered in the practice of nuclear medicine; promoting leadership and career development in women; raising awareness of scientific contributions of women in nuclear medicine; recognizing the challenges of balancing career and family; promoting fair and equitable treatment; and improving the climate for women in nuclear medicine in all stages of their careers.

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