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AJNR Am J Neuroradiol 2021, 42 (12) 2127-2129

doi: <https://doi.org/10.3174/ajnr.A7310>

<http://www.ajnr.org/content/42/12/2127>

The American Society of Neuroradiology: Cultivating a Diverse and Inclusive Culture to Build a Stronger Organization

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As an organization, the American Society of Neuroradiology (ASNR) is committed to a welcoming environment for all and encourages a culture of bystander allyship, positive mentorship, and professional modeling.¹ Central to achieving this welcoming environment is the need to acknowledge, respect, and celebrate diversity in our organization and to actively include and elevate the underrepresented. We believe embracing diversity and inclusion is in the best interest of our patients, our specialty, our Society, and ourselves, and we also expect that embracing diversity and inclusion will enhance our collective ability to achieve quality and excellence.

As physicians and scientists in neuroradiology, our foremost responsibility is the care of our patients. We are deeply concerned by the well-documented disparities in health care access and outcomes attributable to race and ethnicity,² sexual orientation,³ gender identity,⁴ religion,⁵ poverty,⁶ aging,⁷ and other factors. Neuroradiology is not exempt from these issues. There are documented racial and ethnic differences in diagnostic imaging use during US emergency department visits.⁸ Disparities have also been shown in a number of disease processes in which neuroradiologists directly or indirectly provide clinical care, including stroke,^{9,10} dementia,¹¹ pain management including osteoporotic compression fracture,^{12,13} and head and neck cancer.¹⁴ Furthermore, pre-existing disparities have been further exacerbated by the coronavirus disease 2019 (COVID-19) pandemic,¹⁵⁻¹⁸ particularly in impoverished communities and communities of color. Although the root causes of health disparities are complex, they can be grouped into health system, patient, and provider factors.²

Our committee has attempted to mitigate contributing provider factors through a series of educational webinars that do the following: 1) highlight the existence of health care disparities in the context of COVID-19 (Neuroradiology Updates & COVID-19, August 5, 2020), artificial intelligence (Artificial Intelligence: What the Neuroradiologist Needs to Know, October 7, 2020), and back pain (Oh My Aching Back!: What the Neuroradiologist Needs to Know about Back Pain in 2020, November 4, 2020); 2) educate neuroradiologists about respectfully and compassionately caring for vulnerable populations (Diversity & Inclusion Matters, July 8, 2020; Understanding the Terminology and Making a Difference, September 2, 2020; Imaging of the Transgender and Gender Diverse Patient, March 31, 2021); and 3) define allyship

as well as provide strategies for being an effective ally and speaking up against microaggressions encountered in the professional radiology setting (Understanding the Terminology and Making a Difference, September 2, 2020). We are also committed to combating “ableism,” which is defined as discrimination and social prejudice against individuals with disabilities.¹⁹

Diversity and inclusion are also critical to the long-term health of our specialty. A diverse neuroradiology workforce not only improves our ability to address health disparities by mitigating the negative effects of language barriers, mistrust, and cultural misunderstandings²⁰ but also positions us to benefit from enriched collaborations, innovation, and growth.²¹ For example, an age-inclusive workforce facilitates intergenerational learning and has been linked to higher productivity, lower turnover, and higher rates of creativity and innovation.²²

Historically, neuroradiology has been a male-dominated field.^{23,24} Although more work is needed in neuroradiology to achieve gender parity with the medical school graduate and graduate medical education trainee pools, we are encouraged by recent progress in gender equity within the ASNR leadership ranks. More specifically, 5 of the 10 ASNR Presidents from 2010 to 2019 were women, and 3 of the 4 Presidents from 2020 to 2023 will be women, as opposed to just 2 female Presidents from 1962 to 2009.²⁵ Furthermore, there is strong female leadership among ASNR staff, with 8 of the 10 departments at headquarters led by women as well as a female Managing Editor of the *American Journal of Neuroradiology*. We celebrate the progress embodied by our Society’s record of recent female leaders and the positive example the ASNR has set for other major medical societies in this regard;²⁶ however, we are also committed to confronting other existing gender imbalances within the organization, including only 2 women having received the ASNR Gold Medal and no female Editors-in-Chief of the *American Journal of Neuroradiology*.

When thinking about the long-term health of our specialty within the United States, societal demographics and demographic trends are relevant. In 2016, minority groups, including African Americans, Hispanics and Latinos, Asians, American Indians, Alaskan Natives, Native Hawaiians, and Pacific Islanders accounted for >38% of the United States population.²⁷ By 2045, white Americans are projected to no longer be in the majority.²⁷ However, underrepresented minority groups in medicine (African Americans, Hispanics, Native Americans, Alaskan Natives, Native Hawaiians, and Pacific Islanders) comprise only 6.5% of practicing radiologists and only 8.3% of radiology residents, compared with 15.3% of medical school graduates.²⁸ Shared race or ethnicity between patients and physicians has been shown to positively affect communication, patient satisfaction, compliance, and overall health outcomes.²⁹⁻³² Furthermore, lack of diversity within radiology may impair the ability of our field to address the underlying causes of the previously described health care disparities related to radiology. For these reasons, our committee supports existing radiology pipeline initiatives intended to expose and attract talented individuals from backgrounds underrepresented in medicine to our specialty, including the American College of Radiology’s Pipeline Initiative

for the Enrichment of Radiology internship directed toward rising second-year medical students. Additionally, we are actively exploring the potential for similar pipeline programs specific to neuroradiology and the ASNR.

Just as diversity strengthens our specialty, it also strengthens our organization and should, therefore, be viewed as a strategic imperative. It is well-documented that corporations that value and prioritize diversity perform better.³³ For example, organizations in the top quartile with respect to racial and ethnic diversity are 35% more likely to have above-median financial performance, and organizations in the top quartile for gender diversity are 15% more likely to have above-median financial performance.³⁴ Organizational diversity improves employee engagement, analytical thinking, and innovation.³⁵ In problem-solving, groups composed of individuals with a wide range of backgrounds, perspectives, and abilities outperform groups of like-minded experts, particularly when problems are unique or difficult.³⁶

The ASNR annual meeting program is one of the most highly visible products of our organization, where the presence or absence of diversity is readily apparent. Thus, our committee prioritized the creation of an annual meeting programming diversity checklist, encouraging diverse and inclusive representation in the following areas: 1) geographic, including international; 2) institutional; 3) gender and gender identification; 4) age and career level; 5) race, ethnicity, culture, and nationality; 6) neuroradiologic subspecialty; 7) practice environment; 8) training institution; and 9) accommodations for all levels of abilities. Additional initiatives intended to strengthen the ASNR as a diverse and inclusive organization include the Committee Chair Orientation Toolkit and invitations to ASNR Committee Chairs to join Diversity and Inclusion Committee calls and partner on aligning strategic initiatives.

Cultural competence is not innate. Rather, this is a skill set developed through interest and intentional effort facilitated by education, travel, and experience. We are fortunate to inhabit a fascinating world teeming with biologic diversity. A certain awe for and desire to understand these diverse biologic processes and leverage them for the benefit of humankind likely motivated many of us to pursue a career in medicine. We suggest approaching human diversity with this same sense of wonder, appreciation, and desire to understand, recognizing the tremendous creativity and vitality that these differences may catalyze.

Finally, the committee views health equity for the patients we serve as an extremely important endeavor for medicine in general, as well as neuroradiology in particular. We must remain vigilant regarding the social, environmental, economic, political, and cultural frameworks that affect individual and population health. It is becoming increasingly clear that radiology can play a pivotal role in addressing these issues. For example, the American College of Radiology recently convened the Radiology Health Equity Coalition to advance awareness of health disparities and equity in the delivery of health care in the United States.³⁷ As the pandemic has highlighted substantial inequities in health status and health care, the American College of Radiology became convinced that patient-centered care achieved through health equity is good for patients and providers alike. At the request of the American College of Radiology Commission on Neuroradiology,

the committee recently recommended that the ASNR become a member organization of the Coalition, and the ASNR Board of Directors unanimously voted to join.

Although we hope that our shared responsibility to do what is best for our patients would serve as sufficient motivation to enthusiastically support the diversity and inclusion efforts of the ASNR, we believe there are also very good reasons to participate from the standpoints of our specialty, our society, and ourselves. Please, come join us in this important work! There is not only much to do but also much reason for excitement and optimism about a better and stronger future together.

All Diversity and Inclusion webinars mentioned in this article are available for on-demand viewing at ASNR Education Connection (<https://www.asnr.org/education/education-connection/>).

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