

**Request for Information (Notice NOT-CA-21-067):
Seeking Stakeholder Input on Enhancing Diversity & Inclusion in the Cancer Research Workforce**

African Americans, Hispanics, Native American/Alaska Natives, and Native Hawaiian/Pacific Islanders are expected to form more than half of the US population by 2050.¹ However, these racial/ethnic groups, along with women and people with disabilities, remain underrepresented in the biomedical workforce,¹ throwing into question whether the health research labor pool is adequately prepared to reflect the perspectives of these populations and their health needs.

Studies confirm that underrepresented minorities (URMs) are more likely to research the particular health needs of underserved and underrepresented communities, especially their own.² Many choose biomedical research careers specifically because of their interest in reducing disparities in their populations.¹ Similarly, while women's health is still disproportionately under-studied and under-funded, women are those leading the way in fundraising, advocacy and government relations, and in clinical research efforts to better represent women's health.³ As a national nonprofit focused on promoting women's health research, education, and policy, our organization has also witnessed this in our programming and working group participants. If the cancer research workforce is not adequately representative of the emerging American population, we will have significant gaps in our knowledge and services. Therefore, recruiting and retaining students, professionals, and researchers into the biomedical and cancer workforce is of critical public health importance.

Further, more diverse research teams lead to improved outcomes. By including multiple perspectives, teams can more creatively solve problems and consider questions or aspects of the research work that might not otherwise be apparent.² Including URMs in cancer research also helps to ensure that the experiences of the communities where disparities exist are represented and studied appropriately in the work.⁴

Integrated and Holistic Solutions

There is evidence that URMs are lost at each stage of the pipeline, from K-12 to bachelor's and post-baccalaureate study, and then on to facing additional barriers in the academy, private companies, and government and non-government agencies.¹ Thus, strategies to improve representation for URM cancer researchers must be integrated across the educational and institutional systems that currently exist for training, funding, executing, and publishing cancer research. In particular, institutions must actively engage in equity improvement plans to assess and reduce the barriers within their systems. For example, the [Athena Swan Charter](#) is a set of principles and extensive resources to guide institutions in dismantling sex and gender biases and [SEA Change](#) is a similar self-assessment and program planning guide prepared by the American Association for the Advancement of Science designed to achieve sustainable change for diversity and inclusion in post-secondary education.

Mentoring, coaching, and collaborating with principal investigators who have federal funding remain key strategies that URMs identify as gaps and that research confirms are less accessible to URM researchers.⁴ Existing programs should consider where links are available, and agencies like NIH should continue to invest in and build programs aimed at professional development and skills training for grant writing, networking, and mentoring.

Dedicated Funding and Extramural Resources

Despite being awarded nearly 13% of biomedical science PhDs, URM researchers only receive about 5% of NIH R01 grants,² and after initial failure, URM researchers are less likely to reapply for federal grant funding,⁴ compounding the effect of under-funding. Given that URMs are more likely to conduct research on disparities that affect their communities, it is therefore important to ensure adequate funding is directed

to URM researchers who can expand our knowledge base about cancer in under-researched and under-served populations.

Further, racialized URM researchers form only 2% of tenure track faculty, and women biomedical researchers, though earning more than 50% of PhDs, form only 33% of tenure track faculty.² A growing number of PhD graduates are working outside of academia,⁵ and this is especially true for URM and women. It is therefore important to explicitly direct funding streams and programs to extramural research and workforce programs (for example, advanced training or networking, mentoring resources, and similar) to build and maintain capacity in cancer research to represent URM populations.

Intentional Investment in High Profile Service Opportunities

As part of the funding and granting process, it is critical to include and enhance the perspectives of URM researchers in systems and processes. As discussed above, these perspectives are needed for better, more comprehensive and holistic research findings. As URM researchers are more likely to have professional or lived experiences related to health research among their populations, they are also more likely to identify where gaps or improvements in research proposals might be relevant.

In all settings, particularly in academia, participation in committees, boards, and similar are both necessary and valuable for career advancement. It could open networks to meet and collaborate with other researchers, especially those working on research focused on underrepresented populations, and increase their profile broadly. However, URM and women are often tasked with committee work focused on racial and ethnic diversity or gender representation.⁶ While this labor is important, it can displace a URM researcher's time and attention on scholarship or direct mentoring related to health research disparities. It is therefore important to ensure URM are offered service opportunities that are meaningful toward their scholarship, while retaining capacity for other work that can better advance their careers or research endeavors.

References

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