



**Association of
American Medical Colleges**
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October 26, 2017

Shiva P. Singh, Ph.D.
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National Institute of General Medical Sciences
National Institutes of Health
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**Re: Request for Information: Organization and Administration of NIGMS Undergraduate and Pre-Doctoral Diversity Programs
NOT-GM-17-017**

Dear Dr. Singh:

The Association of American Medical Colleges (AAMC) is pleased to have this opportunity to offer comments related to identifying strategies that will lead to more effective and efficient organization and administration of the NIGMS' Undergraduate and Pre-doctoral Diversity Programs. Founded in 1876 and based in Washington, D.C., the AAMC is a not-for-profit association dedicated to transforming health care through innovative medical education, cutting-edge patient care, and groundbreaking medical research. Its members comprise all 147 accredited U.S. and 17 accredited Canadian medical schools; nearly 400 major teaching hospitals and health systems, including 51 Department of Veterans Affairs medical centers; and more than 80 academic societies. Through these institutions and organizations, the AAMC serves the leaders of America's medical schools and teaching hospitals and their nearly 167,000 full-time faculty members, 88,000 medical students, 124,000 resident physicians, and thousands of graduate students and postdoctoral trainees in the biomedical sciences.

AAMC recognizes the value of training a new generation of biomedical researchers from diverse backgrounds. Workforce diversity is important for leveraging a broad array of talents and experiences from individuals of diverse sociodemographic and socioeconomic backgrounds. These particular characteristics can have an influence on the development of research questions and production of innovative research partnerships.

Junior researchers, especially individuals underrepresented in the biomedical workforce, often lack mentorship networks to advise on career development, grant submissions, and other professional development areas. The AAMC commends the NIH for developing a cadre of training programs with records of success, such as [Bridges to the Baccalaureate](#) and [Bridges to Doctorate](#), [Research Initiative for Scientific Enhancement \(RISE\)](#), [Maximizing Access to Research Careers \(MARC\) Undergraduate Student Training in Academic Research \(U-STAR\)](#), [Initiative for Maximizing Student Development \(IMSD\)](#), and [Post-baccalaureate Research Education Program](#)

(PREP). These programs are integral in increasing the number of racial and ethnic minorities in biomedical research and health sciences. AAMC commends the NIH Office of Intramural Training and Education for creating programs that provide valuable resources and expand biomedical research opportunities for students of all ages. We are pleased to offer the following recommendations:

Expand program eligibility to include the social sciences

Eligibility for many of these Undergraduate and Pre-doctoral programs are limited to those pursuing degrees in STEM (science, technology, engineering, and mathematics) and behavioral sciences. In a previous letter to NIMHD¹, AAMC suggested the expansion of the program eligibility requirements to include social sciences and other interdisciplinary areas of inquiry to produce scholars from diverse backgrounds. AAMC reiterates this recommendation.

Provide resources to help students navigate the NIH programs and their careers

In a previous comment letter, we recommended the NIH provide information to potential students on how to navigate through intramural training programs to maximize the positive impact on their biomedical research careers². We are pleased that as a part of the new Ruth L. Kirschstein National Research Service Award (NRSA) Predoctoral Institutional Research Training Grant (T32), NIGMS requires all applicants to address trainee career development by outlining a plan to provide information about potential career paths. AAMC recommends that career development also be a component of the NIGMS Undergraduate and Pre-doctoral Diversity Programs.

Increase coordination across NIH and institutional programs

AAMC suggests all NIGMS Undergraduate and Pre-doctoral programs consider coordinating with each other and existing NIH initiatives such as the National Research Mentoring Network (NRMN), Building Infrastructure Leading to Diversity (BUILD), and Coordinating and Evaluation Center (CEC) to create synergies that more efficiently and effectively promote the development of a well-trained and diverse biomedical research workforce, especially when a single institution is awarded multiple programs. While AAMC recognizes that the programs may have different areas of focus and may target trainees at different stages of training, AAMC suggests that the programs identify areas where coordination will be a benefit to all programs. Furthermore, to strengthen intra-institutional networks and leverage resources, AAMC suggests

¹ AAMC Comment Letter, August 24, 2015,(available at <https://www.aamc.org/download/442000/data/aamcsubmitslettertonimhdontraining.pdf>)

² AAMC Comment Letter, August 24, 2015 ,(available at <https://www.aamc.org/download/442000/data/aamcsubmitslettertonimhdontraining.pdf>)

that NIH's undergraduate and pre-doctoral diversity programs consider partnering with existing diversity training opportunities on campus.

Varied considerations for single institutional programs

The question of whether an institution of higher learning should be home to one, centralized diversity program or to multiple, smaller programs is complex. Some universities have a more centralized administration and therefore a single program spanning the entire institution may make sense. In such an institution, centralized management can better address stresses for individuals along the continuity of professional development: For example, does undergraduate preparation enable students to succeed in the institution's graduate program? What kinds of support seems to be most effective in fostering the professional growth of science-interested undergraduates from diverse backgrounds so that they remain interested and feel a part of the community of scientists within their institution?

In contrast, the single point of management would likely fail at some of our larger, more decentralized institutions. There are schools where the undergraduate campus may be physically and practically separated from the graduate school. This is particularly true of medical schools, which may be located close to hospitals instead of close to campus. In that situation, a single management center would likely be ineffective and have less influence on student life. Multiple centers would allow closer links at the different stages of training, although with some potential loss of emphasis on continuity unless that issue was specifically addressed.

We suggest that institutions be allowed to offer a diversity program management scheme that meets institutional needs. It shouldn't be one size fits all. However, there should be an expectation that all program applicants describe how their institution will address issues of continuity and local authority (e.g. can the diversity program affect curricula?) In addition, if there are separate programs at an institution, there should be one comprehensive evaluation that looks at the success of the programs working together to enhance the careers of diverse students building careers in Science.

Strengthen program evaluation

AAMC commends NIGMS for enhancing program evaluation requirements as a part of the new T32 research training grant application. With a new focus on career outcomes and mentor training, AAMC supports the efforts to track trainee career outcomes because it will provide better insight into various, successful career pathways and may inform future improvements to

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graduate programs³. A strong evaluation plan for each of the Undergraduate and Pre-doctoral Diversity Programs should be developed.

AAMC appreciates the opportunity to comment on strategies to strengthen the undergraduate and Pre-doctoral diversity programs, and we look forward to working with the NIGMS on this issue. Please feel free to contact me or my colleagues, Karey M Sutton PhD., Lead Specialist Health Equity Research and Policy (ksutton@aamc.org) and Jodi Yellin, PhD., Director Science Policy (jyellin@aamc.org) with any questions about these comments.

Sincerely,

A handwritten signature in blue ink, appearing to read "Ross E. McKinney, Jr., MD". The signature is stylized and cursive.

Ross E. McKinney, Jr., MD
Chief Scientific Officer

³ AAMC Comment Letter, August 3, 2016, (available at <https://www.aamc.org/download/464816/data/aamclettertonigmsonmodernizinggraduateeducation.pdf>)