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Association of American Medical Colleges 655 K Street, NW, Suite 100, Washington, DC 20001-2399 T 202 828 0400 aamc.org

Patricia Labosky, PhD Office of Strategic Coordination Division of Program Coordination, Planning, and Strategic Initiatives NIH Office of the Director National Institutes of Health InclusiveExcellenceRFI@nih.gov

# Re: Request for Information: Institutional Accountability to Promote Inclusive Excellence NOT-GM-18-034

Dear Dr. Labosky:

The Association of American Medical Colleges (AAMC) is pleased to have this opportunity to offer comments related to advancing inclusive excellence at the faculty level through institutional change in the biomedical sciences. The AAMC is a not-for-profit association representing all 154 accredited U.S. medical schools 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 and scientific societies. Through these institutions and organizations, the AAMC represents more than 173,000 faculty members, 89,000 medical students, 129,000 resident physicians, and more than 60,000 graduate students and postdoctoral researchers in the biomedical sciences. Our comments reflect input from many of these constituents, primarily collected through our Council of Faculty and Academic Societies (CFAS), Group on Diversity and Inclusion (GDI), Group on Faculty Affairs (GFA), Group on Research Advancement and Development (GRAND), Group on Graduate Research, Education, and Training (GREAT), and Group on Women in Medicine and Science (GWIMS)<sup>1</sup>. While the AAMC's comments here focus on broad, national themes, we have encouraged our member institutions to respond individually as well.

The AAMC recognizes the value of training new generations of biomedical researchers from diverse backgrounds. An inclusive workforce with individuals from historically excluded and underrepresented (HEUR) groups in biomedical research is critical to gather a range of perspectives needed to solve complex biomedical problems. The AAMC defines HEUR groups broadly, including racial and ethnic minorities underrepresented in research, women, international scientists, persons with disabilities, and

<sup>&</sup>lt;sup>1</sup>CFAS is AAMC's council comprising faculty representatives appointed by medical schools and academic societies, providing a voice for academic faculty within the AAMC's governance and leadership structures. The GDI focuses on activities that promote the benefits of diversity and inclusion in medicine and biomedical sciences, with a specific focus on the successful and progression of minority faculty. The mission of the GFA is to build and sustain faculty vitality in medical schools and teaching hospitals. GRAND is a professional development group for research deans and deans of clinical and translational research at these same institutions. The GREAT Group is AAMC's professional development group for graduate school deans, MD-PhD program directors, and postdoctoral program directors who have responsibility for biomedical PhD, MD-PhD, and postdoctoral training occurring within medical schools and teaching hospitals. GWIMS advances the full and successful participation and inclusion of women within academic medicine by addressing gender equity, recruitment and retention, awards and recognition, and career advancement.

first-generation college students, as well as other individuals from disadvantaged backgrounds. The inclusion of diverse perspectives and backgrounds has a demonstrable influence on the development of research questions, the production of innovative research partnerships, and discovery itself. Moreover, as science becomes more complex and challenging, and more internationally competitive, this nation cannot afford to exclude new talent because of stereotypes and barriers.

The AAMC commends the NIH for developing an array of programs across the undergraduate, graduate, post-doctoral, and faculty spectrum to increase diversity, and we are supportive of NIH's efforts to evaluate its programs' successes after their launch. The AAMC also applauds the NIH for its focused attention on increasing diversity in the research workforce through efforts such as the NIH Advisory Committee to the Director Working Group on Diversity, and we thank the NIH for recognizing the need for additional strategies to foster faculty diversity in academic research positions.

The NIH should continue to promote recruitment and retention of HEUR scientists by valuing and supporting institutions in their goals of increasing diversity, equity, and inclusion. The following is a summary of the AAMC's recommendations, described further below:

#### Recommendations for the biomedical community, including NIH

- The research track career should be made more attractive and inclusive for HEUR faculty by promoting networking opportunities, transparency, and connection with communities
- Faculty and administrators should be educated, sensitized, and trained to minimize the many challenges that HEUR faculty commonly face (e.g. conscious and unconscious biases, microaggressions, discrimination, harassment, minority tax, code switching, racial battle fatigue) in order to create an inclusive environment
- High quality mentoring and sponsorship tailored to the needs of individual HEUR faculty should be incentivized and provided to encourage success in research-track careers

# Recommendations specific to the NIH

- Develop and support an inter-institutional, virtual cohort program to support faculty; cohorts should be formed based on discipline in addition to career stage
- Lead efforts to gather data from new and existing sources to help form effective strategies to promote equity, diversity, and inclusion
- Consider curating or supporting a centralized location for online resources, including a data dashboard
- Consider dedicating funds for institutional offices that support the professional development of scientists from underrepresented groups
- Increase institutions' ability to recruit diverse investigators through an adapted K99/R00 or similar mechanism
- Continue and expand NIH programs to support partnerships between well-resourced institutions and smaller or less-resourced institutions, including institutions that produce a high percentage of HEUR scientists

Institutional programs and approaches that have been successful in reducing isolation, increasing community building, and fostering career advancement for early-career faculty

Scientists from HEUR groups face a number of barriers throughout their scientific careers, several of which may inhibit their recruitment into and retention of faculty positions. Foremost is the struggle against racism<sup>2</sup>, sexism<sup>3</sup>, and closed communities. These scientists often must overcome practical disadvantages, such as lack of mentoring specific to their needs, fewer mentors from similar backgrounds, a misalignment between institutional and their own values<sup>4</sup>, and personal factors,<sup>5</sup> which may contribute to lower funding rates<sup>6</sup> and other issues. Additionally, the perceived devaluing of certain types of research and the 'diversity tax' that many HEUR scientists face when asked to perform a higher percent of uncompensated tasks create a difficult career path. All of these issues that are felt more acutely by HEUR groups could contribute to a decision to leave the academic STEM workforce.

While the AAMC thanks the NIH for looking to address the lack of diversity, equity, and inclusion at the faculty level, the strategies sought in this request for information and presented in this letter do not address a key aspect of culture and climate change. Programs to increase recruitment, retention, and advancement of HEUR scientists are a critical part of the puzzle, but the workplace itself must also be improved to prevent the "minority revolving door."<sup>7</sup> Additional programs and training should be put in place so that all faculty are able to recognize how they contribute to toxic workplace environments and what role and the responsibility they have in changing the culture. The NIH should create a grant mechanism to help institutions establish and continue this work themselves. The NIH could look to the example of the University of California Davis's Center for the Advancement of Multicultural Perspectives on Science (CAMPOS) initiative. This program was originally housed in their NSF-funded ADVANCE program and has been successful in recruiting and retaining minority women across the STEM fields within their institution.<sup>8</sup>

When strategizing how stakeholders could increase diversity in early, mid, and late career faculty positions, two different phases should be considered. First, faculty positions must be made an achievable and desirable goal for all trainees and faculty. Second, upon entering an early faculty position, the environment must be inclusive to ensure retention.

<sup>&</sup>lt;sup>2</sup> D. Mehta, "Lab Heads Should Learn to Talk About Racism," *Nature* 559, no. 7713 (2018).

<sup>&</sup>lt;sup>3</sup> Engineering National Academies of Sciences and Medicine, *Sexual Harassment of Women: Climate, Culture, and Consequences in Academic Sciences, Engineering, and Medicine* (Washington, DC: The National Academies Press, 2018).

<sup>&</sup>lt;sup>4</sup>K. D. Gibbs, Jr. and K. A. Griffin, "What Do I Want to Be with My Phd? The Roles of Personal Values and Structural Dynamics in Shaping the Career Interests of Recent Biomedical Science Phd Graduates," *CBE Life Sci Educ* 12, no. 4 (2013).

<sup>&</sup>lt;sup>5</sup> E. H. Ellinas, N. Fouad, and A. Byars-Winston, "Women and the Decision to Leave, Linger, or Lean In: Predictors of Intent to Leave and Aspirations to Leadership and Advancement in Academic Medicine," *J Womens Health* (*Larchmt*) 27, no. 3 (2018).

<sup>&</sup>lt;sup>6</sup> D. K. Ginther et al., "Race, Ethnicity, and Nih Research Awards," *Science* 333, no. 6045 (2011).

<sup>&</sup>lt;sup>7</sup> Alma Clayton-Pedersen Sharon Parker, José Moreno, Daniel Teraguchi, Daryl G Smith, "The Revolving Door for Underrepresented Minority Faculty in Higher Education," (James Irvine Foundation2006).

<sup>&</sup>lt;sup>8</sup> 'CAMPOS,' UC Davis, <u>https://diversity.ucdavis.edu/campos</u>

As noted in AAMC's July 2018 comments on NIGMS' RFI on maintaining diversity through the postdoctoral researcher to faculty career transition, many AAMC member institutions have begun implementing strategies to increase diversity and inclusion at the faculty level. Many of these programs have already begun to receive positive feedback. Anti-bias training of all types for faculty and search committees is now being implemented at many institutions. Mentoring is widely recognized as an essential part of success, and efforts to increase the quality of mentoring for HEUR scientists include selecting a focused mentoring team for new faculty by both the new faculty themselves and the department chair.

Some institutions are attempting to create an inclusive environment by hiring a consultant company to help recruit minorities and having 'diversity days' for recruitment that highlight a school's commitment to diversity. Vanderbilt and University of Alabama have implemented seminar and networking programs to invite HEUR scientists to speak without job interview pressure, receiving enthusiastic responses to such events. The University of Wisconsin recently opened an office of diversity and inclusion that is largely focused on using analytical software to gather diversity data that will be made available both internally and externally. And some individual HEUR faculty have taken the initiative to renegotiate their appointments in return for their higher level of service, a strategy that institutions could implement for their HEUR faculty.

Below, we list some existing programs that have been successful in recruitment and/or retention. The NIH should look to these programs for disseminating good practices in reducing isolation, increasing community building, and fostering career advancement for early-career faculty:

- Johns Hopkins Carey Business School Women's Leadership Initiative<sup>9</sup>
- University of Rochester Medical Center Office for Inclusion and Culture Development and The University of Rochester Susan B. Anthony Center - Developing from Within: Exploring and Enhancing Career Choices for Mid-Career Women<sup>10</sup>
- The National Center for Faculty Development & Diversity an independent professional development, training, and mentoring community<sup>11</sup>
- University of Pittsburgh School of Medicine SPRINGBOARD<sup>12</sup>
- University of California Davis Advancing Faculty Diversity Grant<sup>13</sup>

<sup>&</sup>lt;sup>9</sup> 'Women's Leadership Initiative,' John Hopkins Carey Business School, https://carey.jhu.edu/about/diversity-inclusion/women-leadership-initiative/.

<sup>&</sup>lt;sup>10</sup> 'Educational Programs and Resources: Developing from Within,' University of Rochester Medical Center Office for Inclusion and Culture Development, https://www.urmc.rochester.edu/inclusion-culture-development/career.aspx.

<sup>&</sup>lt;sup>11</sup> The National Center for Faculty Development & Diversity, https://www.facultydiversity.org/.

<sup>&</sup>lt;sup>12</sup> 'Office of Faculty Affairs,' University of Pittsburgh School of Medicine, http://medfaculty.pitt.edu/faculty-development.

<sup>&</sup>lt;sup>13</sup> 'Advancing Faculty Diversity Grant,' University of California Davis,

https://academicaffairs.ucdavis.edu/advancing-faculty-diversity-pilot-project.

• Emory University School of Medicine - Radiology Diversity Program,<sup>14</sup> piloting a year-long women's program

In addition to these programs, the AAMC Minority Faculty Leadership Development Seminar is a national model program that has promoted career retention of minority faculty in academic medicine since 1990. Program faculty provide content and subject matter expertise to program participants to address the specifics and nuances of navigating the early career faculty role and the unique aspects of navigating that role as an underrepresented faculty member in a majority environment. Evaluation results indicate that attending the seminar creates a sense of belonging and a safe psychological space for faculty, encouraging professional development and emphasizing the importance of continuous cultivation of tools for success in academic medicine.

The NIH should also consider embracing a community engagement approach to decrease isolation at the faculty level. For example, NIDDK Director Griffin Rodgers, MD, MACP, has focused on enhancing diversity in the biomedical workforce. He established a diversity-focused partnership between the NIH and the National Medical Association (NMA) that has provided more than 650 travel awards for underrepresented medical researchers and fellows to attend the annual NMA Convention. The NIDDK has also prioritized diversity in its research and research training programs, including high school and undergraduate summer research training programs that have benefitted more than 1,000 promising high-risk students.

# Institutional mentoring programs that support faculty development, retention, and career success

High quality mentoring is essential to success in independent research<sup>15</sup>, and mentorship can help HEUR scientists continue in research-track careers.<sup>16</sup> While all postdoctoral researchers and early career faculty need guidance on their work, such as research career paths, grant writing, and running a lab, HEUR scientists also have unique mentoring needs.<sup>17</sup> They may benefit from a mentor with whom they can identify and who can help guide them with challenges unique to their background. NIH could also provide resources for HEUR mentees to help with interpersonal skills and how to work effectively with colleagues and mentors who are different from them, such as guidance on how to conduct difficult conversations. The National Academies of Sciences, Engineering, and Medicine are compiling a report on "The Science of Effective Mentoring in Science, Technology, Engineering, Medicine, and Mathematics (STEMM)"<sup>18</sup> and an online resource that will include guidance on some of these skills later this year.

<sup>&</sup>lt;sup>14</sup> 'Our Diversity,' Emory University School of Medicine Radiology Program,

https://med.emory.edu/departments/radiology/about-us/diversity.html.

<sup>&</sup>lt;sup>15</sup> C. Pfund et al., "Defining Attributes and Metrics of Effective Research Mentoring Relationships," *AIDS Behav* 20 Suppl 2 (2016).

<sup>&</sup>lt;sup>16</sup> A. M. Byars-Winston et al., "Culturally Diverse Undergraduate Researchers' Academic Outcomes and Perceptions of Their Research Mentoring Relationships," *Int J Sci Educ* 37, no. 15 (2015).

<sup>&</sup>lt;sup>17</sup> M. R. Mahoney et al., "Minority Faculty Voices on Diversity in Academic Medicine: Perspectives from One School," *Acad Med* 83, no. 8 (2008).

<sup>&</sup>lt;sup>18</sup> 'The Science of Effective Mentoring in Science, Technology, Engineering, Medicine, and Mathematics (STEMM),' The National Academies of Sciences, Engineering, and Medicine,

http://sites.nationalacademies.org/pga/bhew/mentoring/index.htm.

In addition to having a more diverse faculty pool from which young researchers could find mentors, an ideal institutional mentoring program at the faculty level should include several components. Training on how to mentor younger scientists should begin early, at the graduate student and postdoctoral researcher levels, so that new faculty arrive in their positions prepared to mentor trainees. Training all faculty on how to help younger researchers deal with instances of bias would create a more respectful environment and help encourage HEUR scientists to continue on the research track. To incentivize high-quality mentoring at the faculty level, mentoring should be valued in awards, funding decisions, promotion, and tenure. Institutions should promote both mentorship, which "centers on personal and professional development," and sponsorship, which "focuses on enhancing the visibility, credibility, and professional networks"<sup>19</sup> to assist HEUR scientists in ascending the faculty ranks. NIH could help incentivize these institutional changes by valuing mentorship and sponsorship in their awards, similar to the emphasis given to mentorship in the new NIGMS T32 Training Grants released in 2017.

Existing resources and models could be improved, adapted, and/or used to create effective faculty mentoring and sponsorship programs at institutions:

- NIH NRMN Culturally Aware Mentoring Mentor Training Module<sup>20</sup> train-the-trainer curriculum
- AAMC Group on Women in Medicine and Science (GWIMS) Toolkit series of presentations designed to provide practical guidance on a variety of topics relevant to women faculty in academic medicine<sup>21</sup>
- University of California San Francisco faculty resources on differences between being a mentor and being a supervisor (e.g. hiring and firing)
- University of Minnesota Clinical and Translational Science Institute virtual mentoring training and network<sup>22</sup>
- Society of General Internal Medicine Career Advising Program<sup>19,23</sup> outcomes on national-level, two-year sponsorship program in academic medicine
- MD Anderson Cancer Center's Leaders' Sponsorship Program<sup>19</sup> institutional-level sponsorship program
- University of Texas Medical Branch at Galveston leadership academy for translational research to train investigators to run large labs

# Faculty-level cohort-model approaches that are institution-based or distributed across institutions

<sup>20</sup> "Culturally Aware Mentoring: A New Mentor Training Module," National Research Mentoring Network, https://nrmnet.net/culturally-aware-mentoring-a-new-mentor-training-module/.

<sup>21</sup> "Gwims Toolkit," Association of American Medical Colleges,

<sup>&</sup>lt;sup>19</sup> A. S. Gottlieb and E. L. Travis, "Rationale and Models for Career Advancement Sponsorship in Academic Medicine: The Time Is Here; the Time Is Now," *Acad Med* 93, no. 11 (2018).

https://www.aamc.org/members/gwims/toolkit/343518/toolkithometsr.html.

<sup>&</sup>lt;sup>22</sup> <u>"Mentoring," University of Minnesota clinical and Translational Science Institute,</u>

https://www.ctsi.umn.edu/education-and-training/mentoring

<sup>&</sup>lt;sup>23</sup> B. Roy and A. S. Gottlieb, "The Career Advising Program: A Strategy to Achieve Gender Equity in Academic Medicine," *J Gen Intern Med* 32, no. 6 (2017).

While the use of cohorts to strengthen community, diversity, and inclusion are often discussed in educational literature, this strategy has not often been applied at the faculty level, although some preliminary evidence is positive.<sup>24</sup> A cohort model at the faculty-level, while having the potential to benefit the community and increase both diversity and inclusion in higher positions in biomedical research, would come with key challenges that would require a tailored approach. AAMC institutions strongly agree that hiring an intentional cohort at the faculty-level is likely to be very difficult at a national level, and nearly impossible on an institutional level. Because of specific needs and requirements at both the departmental and chair levels when making hiring decisions, as well as restrictions due to money streams for hiring and temporary appointments, institutional hiring of faculty case-by-case and would be difficult to coordinate. Therefore, the AAMC recommends that a faculty-level cohort be selected from the faculty that institutions choose to hire individually, as opposed to attempting to facilitate hiring by design. Another challenge is determining the common thread of a cohort or cohorts. For trainees, cohorts are usually defined by their year of training, but this should not be the only consideration at the faculty level. Faculty in different disciplines may have vastly different support needs, and so a cohort will better be able to support each other if they are within the same discipline as well as career stage. This is another reason that a cohort should not be restricted to one institution, as disciplines within an institutional cohort will be too broad.

As noted above, cohorts should be inter-institutional and discipline specific, to be able to form a large enough cohort and to meet its specific needs. The type of faculty should also be considered when forming a cohort – investigators, clinical researchers, educators, and those who combine some of these roles all have varying needs. While a cohort of investigators with the same career stage can generate community and support, the cohort of one career stage should have facilitated access to cohorts at other stages, to provide further community, mentoring, and sponsorship opportunities. The NIH should support a variety of models with mentorship and sponsorship components, possibly through a grant mechanism to support junior faculty collaborations with senior faculty and others.

To create an inter-institutional faculty cohort system, the NIH should invest in and maintain a virtual community of cohorts anchored in disciplines of interest. Because each institution has its own metrics for and governance over faculty, the NIH should create guidelines and standards for cohort participation, defining the career stage, discipline, and faculty roles for each cohort. The virtual community should use social media to promote interaction within the community, share resources, and draw new members. Most interactions within these virtual communities would be online, but they should also bring cohorts together in one to two in-person meetings annually, supported by the NIH. Inperson meetings could be regional and/or national and could be centered around one discipline-specific cohort or bring several cohorts together.

To develop the virtual faculty-level community, the NIH should leverage the network and resources that already exist within the NRMN to help develop cohorts at the faculty level. Another option to develop discipline-specific cohorts would be for NIH to provide opportunities for professional societies to develop and guide cohort membership within their already existing, field-specific community.

<sup>&</sup>lt;sup>24</sup> H. A. Valantine et al., "The Gender Gap in Academic Medicine: Comparing Results from a Multifaceted Intervention for Stanford Faculty to Peer and National Cohorts," *Acad Med* 89, no. 6 (2014).

The NIH should look to existing cohort models to inform its own development of such a program. For example, the Texas CTSA Consortium Mentored Research Career Development (KL2) Program in Clinical and Translational Science<sup>25</sup> – an NIH-sponsored, cross-institutional, two-year program - brings together junior faculty from across Texas institutions. In industry, Dow Chemical has a program called Employee Resource Groups, which brings together eight internal groups based on shared backgrounds and interests, e.g., a women's group, a group for people with disabilities, an LGBT group, groups for different races and ethnicities, and a veterans' group. Several of the groups have "formed partnerships with external organizations to drive progress and change, develop community programs and pursue other outreach opportunities,"<sup>26</sup> and once a year, ambassadors from each group come together to share successes and best practices.

#### Data-driven strategies to assess and manage institutional equity and diversity

Gathering data is essential to forming effective strategies to promote equity, diversity, and inclusion. AAMC institutions agree on the need to assess their own climates, and the AAMC provides the Diversity Inclusion Survey and Foundational Principles of Inclusion Excellence Toolkit to help them do so. Any such survey should include questions about satisfaction from both trainees and faculty, and evaluating pay equity across institutions would also be valuable in promoting equity. Surveys of this kind come with concerns about anonymity within an institution, as characteristics within a discipline or program may make it clear who is responding. This concern could prevent respondents from being comfortable answering candidly. NIH could mediate these concerns by putting out and analyzing the survey results and only releasing aggregated data. NIH should continue to publish data on equity in funding through its grant mechanisms, and the NIH could use existing data pools to learn more about trends in diversity at the faculty level, such as data on K to R transitions.

#### **Centralized Resources**

Many of these recommendations depend on data and resources being available online. Making a centralized location, perhaps curated or supported in part by the NIH, of these resources is vital to ensuring access to all, as keeping them located on different institutions' websites will inhibit many young researchers from being aware that they exist. An NIH-led data dashboard, as suggested by the NIH's chief diversity officer Dr. Hannah Valantine at the June 2018 Advisory Committee to the Director meeting, would be an excellent start to this centralization. It would serve the community to make current NIH data easily available, so data could be quickly looked up, such as the success rate and diversity of early career awards such as K99s. This dashboard can be a model for other institutions to share their diversity data.

#### Existing Programs and Resources

 <sup>&</sup>lt;sup>25</sup> 'Mentored Research Career Development (KL2) Program in Clinical and Translational Science,' UT Health San Antonio Institute for Integration of Medicine and Science, https://iims.uthscsa.edu/ed\_KL2\_welcome.html.
<sup>26</sup> Inclusion and Diversity,' Dow Corporate, https://corporate.dow.com/en-us/about/beliefs-and-culture/diversity.

Several institutions have data gathering efforts that the NIH could use to inform their own efforts or request access to for its own analysis. Brown University's Office of Institutional Equity and Diversity<sup>27</sup> and the University of Michigan's Office of Diversity, Equity, and Inclusion<sup>28</sup> would both be good resources regarding their use of metrics related to faculty diversity, equity, and inclusion efforts. The AAMC hopes to analyze data on the participant outcomes of the AAMC Minority Faculty Leadership Development Seminar presented in a previous section of this letter.

The University of California (UC) and University of Michigan led program, Partnership for Faculty Diversity<sup>29</sup>, offers *p*ostdoctoral research fellowships, faculty mentoring, professional development and academic networking opportunities to scientists from HEUR and non-traditional education backgrounds at over a dozen research institutions. This program stems from the successful President's Doctoral Fellowship Program started at UC over 30 years ago, from which 75% of the fellows have found faculty appointments, many on UC campuses. These programs have collected years of outcomes data that could be analyzed to determine trends in diversity in the biomedical research workforce.

# Capacity for institutional support of early-career scientists, including start-up packages, research, lab space/equipment, and salary

Several AAMC institutions find that the largest barrier to increasing diversity in their faculty population and retaining those faculty is a lack of resources (e.g. equitable startup funds for comparable positions across institutions of various sizes and endowments).<sup>30,31,32</sup> AAMC institutions understand the need to support these efforts through their university budget and corresponding offices devoted to the topic of faculty development and/or diversity, equity, and inclusion. Such offices could significantly increase support for scientists from underrepresented groups, including not only women and racial and ethnic minorities, but other groups that are often neglected in these efforts, such as scientists with disabilities and international researchers. To assist in these efforts, NIH should consider dedicating funds for institutional offices that support the professional development of scientists from underrepresented groups.

Additionally, NIH should increase institutions' ability to recruit diverse investigators through a grant mechanism. The K99/R00 mechanism has been successful in supporting postdoctoral researchers into positions of independence. The NIH could adapt this mechanism or create a similar mechanism to focus on funding scientists from underrepresented groups, making it easier for them to obtain optimal faculty positions and leading to an increased chance of retention in the biomedical research field. Providing this

<sup>27</sup> https://www.brown.edu/about/administration/institutional-diversity/

<sup>&</sup>lt;sup>28</sup> https://odei.umich.edu/

<sup>&</sup>lt;sup>29</sup> "President's Postdoctoral Fellowship Program," University of California, https://ppfp.ucop.edu/info/about-ppfp/index.html.

<sup>&</sup>lt;sup>30</sup> J. Bickel, "What Can Be Done to Improve the Retention of Clinical Faculty?," *J Womens Health (Larchmt)* 21, no. 10 (2012).

<sup>&</sup>lt;sup>31</sup> K. A. Joiner et al., "Timing of Revenue Streams from Newly Recruited Faculty: Implications for Faculty Retention," *Acad Med* 82, no. 12 (2007).

<sup>&</sup>lt;sup>32</sup> B. Satiani et al., "A Review of Trends in Attrition Rates for Surgical Faculty: A Case for a Sustainable Retention Strategy to Cope with Demographic and Economic Realities," *J Am Coll Surg* 216, no. 5 (2013).

type of support could be a complement to other diversity related training mechanisms, like the NIGMS Training Grant (T32) and the BRAIN Initiative Advanced Postdoctoral Career Transition Award to Promote Diversity (K99).

# <u>Role of partnerships between institutions toward reducing isolation, increasing community building, and</u> <u>fostering career advancement for early faculty</u>

Inter-institutional partnerships could help provide resources and networks to HEUR faculty at all institutions, particularly smaller institutions or institutions that have fewer resources. Establishing this type of partnership is both more critical and more difficult for institutions in less-populated areas, as many partnership forms between institutions within a city or dense region of the country. And, as noted above, the pipeline from undergraduate to graduate to independent research is essential to creating and maintaining a diverse biomedical workforce. NIH should continue to support partnerships between undergraduate and graduate institutions to create this pipeline for HEUR scientists.

While AAMC institutions recognize the benefit or working to form these partnerships themselves, both the NIH and professional societies should play a key role in bringing institutions together. The NIH should continue and expand its programs, such as the BUILD, BEST, IRACDA K12, Coordination and Evaluation Center (CEC) U54, and IMSD T32 programs. The recently re-organized U-RISE and MARC T34 programs should be better leveraged to help participants continue on the research career path, perhaps by creating strong partnerships between the undergraduate institutions they are graduating from and graduate institutions. The NIH could also foster and fund the creation of inter-institutional consortiums, such as the Texas Consortium for Faculty Success, which was founded in 2016 after an AAMC GFA meeting and "shares best practices focused on enhancing biomedical faculty success throughout the faculty lifespan" at twelve academic health institutions in Texas.<sup>33</sup>

Another critical point in the pipeline to create a diverse faculty is hiring HEUR scientists into faculty positions. NIH should assist both hiring institutions and HEUR scientists seeking faculty positions to find each other in their searches. The NIH should optimize its existing scientific workforce toolkit, which already gives guidance to institutions on how they can find HEUR faculty candidates, to help make these connections. Additionally, the NIH should scale up its Distinguished Scholars Program to give institutions resources to run such programs themselves.

<sup>&</sup>lt;sup>33</sup>'Texas Consortium for Faculty Success,' <u>http://www.texasfaculty.org/</u>.

The AAMC appreciates the opportunity to comment on advancing inclusive excellence at the faculty level through a cohort model, and we look forward to working with the NIH on this issue. Please contact us or our colleague, Amanda Field, PhD, Science Policy Specialist (afield@aamc.org) with questions about these comments.

Sincerely,

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

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David Acosta, MD Chief Diversity and Inclusion Officer