

Synthesis of Responses to NIGMS Request for Information on Strategies to Enhance Postdoctoral Career Transitions to Promote Faculty Diversity

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Introduction

NIGMS has a longstanding commitment to training the next generation of biomedical scientists and supporting the training of students from diverse backgrounds, for example groups [underrepresented](#) in biomedical research, [through fellowships, career development grants, and institutional training and student development programs](#). While these programs and other efforts have contributed to a substantial increase in the talent pool of well-trained biomedical Ph.D.s from historically underrepresented [racial and ethnic groups](#) and women, these and other groups remain underrepresented in the NIH-funded workforce and the professoriate – especially at research-intensive institutions.

On May 24, 2018, NIGMS released a Request for Information (RFI; [NOT-GM-18-034](#)) to obtain input from key extramural community stakeholders, including postdoctoral scientists, biomedical faculty, scientific societies and advocacy organizations, and academic institutions, as well from interested members of the public, on strategies to enhance postdoctoral career transitions to promote faculty diversity, specifically in research-intensive institutions. The RFI, and an accompanying [Feedback Loop blog post](#), asked members of the community to provide input on the following:

- The barriers scientists from underrepresented groups face as they progress from postdoctoral training into faculty positions at research-intensive institutions, and potential strategies to overcome these barriers.
- The qualities and perspectives that scientists from underrepresented groups bring to the research enterprise, and how these can be drawn upon to encourage and promote career transitions into the professoriate at research-intensive institutions.
- Approaches key stakeholders (e.g., faculty advisors, institutions, scientific societies, etc.) can use to promote the successful career transitions of postdoctoral scientists from underrepresented groups into the professoriate at research-intensive institutions, and how these can be coordinated and sustained to maximize impact.
- Current strategies that have been successful in promoting the transition of postdoctoral scientists from underrepresented groups into independent, tenure-track faculty positions.
- Any other comments or recommendations for NIGMS to consider with respect to programs to enhance career transitions of postdoctoral scientists from diverse groups into the professoriate at research-intensive institutions.

The RFI closed July 20, 2018. A total of 89 unique responses were submitted through an online form, the *Feedback Loop* blog, and direct email to NIGMS staff members. Most of the responses were anonymous, but the content indicated that comments were submitted by postdoctoral scientists, faculty, and professional societies. Stakeholders, including the American Society for Microbiology, Rescuing Biomedical Research, Federation of American Societies for Experimental Biology (FASEB), American Physiological Society (APS), Association of American

Medical Colleges (AAMC), American Society for Biochemistry and Molecular Biology (ASBMB), Future of Research, Leadership Alliance, Society for Neuroscience, American Society for Cell Biology (ASCB), American Psychological Association, and the Yale Postdoctoral Association Advocacy Committee submitted comments.

Analysis Approach

A text mining approach was applied by the NIGMS Office of Program Planning, Analysis, and Evaluation to obtain a quantitative view of sub-categories brought up in the comments. The responses were then read by program staff, first to refine broad categories and then to quantify their representation in the responses. The response formats were heterogeneous (i.e., some used the web form to provide feedback, while others wrote letters), and many respondents reiterated their main points in multiple sections of their response. Thus, codes were applied on a per response basis rather than per prompt.

Results

Categories Referenced in RFI Responses and Qualities Brought by Underrepresented Groups to Research Enterprise

Figure 1 shows the categories referenced in the RFI responses.

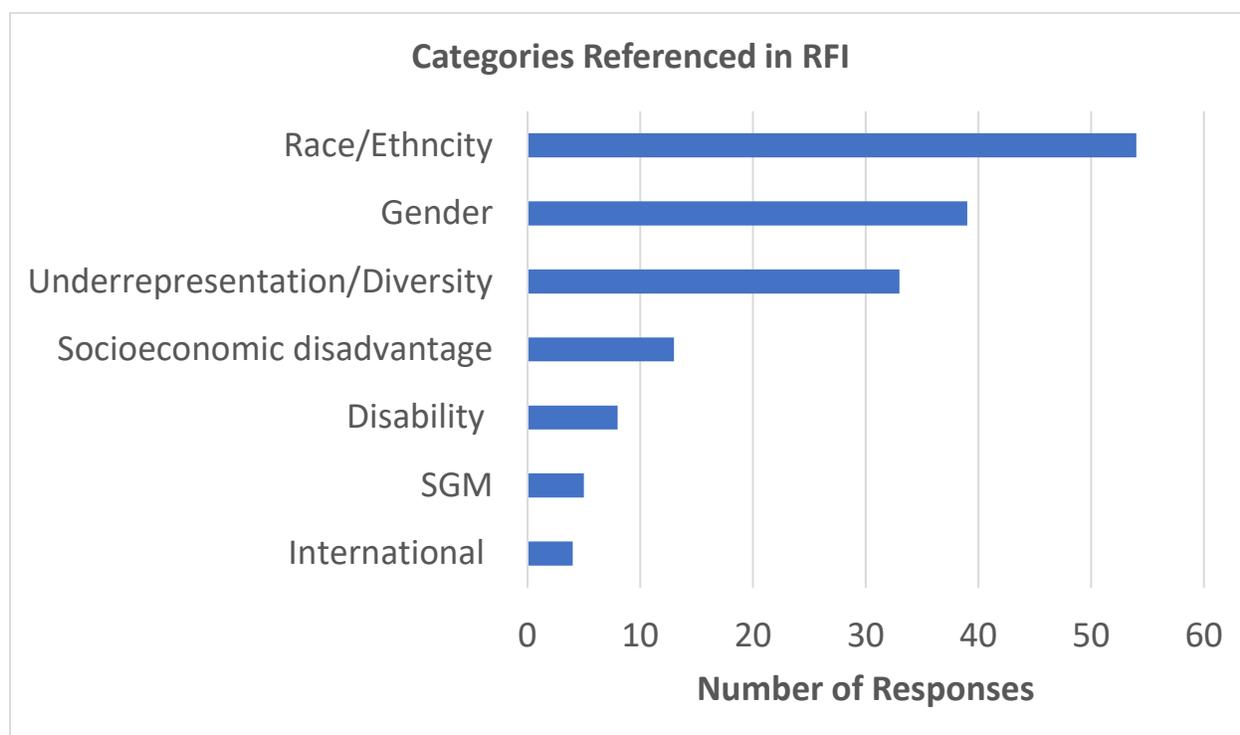


Figure 1: Groups referenced in RFI for strategies to enhance faculty diversity. Bar chart showing the number of RFI responses in which the groups on the x-axis were represented. Multiple groups could be referenced in a response. SGM = sexual and gender minorities. A total of 89 unique responses were received for the RFI.

The most prominent categories referenced in the RFI were **race/ethnicity** (n=54), **gender** (n=39), and **underrepresentation/diversity** (n=33). Other categories include **socioeconomic**

disadvantage (n=13), **disability** (n=8), **sexual and gender minorities** (SGM; n=5), and **international** (n=4). Responses noted that diversity in research **broadens perspectives** (n=28), and that scientists from underrepresented groups have a unique ability to serve as **role models** (n=12) for the increasingly diverse student populations in universities.

Barriers

The 10 most frequently cited barriers identified in the RFI responses are listed below in Figure 2:

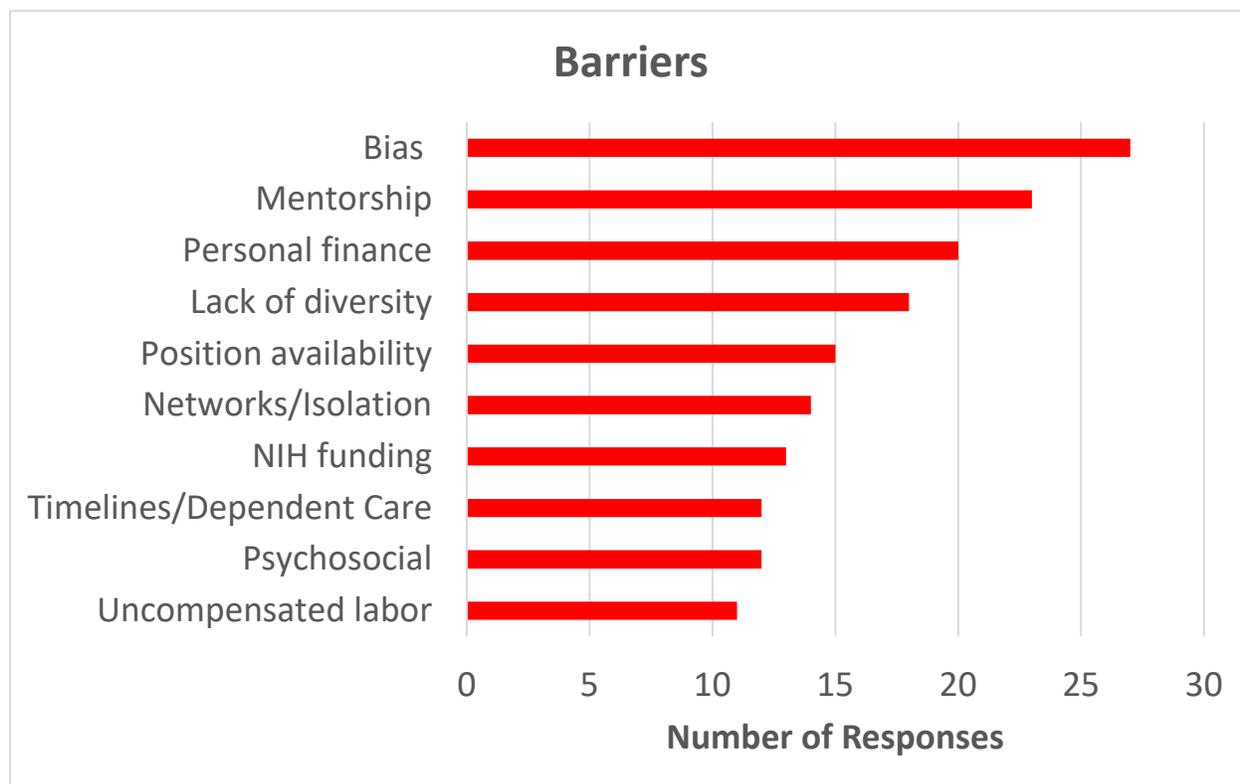


Figure 2: Barriers scientists from underrepresented groups face as they progress from postdoctoral training into faculty positions at research-intensive institutions identified in RFI. Bar chart showing the number of RFI responses in which the barriers on the x-axis were represented. A total of 89 unique responses were received for the RFI.

The most commonly referenced barrier facing scientists from underrepresented groups in science generally, and in transitioning from postdoctoral training to faculty positions at research-intensive universities specifically, was **bias** (n=27). These included both implicit biases, and explicit racism, sexism, ableism, and harassment. For example, a group of postdocs at a major research university commented:

“A major barrier that underrepresented minority scientists face is discrimination and harassment. As postdocs at [major research university], many of us have witnessed or have been the target of numerous forms of discrimination and harassment ranging from the covert (e.g. microaggressions and implicit bias) to the overt (e.g. hate speech,

isolation, and intimidation). Examples include having inappropriate and hurtful comments about our intelligence, race, ethnicity, religion, and national origin directed at us and our peers; being scrutinized more harshly by our peers and advisors based on our race and/or appearance; consistently being ignored or talked over during meetings; having our contributions and accomplishments undermined, devalued or overlooked entirely; being isolated within laboratories such that colleagues neither acknowledge us nor respond to formal requests for research materials or information; having our access to reagents and equipment restricted by colleagues; and, being stopped and questioned by campus/city police while going about our university business. Even when witnessed by our supervisors, most of these incidents were overlooked, which served to increase our sense of isolation and not belonging. The effect of such a hostile work environment is detrimental to underrepresented minority scientists' research productivity and a severe mental health burden. This is compounded by the fact that underrepresented minority scientists will most likely continue to face hostility and isolation as they advance through the faculty ranks. Together, the reality of a hostile work environment coupled with the prospect of future hostile work environments at the faculty level saps underrepresented minority scientists of their energy, creativity, and resolve to pursue a career in academia.”

Another respondent noted, “A barrier for women, especially, is a culture that protects harassers. Behaviors that would not be tolerated in the corporate world are ignored in academia and NIH-funded institutions: this must stop.” Similarly, a respondent who identified as a “faculty member at a minority-serving institution” noted, “I’m always encouraging my students to go obtain their PhD at an R1, only to see them come back later with disheartening stories of discrimination or isolation because they do not feel welcome.” Responses noted that there are **psychosocial impacts** (n=12) of these biases – most frequently “imposter syndrome,” “stereotype threat,” and lack of “confidence” – and other barriers that cause otherwise qualified scientists from underrepresented groups to opt-out of academia.

Respondents also noted that insufficient or uneven **mentorship** (n=23) was a barrier facing scientists from underrepresented groups seeking to transition to the professoriate. A respondent who identified as a “tenured female Hispanic professor at a research-intensive institution” noted a significant barrier is the lack of diversity in faculty ranks resulting in “a lack of mentors of similar experience or background...a lack of familiarity of existing faculty with issues pertinent to URM [underrepresented minority] researchers, and a lack of appreciation for the value of diverse inputs.” Another faculty member indicated that many graduate students have “mentors who are not fully invested in their training” and thus “choose postdocs that do not prepare them to be optimally competitive for R1 positions.” Similarly, responses noted that scientists from underrepresented groups are not always included or engaged in the **networks** (n=14) that are key for obtaining a position at a research-intensive academic institution. As the APS noted, “Networking with those in the discipline is critical to this transition phase,” but as another response noted “scholars from underrepresented groups may not feel that they have access to networks [of science faculty].”

Personal finances (n=20) were also described as a barrier facing scientists from underrepresented groups in the sciences. This was linked to both postdoc salaries that are lower than what scientists with this level of training can receive in other positions (e.g. academic administration, consulting, or industry), as well as the greater proximity to poverty for scientists from historically underrepresented racial and ethnic groups than those from other backgrounds. As a postdoc who identified as an “African American female from an economically disadvantaged background and with children” noted:

“Postdocs from URM [groups] are often disproportionately from backgrounds of lower economic status, which has an impact on how long they feel they can survive in a poorly paid position. As for myself, although I want nothing more than to be a research investigator at a top academic institution, I also question whether it makes sense to continue through a 4-5 year postdoc at a very low salary to raise a family on. ... Although my husband and I are extremely frugal, I sometimes feel that I am one financial catastrophe away from having to leave my postdoc for a higher paying position (a car failing, illness in my husband or children). I know that I am not alone in this concern. Although I am a talented scientist, I know that I could perform better if I was not under constant financial stress.”

Lack of diversity (n=18) in the professoriate now was also mentioned as a barrier, leading to higher levels of **uncompensated labor** (n=11) for scientists from underrepresented groups which can adversely impact their ability to make the research progress they need for advancement in their scientific career. As the AAMC noted:

Because of an admirable desire to promote diversity on various academic committees and groups, at many institutions the small pool of [underrepresented] trainees and scientists is asked to serve more frequently. This service is typically uncompensated and may not be formally recognized in the promotion and tenure process. This ‘diversity tax’ takes time away from their research that those with whom they are competing are not asked to give.

Structural issues, such as **position availability** (n=15) in terms of their number, geographic distribution, and pay structure of faculty positions at many institutions, as well as the ability to obtain **NIH funding** (n=13) were mentioned as issues facing all postdocs seeking faculty careers in research-intensive institutions, including those from underrepresented groups. ASCB noted, “trainees report increasing disinterest in the lack of work-life balance, struggles for necessary grant funding, relatively low salaries, and general high stress of many faculty positions.” Another response wrote the “salary structure of research-intensive faculty positions” posed a challenge. This response went on to say “we ask ourselves ‘why should we go through years of education and struggle at prestigious institutions just to end up in a job that only pays a portion of our salary?’” noting “a partial salary position is extremely hard to justify to our family members who are not in academia and consider job stability and a full time salary to be central pillars of success.” Another response indicated:

“There is a fundamental disconnect between the goals of increasing diversity in science and the overall academic jobs market. No amount of fellowships or mentoring can hide the low availability of faculty positions, the scarcity of funding, and the difficulties that any postdoc, much less one from an underrepresented group, face when choosing a career in academia. When postdocs see their mentors writing numerous grants and spending a large amount time trying to get manuscripts published, academia does not look like a very attractive or even sensible option. As long as there is a clear crisis in the academic job market, how can one hope to make academia sound appealing?”

Finally, a conflict between **timelines** (n=12) in which a scientist pursues an academic career, applies for NIH career awards (e.g. K99/R00), and childbearing years was noted as having a particular impact on women pursuing faculty positions. This was often linked to personal finances – especially childcare expenses on postdoctoral salaries – and a number of responses

noted that efforts to reduce the length of postdocs can adversely impact mothers. As one response noted:

“There is increasing pressure from NIH to shorten the length of postdoctoral training. I believe this creates an impediment for women seeking to move from postdocs into faculty positions. Many women have children during their postdocs, and this has a substantial negative impact on their productivity. To achieve the same level of total productivity as a childless male, for example, a woman with a child would need more years in her postdoctoral position. There is an inherent challenge with the timing here: people usually do postdocs during the time in their life when they are most likely to start a family. Even with flexible work schedules etc., there is a limited number of hours in the day and it's usually not physically possible for women to devote the same number of hours per week to work after having a child. This affects men too, but there are ways in which it particularly affects women. Women usually do more nighttime parenting than men, because they are often breastfeeding. These sleep disruptions affect productivity. Breastfeeding women need to take time to pump during the day, which reduces the number of hours available for work. Pregnancy itself often reduces productivity (it certainly did for me), because there are large number of doctor visits that cut into the work day and because there are often debilitating physical symptoms such as nausea and fatigue. Taking all of these factors into account, I believe that women are negatively and disproportionately affected by efforts to reduce the length of postdoctoral training. We need that extra time.”

Proposed Solutions

The 10 most frequently mentioned solutions to the barriers listed above are shown in Figure 3.



Figure 3: Solutions to barriers scientists from underrepresented groups face as they progress from postdoctoral training into faculty positions at research-intensive institutions identified in RFI. Bar chart showing the number of RFI responses in which the barriers on the x-axis were represented. A total of 89 unique responses were received for the RFI.

The most frequently mentioned solutions were under the umbrella of **institutional responsibility** (n=29). These included bias training (generally, and for faculty search committees specifically), increased emphasis on faculty retention (especially for faculty from underrepresented groups), equity among start-up packages for faculty from different backgrounds, and accountability. Quotes below represent the types of responses received:

“Institutions need to provide implicit bias and diversity and inclusion training for hiring committees. In addition, they should require a fair and systematic interview process that includes rubrics for consistent evaluations and agreement before the search on what are the characteristics a successful candidate should have and how they would be weighed.”

“Tackling the demand-side barriers [in the faculty hiring process] will require acknowledgement of implicit and explicit biases in the hiring process by universities, faculty, and administrators. Approaches likely to have an immediate impact are implicit bias training for search committee members and administrators, and the appropriate setup of faculty searches with clearly defined evaluation criteria and diverse membership. To enact long term change, clear commitments, paired with goals and accountability, to address demand-side barriers must come from the leadership of universities and the NIH.”

“Key strategies to address this should focus on aiding the transition to faculty positions; but also on retention and on incentivizing changes to the cultural norms of academe to ensure that people from these populations are not only present, but thrive.”

“URM faculty are recruited to institutions and need support to be retained (i.e. startup packages, which typically lack transparency for equity).”

“Institutions should also devise strategies to retain mid-career underrepresented minority faculty who can serve as mentors to junior underrepresented minority faculty.”

Similarly, responses indicated a need for **focused recruitment/hiring** (n=15). One response said faculty have to “actively recruit and tap their networks” to ensure a diverse candidate pool noting, “If you sit back and wait for the system to magically change itself it will not. Go out and find the people you say you really want.” Several postdocs from underrepresented racial and ethnic groups noted a discordance between discussions of faculty diversity and the lack of activity to recruit them to the professoriate. As one respondent who identified as a “black woman postdoc” noted:

“It feels strange to hear people say “we don’t have enough black faculty” and I’ll be sitting here talking to other black colleagues about how we are running out of grant funding or are underpaid and we’re trying to get faculty positions and not having any luck...I read all these articles online and see all these people saying they do diversity work for the university, and then I still see me and the other black staff scientists (many of whom hold PhDs from ivy leagues schools) and we are just sitting here unsure of how

to find our way into a faculty position. If diversity in academia is such a problem, why doesn't anyone look under their nose and see that we are right here and try to give us a leg up?"

Moreover, responses indicated the need for **inclusive and welcoming environments** (n=14) such that when women, scientists with disabilities, and scientists from underrepresented groups join institutions they are able to remain and thrive:

"Create an inclusive environment for faculty, which would increase both recruitment and retention of diverse junior faculty. This includes gathering data on diversity questions that affect faculty as well as trainees. Also, continuing mentorship and mentorship training that meets the needs of [underrepresented] faculty would both help them be successful researchers and help create a desirable culture, as would ensuring that diversity and inclusion resources are available to all."

"Mandate institutions to be more respectful and inclusive of women and ethnic talent, the abhorrent conditions in universities is depressing and hostile to life and health."

"Ultimately, [underrepresented] members need to feel welcomed like anyone else. It's not just about building the talent pool, though that is an important step. No one wants to put up with extra negativity, or even threats to personal safety, in an already stressful and only sometimes rewarding field. We can't just keep expecting the love of science to pay for all downsides and injustices."

Other proposed solutions focused on the need for enhanced **mentorship** (n=27)—often coupled with mentor training—and **networking** (n=22) for and among scientists from underrepresented groups.

"Faculty advisors need to have training in best practices in mentoring and communication to learn how to promote and elevate [early career scientists'] careers."

"More emphasis on creating "developmental networks" of mentors, sponsors, and coaches with individuals outside of home department/institution rather than relying too heavily on a single mentor."

"Mentorship from more advanced scientists from underrepresented groups."

"Require faculty to undergo Culturally Aware Mentoring training offered by National Research Mentoring Network (NRMN). Reward faculty who attend and/or facilitate these workshops in a significant way within institutions (making this valued for promotion and tenure, offer financial compensation, offer release time from teaching or other responsibilities) and by funding agencies and foundations (having a mentoring metric that impacts the scores of research grants or reward a good track of mentorship with more funding)."

Other responses noted the need for additional **transitional awards** (n=22). A number of the responses noted the [differences across race/ethnicity](#) in current K99/R00 program, with 13 of the responses calling for either specific K-awards or changes in policy to existing programs to enhance diversity. Many responses suggesting additional transitional awards noted the need for timelines to be flexible to ensure that life issues such as childbearing do not adversely impact the ability of qualified scientists to participate:

“Things that were valuable to me included, transitional grants, such as K01 (mentored career awards), serving on study section early, having a challenging yet supportive faculty mentor.”

“Implement Programs to Support [underrepresented] Scientists in the Transition to Independence. AAMC asks the NIH to consider specific funding and programs to maintain diversity from the postdoctoral research position into faculty. We commend the recent initiation of the pilot NINDS BRAIN Initiative Advanced K99/R00 - Postdoctoral Career Transition Award to Promote Diversity.”

“ASBMB recommends that NIGMS commit to specifically setting aside funds within the K99/R00 program to fund underrepresented minority scientists. A specific set aside within the current K99/R00 program is most desirable, as opposed to creating a separate program restricting application to underrepresented minority trainees only since a separate program may carry stigmas that could be unfavorably reviewed by search committee members who have not had implicit bias training.”

Other proposed solutions included also a focus on providing opportunities for **skills development** (n=15), including, but not limited to, grant writing workshops for postdoctoral scientists to ensure they are able to navigate the faculty job search process and successfully launch their careers.

“More institutions need to offer Preparing Future Faculty programs and resources - not just for Ph.D. students but also for postdoctoral fellows.”

“Training in negotiation skills to request adequate resources/support necessary for early career research faculty (e.g. startup packages, biostatistical support, administrative support, minimal teaching/research commitments) -- such skill building is often dependent on mentoring.”

“NIH should establish funding mechanism to support rigorous and robust professional development of junior URM faculty.”

Responses also noted the need for changes in **NIH funding policies** (n=11) to ensure that postdoctoral/career awards are available to trainees in a wider variety of labs, and that early career faculty are able to obtain and keep funding.

“Right now [NIH postdoctoral] fellowships are only available to people who already have NIH money and as the instructions are written, preference is given to mentors who have successfully previously mentored fellows. This is a catch 22 for young faculty and for postdocs that want to get into this area.”

“Please, please consider lowering the number of NIH grants any one investigator can have. This bottle neck is the direct result of grants policy. Please understand, I'm an old guy with multiple grants and tenure. I'm not an unfunded, disappointed faculty member. But I am a disappointed former department head who could not get faculty hired because of the current grant system!”

Responses also noted the need to **reward service** (n=12)—especially the disproportionate service from scientists from underrepresented backgrounds perform have relative to their peers

from well represented backgrounds—by providing additional resources and/or relieving them of other duties.

“Recognize that minority faculty face a disproportionate burden as mentors and in service (often referred to as the minority tax), and relieve them of conventional requirements for teaching and service. Recognize the informal service for its contribution to the campus community. Expand the definition of service to encompass the broad contributions that currently go unseen and unappreciated; codify these and value these in hiring and promotion.”

“Providing extra research funding, to compensate for time spent mentoring and focusing on diversity issues.”

“Encourage universities to give URM/women service credit for their mentoring, or give URM/women funding to mentor, which will encourage universities to value that mentoring.”

Finally, responses focused on the need for enhanced **data** (n=10) to help form policy and for scientists of all backgrounds to be able to better navigate the system.

“Gather new data. Set up focus groups to ask URM graduate students what they would value, and to ask URM postdocs and faculty members what barriers they faced and what might have helped make a difference.”

“Lack of access to salary data to support negotiations--solution would be more transparency with salary reports (e.g. MGMA data, AAMC data).”

“When a junior URM faculty receives an NIH grant, NIH should mandate transparency by requesting of the institution information on salary and startup package sizes given to comparable junior faculty who are in the same same/closely fields at the institution. Mentoring information provided to the faculty should also be requested. This could help to eliminate any bias.”

Current Successful Strategies

While a number of the responses indicated they were unaware of current strategies that have been successful in promoting the transition of postdoctoral scientists from underrepresented groups into independent, tenure-track faculty positions (“As far as I am aware, postdocs of color venture into the tenure-track on their own volition, and with a hope and a prayer”), below is a list of the resources identified through the RFI (including new programs who have this as a goal but which have not been around long enough to demonstrate efficacy). Note, this list does not include programs to enhance diversity at the undergraduate or predoctoral levels:

NIH

- NIH Scientific Workforce Diversity Interactive Toolkit:
<https://www.aamc.org/members/gdi/490806/nih-scientific-workforce-diversity-interactive-toolkit.html>
- NIGMS Institutional Research and Academic Career Development Awards (IRADCA):
<https://www.nigms.nih.gov/Training/CareerDev/Pages/TWDInstRes.aspx>

- NIH Research Supplements to Promote Diversity in Health-Related Research: <https://grants.nih.gov/grants/guide/pa-files/PA-18-586.html>
- K99/R00 - BRAIN Initiative Advanced Postdoctoral Career Transition Award to Promote Diversity: <https://www.ninds.nih.gov/Funding/Training-Career-Development/Award/K99R00-BRAIN-Initiative-Advanced-Postdoctoral-Career>
- K01 - NCI Mentored Research Scientist Development Award to Promote Diversity: <https://grants.nih.gov/grants/guide/pa-files/PA-18-365.html>
- NIH Blueprint Diversity Specialized Predoctoral to Postdoctoral Advancement in Neuroscience (D-SPAN) Award (F99/K00): <https://grants.nih.gov/grants/guide/rfa-files/RFA-NS-18-007.html>
- NSF ADVANCE Program: https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5383
- NSF Alliances for Graduate Education and the Professoriate: https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5474

Private Funding

- Burroughs Wellcome Fund Postdoctoral Enrichment Program: <https://www.bwfund.org/grant-programs/diversity-science/postdoctoral-enrichment-program>
- Howard Hughes Medical Institute Hanna H. Gray Fellows Program: <https://www.hhmi.org/programs/hanna-h-gray-fellows-program>
- Ford Foundation Postdoctoral Fellowship: http://sites.nationalacademies.org/pga/fordfellowships/pga_047960

University-Based Programs/Initiatives

- Big Ten Alliance – Professorial Advancement Initiative: <https://www.btaa.org/leadership/pai/pai-home>
- California Alliance for Graduate Education and the Professoriate: <https://www.california-alliance.org>
- University of California President’s Postdoctoral Fellowship Program: <https://ppfp.ucop.edu/info>
- Wayne State University – Postdoctoral to Faculty Transition Fellowship Program: <https://gradschool.wayne.edu/pft-fellowship>
- Brown University – Presidential Diversity Postdoctoral Fellowship: <https://www.brown.edu/about/administration/institutional-diversity/initiatives/presidential-diversity-postdoctoral-fellowship>
- University of Washington – Broadening the Representation of Academic Investigators in NeuroScience (BRAINS): <https://advance.washington.edu/brains>
- Vanderbilt University – Academic Pathways Program: <https://gradschool.vanderbilt.edu/postdoctoral/academic-pathways/index.php>
- University of North Carolina, Chapel Hill - The Carolina Postdoctoral Program for Faculty Diversity: <https://research.unc.edu/carolina-postdocs>
- MD Anderson Cancer Center - Duncan Family Institute Mentored Junior Faculty Fellowship in Cancer Prevention Research: <https://www.mdanderson.org/education-training/clinical-research-training/postdoctoral-training/postdoctoral-fellowships/duncan-family-institute-mentored-junior-faculty.html>

Societies/Professional Development/Resources

- National Research Mentoring Network (NRMN): <https://nrmnet.net>

- Culturally Aware Mentorship: <https://nrmnet.net/nrmn-announces-culturally-aware-mentorship-cam-training-module>
- Society for Neuroscience
 - Increasing Women in Neuroscience (IWin): <https://www.sfn.org/Initiatives/Women-and-Neuroscience/Increasing-Women-in-Neuroscience>
 - Neuroscience Scholars Program: <https://www.sfn.org/Initiatives/Diversity-Programs/Neuroscience-Scholars-Program>
- ASBMB – Interactive Mentoring Activities for Grantsmanship Enhancement (IMAGE) Grant Writing Workshop: <https://www.asbmb.org/grantwriting/>
- Leadership Alliance – Career Development Workshop: <http://theleadershipalliance.org/career-development-workshop>
- FASEB – Postdoctoral Preparation Institute: <http://twdprograms.org/2018PPI-2/About.aspx>
- Endocrine Society – Future Leaders Advancing Research in Endocrinology (FLARE): <https://www.endocrine.org/training-and-education/flare>
- Intervention to Increase Faculty Gender Diversity in STEM (Jessi Smith): <https://academic.oup.com/bioscience/article/65/11/1084/375413>
- Minoritypostdoc.org: <http://www.minoritypostdoc.org/index.html>

Conclusion

NIGMS received a diverse set of responses to its RFI for strategies to enhance postdoctoral career transitions to promote faculty diversity. These responses covered current barriers and proposed solutions, in addition to listing current strategies employed to address this goal. NIGMS thanks the individuals, institutions, and organizations that took the time to respond to the RFI and will take this input into consideration when developing new funding opportunity announcement(s) to enhance postdoctoral career transitions to promote faculty diversity.

Acknowledgement

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