

**FABBS Response to Request for Information (RFI) on Recommendations on Re-envisioning U.S. Postdoctoral Research Training and Career Progression within the Biomedical Research Enterprise [NOT-OD-24-150]**

Submitted online: <https://rfi.grants.nih.gov/?s=6660cc1aa1264f88920cf122>

October 23, 2024

***Recommendation 1.3 Part 1: Limit the total number of years a person can be supported by NIH funds in a postdoctoral position to no more than 5 years.***

- *Describe any potential benefits, opportunities, challenges and/or consequences to the postdoctoral workforce or the extramural research community if NIH were to limit total years of NIH-supported funding support for postdoctoral scholars.*
- *Please describe any existing NIH or extramural institutional policies that could pose challenges for the implementation of a policy to limit aggregate NIH funding support for postdoctoral scholars.*

FABBS agrees with the recommendation and the rationale underlying it. Our members, however, have reservations regarding potential unintended consequences.

We recommend that NIH establish a standardized policy for granting extensions to this five-year term, as there may be circumstances – both professional and personal – under which a researcher needs more than five years of postdoctoral experience. For example, a scholar transitioning from one area of research to another may need a second postdoctoral position to be competitive for a permanent position in the new domain. Additionally, interdisciplinary researchers in need of broad experience may require more than five years in multiple postdoctoral positions. Even within a single research area, a researcher may need multiple postdoctoral positions. For example, it is not unusual for researchers in neuroscience to have postdoctoral positions in more than one area of expertise. Postdoctoral scholars may also need additional time due to personal reasons, such as parental leave or illness. It is important to allow researchers in such circumstances the flexibility to properly advance their careers and ensure that they are not penalized by the five-year limit.

***Recommendation 1.3 Part 2: Limit the total number of years a person can be supported by NIH funds in a postdoctoral position to no more than 5 years.***

- *Please describe any key NIH or extramural institutional policies, process or resources that should be developed, improved or expanded to address any potential challenges associated with limiting aggregate funding support for postdoctoral scholars.*
- *What mechanisms should be put into place by extramural institutions to support transitions for postdoctoral scholars nearing the end of the five-year period?*

FABBS supports the goal of promoting more timely transitions of postdoctoral scholars into permanent positions. However, the five-year time limit is only one element of achieving this goal. The transition period for postdoctoral scholars is often extended due to the lack of permanent positions available, especially in academia. NIH or other institutions should consider how to incentivize universities to establish more permanent, tenure-track positions and/or permanent non-faculty positions (e.g., staff scientists in labs). Rather than speeding up the transition process, the five-year limit may instead create a logjam of scholars who can no longer seek postdoctoral positions but do not have many options for permanent positions.

***Recommendation 2.2 Part 1: Revise the K99/R00 mechanism to focus on ideas and creativity over productivity.***

- *Describe any potential short- and long-term benefits and/or challenges to the postdoctoral workforce that may result from limiting the K99/R00 eligibility timeframe to no more than 2 years of postdoctoral experience.*

Although FABBS recognizes that limiting the K99/R00 eligibility timeframe may accelerate the transition from postdoctoral scholar to full-time employee, the policy risks disadvantaging certain research areas. Some research areas take longer than others to build up a CV, as they can differ significantly in terms of productivity rates. For example, scholars who engage in longitudinal, interdisciplinary, or community-engaged research will not be sufficiently competitive for these awards in just two years. Longitudinal methods may take several years to produce results and community-engaged research requires significant investment before the research can even begin (e.g., establishing relationships with the community). Although these methods take time, they are extremely worthwhile, but could be overlooked due to the proposed eligibility criteria.

To avoid disadvantaging these researchers, FABBS encourages NIH to educate reviewers to consider how CVs and productivity rates differ across research areas. Additionally, review panel composition will be important, as reviewers with expertise in a variety of research methods will be needed. Another solution may be to sort applications by research method, so that applications are compared against suitable others.

***Recommendation 2.2 Part 2: Revise the K99/R00 mechanism to focus on ideas and creativity over productivity.***

- *How should the K99/R00 mechanism and review criteria be revised to better emphasize creative ideas and innovation over research productivity? What specific criteria or metrics should be used to evaluate creativity and potential impact of applicants' research proposals?*
- *Provide input on key NIH and extramural institutional policies, processes or resources that may need to be developed or revised to ensure that changes to K99/R00 program eligibility do not negatively impact access to these awards to a broader range of postdoctoral scholars.*

FABBS appreciates the effort to better support a more diverse postdoctoral workforce while recognizing the complexity of implementing this change. It is one thing to change the review criteria, but another to enforce it. FABBS encourages NIH to consider how it will evaluate whether the new criteria are being properly applied. Additionally, some reviewers may be philosophically opposed to prioritizing creativity over productivity. A better understanding of how reviewers make their decisions can inform the changes brought about by this new policy. Importantly, universities and other institutions also prioritize productivity – especially publications – over ideas and innovation. Although NIH is working to change this culture, we may not see the intended changes in the postdoctoral workforce if the institutions providing the training and jobs maintain this view.

***Recommendation 4 Part 1: Promote training and professional development of postdoctoral scholars and their mentors.***

- *Provide suggestions/strategies for how NIH and extramural institutions can ensure that career and professional development training becomes an integrated and measured component of the postdoctoral experience. What policies and resources should institutions establish to ensure equitable access to career and professional development training for all postdoctoral scholars? How can institutions address barriers to participation, such as limited availability of training programs or conflicts with research obligations?*

FABBS supports this recommendation, noting that there is much variation across universities and even within departments regarding training for both postdoctoral scholars and their mentors. An NIH mandate for professional development and mentorship training is an important step toward ensuring equitable access to these opportunities. Although some funding programs already require mentoring plans, there is no monitoring or enforcement of this requirement. FABBS recommends that NIH carefully consider how to execute enforcement of such a mandate. For example, NIH might require grantees to report time spent on professional development and mentoring activities.

FABBS also recommends that NIH consider directly funding programs that work to change the culture that prioritizes research over all other aspects of a program (e.g., mentorship training). NIH can also maintain a centralized database of training and development resources for postdoctoral scholars and their mentors.

***Recommendation 4 Part 2: Promote training and professional development of postdoctoral scholars and their mentors.***

- *What specific skills and competencies are essential for individuals serving in the mentor role for postdoctoral scholars? How should institutions require and support mentor training to ensure the effective mentorship of postdoctoral scholars? Describe any necessary resources required by*

*investigators and institutions to support the implementation of required training opportunities for mentors*

- *Are there opportunities for collaboration between institutions, funding agencies, and professional organizations to enhance career and professional development opportunities for postdoctoral scholars? How can partnerships with industry, government agencies, and non-profit organizations contribute to the enrichment of postdoctoral training experiences?*

Training of mentors is critical to effective professional development for postdoctoral scholars but is often overlooked. Many universities lack mentorship training programs for their faculty; as such, mentoring is often an informal process with varying degrees of success, even within the same department. Mentorship training should go beyond just addressing issues of bias and barriers. FABBS encourages NIH to look to the behavioral and social sciences – including education research – to understand what successful mentoring entails and what strategies lead to the best outcomes for mentees. We offer examples of scholarship on the science of mentorship:

“Establishing effective STEM mentoring relationships through mentor training” (Stelter, Kupersmidt & Stump, 2020) [<https://doi.org/10.1111/nyas.14470>]

“The Science of Effective Mentorship in STEMM” (NASEM Consensus report, 2019) [<https://nap.nationalacademies.org/read/25568/chapter/1>]

“STEM postdoc mentoring: A social exchange theory-based conceptual framework” (Rida, Noel & Miles, 2023) [<https://doi.org/10.1080/13611267.2023.2178708>]

Opportunities for professional development and mentorship training should not come solely from universities and similar institutions. NIH can and does provide such opportunities. For example, FABBS members highly recommend NIA’s week-long trainings and want to see similar programs in other institutes and centers. FABBS recommends that NIH expand existing programs as well as create new programs to fill gaps in the training ecosystem.