

October 21, 2024

National Institutes of Health
Office of Extramural Research
6705 Rockledge Drive
Bethesda, MD 20892

RE: Request for Information on Recommendations on Re-envisioning U.S. Postdoctoral Research Training and Career Progression within the Biomedical Research Enterprise

The American Society for Biochemistry and Molecular Biology is an international nonprofit scientific and educational organization that represents more than 12,000 students, researchers, educators and industry professionals. The ASBMB strongly advocates for strengthening the science, technology, engineering and mathematics (STEM) workforce; supporting sustainable funding for the American research enterprise; ensuring diversity, equity, accessibility and inclusion (DEAI) in STEM; and addressing emerging issues in the scientific enterprise.

The ASBMB is heavily invested in offering services and professional-development programming to students and early-career research professionals. Attracting, mentoring and retaining STEM talent within the U.S. enterprise is fundamental to a thriving innovation ecosystem; however, postdoctoral researchers experience numerous challenges that can detract from their success. We must do better to create attractive and equitable environments to retain top talent in our flourishing research ecosystem. The ASBMB makes the following recommendations to do just that.

We offer a series of recommendations to aid innovative research efforts and support mechanisms to enhance the scientific workforce:

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

1.3 Part 1 Recommendation: Provide considerations and exceptions for specific scientific disciplines

Prior to instilling a five-year cap on postdoctoral support, the NIH should consider the challenges that postdoctoral scholars face in certain disciplines, immigration status and those who may experience unforeseen circumstances. First, after completing their doctoral programs, many spend months to finish projects and papers which may limit the five-year appointment clock. Next, various scientific disciplines may spend longer amounts of time to adhere to specific training obligations. It is not uncommon for individuals to train in two different postdoctoral positions. NIH should provide extensions for postdocs in disciplines where learning new techniques often takes 2-3 years to complete. The ASBMB recommends that NIH allow for an extension with justification for postdocs to extend their

appointments. Additionally, we strongly suggest that NIH investigate the unintended consequences of a five-year cap on international postdoctoral scholars, especially those on a J-1 visa who have a maximum of 5 years for their appointments. Although we have highlighted a few challenges, instilling a 5-year cap could be beneficial to postdoctoral scholars who want to expand on projects from their graduate training and hone on specific technical skills. However, a cap must be flexible for changing and unique circumstances.

1.3 Part 2 Recommendation: Develop funding mechanisms for postdoctoral offices

If the NIH moves forward with instilling a 5-year window for funding support, the agency should provide mechanisms for postdocs to learn the intricacies of starting and maintaining a lab in the academic research landscape. To do this, the society recommends that the NIH develop supplements to ease the transition of postdoctoral appointments to academic careers. The supplements should provide funding for additional mentorship outside of a scholar's lab to ensure exposure to a variety of research environments such as R1 institutions, R2 institutions, masters' level settings, etc. In addition, supplements should support professional development opportunities such as attending conferences and workshops. Moreover, to track the progress of postdoctoral scholars, the NIH should use similar tracking portals such as those used in the MARC and RISE programs. Lastly, to ensure that postdocs from lower resourced institutions receive support, the NIH should develop mechanisms for institutions without postdoctoral offices to develop them or provide services to support postdoctoral scholars.

2.2 Revise the K99/R00 mechanism to focus on ideas and creativity over productivity

The ASBMB would like to note that the society has been awarded the K99/R00 Maximizing Opportunities for Scientific and Academic Independent Careers grant and this may present a conflict of interest in responding to this recommendation.

4.0 Promote training and professional development of postdoctoral scholars and their mentors.

4.0 Part 1 Recommendation: Allow Extramural Postdoctoral Scholars Access to Intramural Resources

Intramural postdoctoral scholars are afforded professional and career development opportunities through the [Office of Intramural Training & Education](#) (OITE). While the NIH OITE does provide some resources for all postdoctoral scholars such as the virtual NIH Career Symposium, there are leadership and management short courses that could be virtual and available to all NIH supported postdocs. There should be equitable resources available to all NIH-funded postdocs. To achieve this, the ASBMB recommends that NIH create a centralized website for postdoctoral resources. Furthermore, the NIH should create marketing strategies to publicize resources that the agency has to support postdoctoral scholars such as its re-entry and childcare supplements. NIH should also provide virtual professional development opportunities open to all NIH-supported postdocs at low-resourced institutions. Another

recommendation to promote professional development is to require [Individual Development Plans](#) giving postdocs a place to parse out their skills and relate them to different types of careers.

4.0 Part 2 Recommendation: Create training modules for postdoctoral offices and T32 awardees

The ASBMB agrees that career and professional development are critical to postdoctoral experience and that postdocs need adequate mentorship from their research advisors. To equip postdoctoral advisors with the skills needed to mentor postdocs, the NIH should require NIH-funded postdoctoral mentors and NRSA Institutional Postdoctoral Training Grant (T32) awardees to integrate professional and training development opportunities into mentorship plans similar to those in other training programs such as the Maximizing Access to Research Careers. Training workshops should include mentorship training for mentors and mentees, along with training to guide scholars into various careers in science. To ensure that postdocs receive sufficient training to facilitate the transition to independent careers, training should include topics such as research misconduct, conflict resolution, active listening, and bias training. Including these professional development opportunities will ensure postdocs stay and contribute to the broader research enterprise.