

Endocrine Society comments in response to [NOT-OD-24-150](#), “Request for Information (RFI) on Recommendations on Re-envisioning U.S. Postdoctoral Research Training and Career Progression within the Biomedical Research Enterprise.”

Response was informed by members of the Research Affairs Core Committee (RACC) and graduate student and postdoctoral scholars of the Society.

Comments submitted electronically via online submission form on October 23, 2024.

Recommendation 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.

Part 1:

- 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.

The Endocrine Society strongly supports enhancing the postdoctoral experience to strengthen the biomedical research workforce. The goal of postdoctoral training is to help researchers transition into a long-term career. While we acknowledge that a 5-year limit of support could support promising postdoctoral scholars, including individuals from diverse backgrounds, e.g., through revised funding strategies, we are concerned that imposing a 5-year time limit for NIH financial support without building in opportunities for extensions would unfairly penalize some postdocs. This 5-year limit could push postdocs to pursue or secure career transitions that they may be unprepared for. For example, if a postdoctoral scholar is interested in teaching but needs to develop familiarity and expertise in designing curricula or lecturing, they may need additional time to develop these skills. Individuals may need additional time due to extenuating circumstances, such as those with inadequate mentorship or international postdocs encountering visa difficulties. Moreover, individuals with caretaking responsibilities or other significant life events would be severely disadvantaged under a limited period. Additionally, postdocs who want to shift their research focus or have long-term projects that prolong the manuscript publication timeline should be eligible for an extension to accommodate their circumstances.

Part 2:

- 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?

Our understanding is that the intention of limiting aggregate funding support for postdocs is to benefit these individuals by promoting career transitions in a timely manner and/or to increase postdoc pay in recognition of their expertise and skills, and we welcome these goals. However, NIH should seek to avoid severe, unintended consequences of this policy. As written, the policy could for example create a surplus of highly skilled trainees competing for limited positions in academia

or elsewhere. NIH should clarify if they intend to fund other long-term scientific careers for these highly skilled scientists, such as staff scientist positions consistent with positions that exist on the NIH intramural campus. Without additional support, the creation of staff scientist positions will create a significant and potentially insurmountable financial burden on already constrained research grants. We urge NIH to partner with institutions to provide additional funding for the creation and support of such positions. Because our Society views the postdoctoral training period as a transitional career phase, we recommend that NIH and extramural institutions partner on providing career development resources and opportunities for postdoctoral scholars to utilize throughout their training.

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

Part 1:

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

While the Society appreciates the rationale for providing postdocs with an accelerated timeline, limiting the K99/R00 eligibility period to the first two years of the postdoctoral experience is challenging. This abbreviated timeline could enhance disparities among the workforce by favoring postdocs in larger labs with existing data sets and/or at well-resourced institutions, potentially unintentionally decrease the diversity of the workforce. The abbreviated timeline also has the potential to create additional challenges for researchers who may need time to navigate and adapt to a new culture and/or new location, those who may have inadequate mentorship support, and those who have other adverse life circumstances as mentioned in our response for Recommendation 1.3. An accelerated timeline may also reduce creativity of proposals. Additionally, a guided shift in mentoring culture from NIH may be necessary to encourage and incentivize mentors to intentionally allow postdocs to develop their own individual projects earlier in the training period.

Part 2:

- 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.

We are expressing caution regarding any plans to revise the K99/R00 review criteria, as a focus on creativity and innovation over productivity is currently not consistent with the success of an R01 application. As part of the review process, applicants should demonstrate how their questions would lead to independent projects that avoid conflict with their mentor's research. The applicant's training plan should reflect critical transferable skills that build on current skills and support a pathway to independence. Understanding that the K99/R00 review criteria could be adapted to meet the needs of the next generation of scientists, our graduate student and postdoc members

have identified several recommendations. The review criteria should emphasize creativity, innovation, and the potential to advance knowledge. As postdoctoral research should be a period of growth, the training plan should identify and highlight new techniques, skills, and knowledge that the applicant will gain, relative to the applicant's current experience. To support postdoctoral scholars who will be applying for K99/R00 grants, NIH and/or extramural institutions should consider hosting webinars or other educational opportunities to bring scholars together and provide clear examples of what a successful proposal contains.

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

Part 1: 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?

Currently, it is difficult for mentors to apply best practices in a measurable way that is recognized by NIH and reflected in a mentor's own success. While mentorship training is required for those who are part of a training program, NIH should expand the training to all NIH grantees with mentorship responsibilities. Additionally, NIH should identify and integrate meaningful mentorship metrics into the proposed changes to ensure that professional development is integrated into the postdoctoral experience. In parallel, institutions should include protected time for professional development into the postdoctoral appointment. Additionally, we recommend that NIH and extramural institutions work together to quantify and track activities such as the number of conferences, workshops, or online courses attended. One specific workshop idea for the training of K99 mentors is how to negotiate and develop projects with a postdoc who will likely become a close colleague and continue in a similar field.

Part 2:

- 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?

Development of the mentor-mentee relationship is essential for the success of postdoctoral scholars. Our graduate student and postdoc members have identified the following skills and competencies needed for individuals serving in mentoring roles: communication, management, leadership, providing constructive feedback, managing different personalities, and how to support career development. We recommend that NIH should actively support mentors with these qualities and competencies. Likewise, both postdocs and mentors should attend workshops on how to

develop effective mentor-mentee relationships. Additionally, NIH can develop opportunities to evaluate and recognize mentors as part of the scoring criteria for NIH grants that fund trainee support.

We recognize the growing interest in diverse career opportunities for scientists and acknowledge their needs to acquire skills and experiences that support these careers. To develop relevant skillsets and knowledge, funding from NIH and the development of NIH partnerships with other government agencies, professional and scientific societies, industry, and other relevant sectors should be created to offer training and career exploration opportunities for postdocs. Finally, institutions should create formalized mentoring networks to guide postdocs towards their career interests and facilitate job connections with potential employers.