April 14, 2023

National Institutes of Health
Office of Extramural Research
9000 Rockville Pike
Bethesda, MD 20892

Re: Request for Information on Re-envisioning U.S. Postdoctoral Research Training and Career Progression within the Biomedical Research Enterprise (NOT-OD-23-084)

Submitted online at: https://rfi.grants.nih.gov/?s=639675def6d8bc7e840ce9c2e&utm

To Whom It May Concern:

The American Society of Hematology (ASH) appreciates the opportunity to provide comments on this request for information (RFI) on the current state of postdoctoral research training and career progression within the biomedical sciences.

ASH represents more than 18,000 clinicians and scientists worldwide who are committed to the study and treatment of blood and blood-related diseases. These disorders encompass malignant hematologic disorders such as leukemia, lymphoma, and multiple myeloma, as well as classical hematological conditions such as sickle cell anemia, thalassemia, bone marrow failure, venous thromboembolism, and hemophilia. As part of its mission to further the understanding, diagnosis, treatment, and prevention of disorders affecting the blood, ASH has a commitment to developing the careers of PhD scientists focused on hematology research.

NIH is interested in input on factors influencing postdoctoral training and hearing about promising solutions to address current challenges affecting the biomedical postdoctoral community. In response to the question about ASH’s perspective on the roles and responsibilities of the academic postdoctoral position, ASH views the position as one that is designed to be a short-term mentored appointment that prepares postdocs for an independent academic faculty position, or for a managerial role in the private, non-profit or government sectors. Beyond carrying out independent research projects, postdocs should have opportunities to work on developing other competencies such as laboratory management and grant writing. Overall, postdocs are immensely important to the success of the laboratory because of their expertise, their full dedication to research and because they drive innovation in the lab. Ideally, in the Principal Investigator (PI) to postdoc relationship, there is a mutual understanding of helping each other move toward their professional goals while advancing scientific discovery.

On the fundamental issues and challenges inhibiting recruitment, retention, and overall quality of life of postdoctoral trainees in academic research, ASH identifies low salary and lack of benefits (for example parental leave, childcare, retirement contributions) as top factors for postdocs to not pursue a career in academic research. Furthermore, academic institutions generally do not provide additional funding to support postdocs through temporary difficulties or less productive times (either due to scientific setbacks
or personal reasons such as illness or family obligations). These issues are exacerbated in areas with a high cost of living, and disproportionately affect women and people from disadvantaged backgrounds. In addition, the shortage of academic positions and uncertain research funding levels makes an academic career a challenging one to pursue, and ASH has seen a trend of more and more graduating PhD students opting not to pursue a postdoc and moving to non-academic positions soon after completing their degree.

There are opportunities where existing NIH policies, programs or resources could be leveraged to enhance postdoctoral training and academic research pathways. One suggestion would be for NIH to formalize guidance on how researchers can support their salary at each step of their academic career. This could take the form of a longitudinal pathway of award mechanisms (consistent across NIH institutions) that support researchers from trainee to independence. Another idea would be an NIH-wide expansion of the model of the NCI R50 mechanism for staff scientists, which would also retain additional talent in the academic workforce. Additional mechanisms to fund laboratory managers or expert technicians would release postdocs from excessive maintenance duties. Additionally, increased pay lines and budget caps would allow investigators to fund postdocs at a higher pay grade and with increased travel funds to allow them to build robust scientific networks, generate collaborations, and move toward independence. Finally, expanding funding opportunities available to foreign postdocs would likely increase the retention of talent in the biomedical workforce regardless of nationality.

Mentors need mentoring as well. ASH recommends NIH develop leadership training resources for Principal Investigators to improve the quality of training for their postdocs and graduate students, especially by providing guidance on the appropriate number of personnel that they should commit to mentoring. NIH funded institutions should have clear guidelines on the expectations of mentors and how they can formalize their interactions with postdocs to improve quality of training, maximize workforce potential, resource utilization, and improve scientific rigor.

There are promising and proven approaches and resources to improve postdoctoral training ecosystem. ASH recommends that NIH formally and regularly interface with existing universities’ offices of postdoctoral affairs, and with medical and professional societies to share best practices in improving the quality of training of the PhD workforce. For instance, ASH has a very active task force focused on advancing the careers of PhD scientists involved in hematology research and also funds a Translational Research Training in Hematology Program that is open to postdoctoral fellows and junior faculty. ASH would welcome the opportunity to share with NIH the successes of our programs launched in support of this constituency.

In closing, ASH again thanks NIH for the opportunity to share our perspective on postdoctoral research training. Should you have any questions or require further information, please contact Kelly Rose, ASH Chief Scientific Officer, at krose@hematology.org.

Sincerely,

Robert A. Brodsky, MD
President