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

Analysis of Public Comments

August 2023

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Executive Summary

Ensuring the future of U.S. competitiveness and innovation in biomedical research is of utmost importance to NIH. One avenue for achieving this goal is to support a sustainable and diverse biomedical workforce. Concerns about the postdoctoral training system and recruiting postdoctoral candidates have grown in recent years. NIH established an Advisory Committee to the Director (ACD) working group to explore the status of the postdoctoral training system, identify and understand critical factors and issues relating to the perceived decline in the number of postdoctoral scholars, and provide recommendations that address those factors.¹ As part of this ACD-led effort, community input on the status of the postdoctoral training system was encouraged through a Request for Information (RFI): Re-envisioning U.S. Postdoctoral Research Training and Career Progression within the Biomedical Research Enterprise (NOT-OD-23-084).²

The RFI invited web form-based input from February 14, 2023, to April 14, 2023. NIH received 3,252 comments from individuals and organizations representing academic institutions, the federal government, industry, advocacy and professional groups, and other constituencies.

The most pressing issue for most respondents was the lack of adequate compensation, including salary and employment benefits. There were also significant concerns about quality of life, including harassment and challenges with diversity, equity, inclusion, and accessibility (DEIA). Additional challenges and issues around postdoc roles and responsibilities, recruitment, job satisfaction and security, and career prospects were highlighted. Respondents suggested that improvements in mentorship and additional support for diverse professional and career development activities could improve the postdoctoral fellowship. Respondents felt that there is a lack of standardization and accountability across a variety of topics related to the postdoc experience. Respondents recognized that international scholars face a unique set of challenges—both immigration and non-immigration issues. Finally, respondents provided diverse input on potential solutions to improve the postdoctoral training ecosystem, including changes to existing NIH policies, programs, or resources and proven or promising external resources or approaches that could inform NIH's efforts.

¹ <https://acd.od.nih.gov/working-groups/postdocs.html>

² <https://grants.nih.gov/grants/guide/notice-files/NOT-OD-23-084.html>

Report on the Results of the RFI

Introduction

Ensuring the future of U.S. competitiveness and innovation in biomedical research is of utmost importance to NIH. One avenue for achieving this goal is to support a sustainable and diverse biomedical workforce. Concerns about the postdoctoral training system and recruiting postdoctoral candidates have grown in recent years. Data published by the National Science Foundation suggest that the number of postdoctoral researchers may be declining, presenting an uncertain future for the overall U.S. biomedical research enterprise.³ There are concerns that these challenges have recently been severely compounded by the COVID-19 pandemic and the ensuing global economic environment.

NIH sought to evaluate the status of the postdoctoral training process, understand fundamental issues affecting postdoctoral scholars, and identify possible solutions to address these issues. Toward this end, an NIH Advisory Committee to the Director (ACD) working group (WG) was established to explore the status of the postdoctoral training system, identify and understand critical factors and issues relating to the perceived decline in the number of postdoctoral scholars, and provide recommendations that address those factors.⁴ As part of this ACD WG-led effort, community input on the status of postdoctoral training, the environment in which it is conducted, and career development and outlooks was encouraged through four public virtual listening sessions⁵ and an online Request for Information (RFI): Re-envisioning U.S. Postdoctoral Research Training and Career Progression within the Biomedical Research Enterprise (NOT-OD-23-084).⁶ Comments were accepted from February 14, 2023, to April 14, 2023.

The RFI invited input from postdoctoral scholars, graduate students, and other interested parties in the research community. Input sought included, but was not limited to, the following:

- Perspectives on the roles and responsibilities of the academic postdoc (e.g., what the postdoctoral position means to you, how you view it)
- Fundamental issues and challenges inhibiting recruitment, retention, and overall quality of life of postdoctoral trainees in academic research
- Existing NIH policies, programs, or resources that could be modified, expanded, or improved to enhance the postdoctoral training ecosystem and academic research career pathways
- Proven or promising external resources or approaches that could inform NIH's efforts to enhance the postdoctoral training ecosystem (e.g., improving postdoctoral recruitment, training, working environment, mentoring, or job satisfaction)

³ <https://nces.nsf.gov/pubs/nsf22319>

⁴ <https://acd.od.nih.gov/working-groups/postdocs.html>

⁵ <https://www.acd.od.nih.gov/working-groups/postdocs.html>

⁶ <https://grants.nih.gov/grants/guide/notice-files/NOT-OD-23-084.html>

Characteristics of Respondents

NIH received 3,252 submissions to the RFI. Of these submissions, 96% (3,121) were from individuals and 4% (131) were from organizations. Respondents came from a wide variety of professional areas; notably, 54% were postdoctoral scholars and 15% were graduate students.

U.S. citizens or permanent residents made up 72% (2,501) of respondents. Figure 1 shows the affiliated organization of the respondents, with a majority (87%; 1,818) from academia.

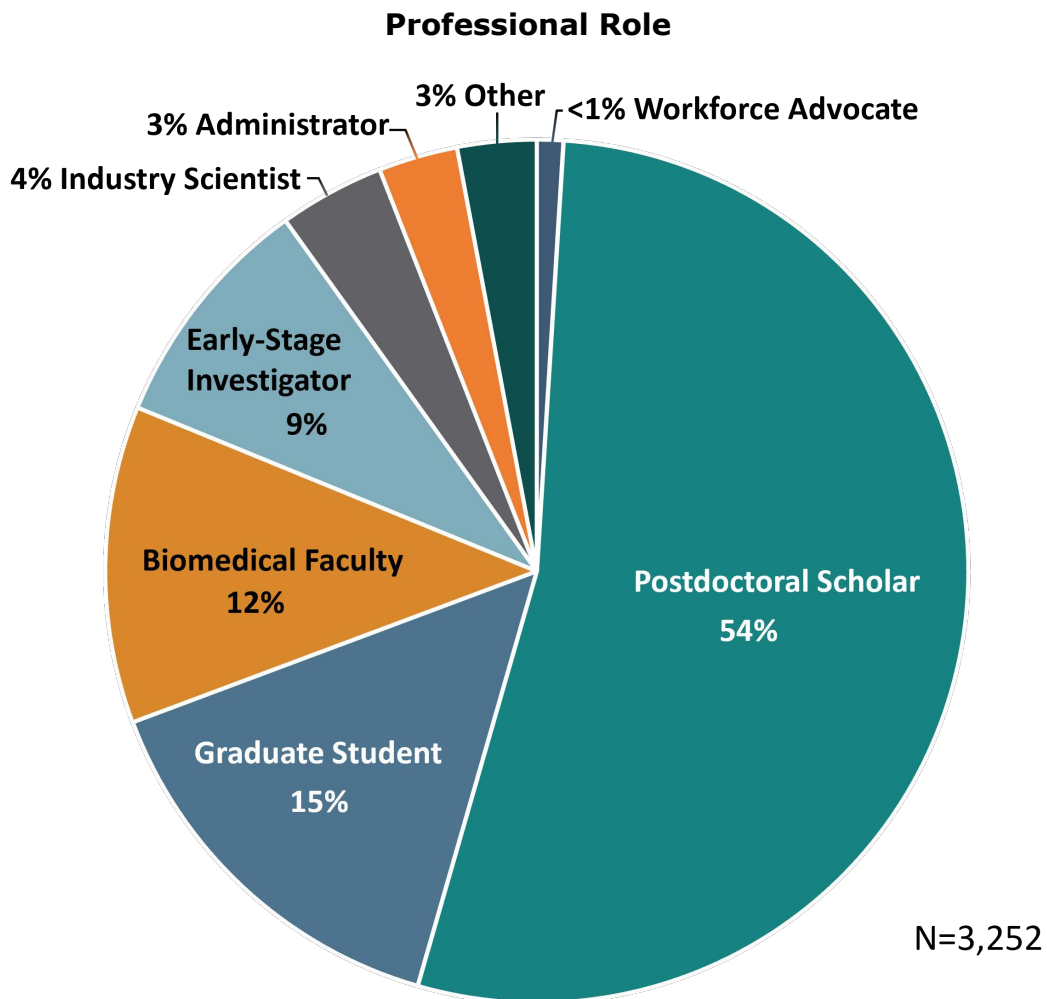


Figure 1. Affiliated organization of respondents.

Of the 3,252 submissions, 96% (3,216) were classified as responsive. Examples of nonresponsive submissions included blank or repetitive character entries and comments that were in non-English languages or did not address the specific RFI questions. The coding and analysis of the public input is based on these 3,216 responses.

Analysis of the Results

Public feedback was accepted through an online form, and input on the four categories of interest was collected using four text boxes. NIH staff analyzed the content of these responses using a standardized coding schema, along with comment boxes to include relevant language from the responses. Sample responses and a description of the codes and subcodes used in the analysis are available in Table 1 of the Appendix. Codes were not mutually exclusive, and response statements were assigned to multiple codes as necessary.

Comments and Suggestions on Postdoc Roles and Responsibilities

Postdoc roles and responsibilities were commented on by 88% (2,815) of respondents. Additionally, 48% (1,556) of respondents indicated that the role and responsibility of the academic postdoc is research training, and 58% (1,867) mentioned transition to an independent academic position. Additional postdoc roles and responsibilities included transition to independent nonacademic research and non-research positions, generating research publications, and other roles and responsibilities, such as mentoring graduate students, teaching, and lab management. Although there may be a research training component to a postdoc, many respondents indicated that postdocs are more likely to be highly skilled, semi-independent scientists who function as early career collaborators. Many respondents expressed a preference for the term “scholar” rather than “trainee.” Respondents also described a lack of standardization in the postdoc, including for title, employment status, salary, benefits, roles and responsibilities, mentorship and training, professional and career development, outcomes, and duration of the role. Strategies to improve standardization could also help in advancing accountability. Respondents suggested expanded training, mentorship, and professional and career development to address the fact that many scholars pursue nonacademic careers in industry, advocacy, policy, and government. Although many considered the postdoc to be too long, there was a recognition that postdoc duration may need to be tailored to the individual (e.g., for a temporary training position or a longer-term staff scientist position). Improvement in the clarity of postdoc roles, responsibilities, and outcomes would help optimize the duration of the position.

Comments and Suggestions on Fundamental Issues and Challenges

Most respondents (97%; 3,108) responded to this question. The RFI coding captured a wide range of topics related to postdoc issues and challenges and the analysis was organized by these topics (shown in Figure 2).

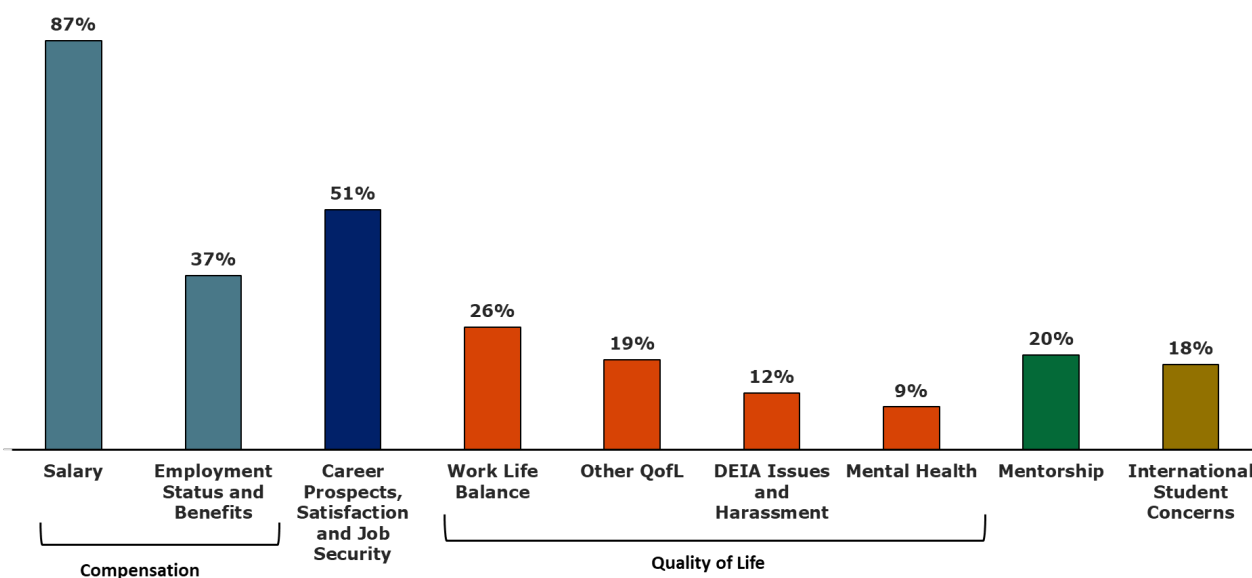


Figure 2. Issues and challenges. Select postdoctoral issues and challenges are color-coded to show linked topics (light blue = compensation; orange = quality of life[.]) N = 3,252.

Compensation

Most respondents (87%; 2,863) commented on salary. The vast majority felt that scholars are not adequately compensated financially for their level of education, expertise, and skills and that salaries should be significantly increased to match other biomedical careers. Respondents also suggested that financial compensation could include location adjustments, annual increases based on cost of living and advancing scholar experience, and other financial support, such as child care subsidies and relocation funding. Respondents suggested that scholars should receive a standard set of employment benefits, including health insurance, retirement, vacation leave, and parental leave. Finally, respondents commented that salary and benefits often are not standardized across departments and institutions and vary based on title, employment type, or funding mechanism.

Recruitment, Job Satisfaction and Security, and Career Prospects

Respondents suggested that scholar recruitment strategies could be standardized, centralized, and made more objective and transparent by developing centralized platforms and infrastructure with data to assist scholars in selecting postdocs (e.g., career outcomes, evidence of institutional support). Recruitment could also focus on concrete criteria rather than personal networks, research pedigree, or word of mouth. Although many respondents indicated that they perceived the goal of the postdoc to be to transition to academic and research positions, many noted that postdocs often leave due to poor job satisfaction, lack of opportunities in academic careers, and a negative work culture. Respondents recommended that the postdoc position include training, mentorship, and professional and career development that better matches the reality that scholars may advance to nonacademic careers. Respondents felt that many postdocs have limited job security due to uncertain employment status, use of short-term contracts, dependency on grant funding, and limited availability of academic positions. It was noted that job uncertainty disproportionately affects international scholars due to their immigration status.

Mentorship and Professional and Career Development

Respondents recognized that mentorship is essential to the postdoc experience and pointed out the need to significantly improve mentorship. Respondents felt there is a lack of expertise in mentorship amongst the academic enterprise and suggested standardizing mentorship training for principal investigators (PIs), scholars, and key institutional staff. Respondents also noted limited mentorship standardization and accountability and suggested the adoption of strategies such as employee performance plans, individual development plans, mentor/mentee compacts, and multimember mentorship committees. These mentorship strategies could be evaluated during peer review of grants, could inform funding decisions, and could be part of annual grant progress reports. Respondents also expressed a desire for overall cultural changes that incentivized high-quality mentorship.

Respondents felt that there is a lack of support for professional and career development (PCD) by both PIs and institutions, especially in non-research areas and for nonacademic careers. There seems to be limited PCD expertise, standardization, and accountability. Respondents advocated for guidance on minimum time spent on PCD, structured PCD plans, opportunities to gain PCD in nontraditional careers, and a balance between standardized PCD activities and tailored individualized strategies for each scholar.

Quality of Life

Almost half (48%; 1,538) of respondents expressed concerns about scholars' quality of life, including a perceived lack of institutional support, limited strategies to build a sense of community to overcome social isolation, and a feeling that scholars are not valued as essential members of the academic research community. The overall challenges with the postdoc (e.g., salary, benefits, job security and satisfaction, job prospects, mentorship, quality of life) disproportionately affect vulnerable communities (e.g., women, underrepresented minorities, members of the LGBTQ+ community, international scholars, scholars with disabilities, scholars who are neurodivergent). There is a pressing need for strategies to address issues in these communities. Respondents suggested improvements in training, mentorship, accountability, institutional support, and infrastructure. Respondents expressed concerns about the lack of sufficient transparency, reporting, data and tracking, and accountability regarding harassment in the research community. Respondents emphasized that many issues of the postdoc ecosystem, including many outlined in this report, contribute to systemic inequities and marginalization of communities and to diversity, equity, inclusion, and accessibility (DEIA) challenges broadly.

International Scholars

Individuals who are not U.S. citizens or permanent residents are disproportionately affected by the challenges of the postdoc. Immigration issues can compound challenges to job security, power imbalances, and quality of life. Respondents suggested increased institutional support around immigration, social isolation, and cultural and language challenges. International scholars also experience significant issues with long-term job prospects, since many funding mechanisms are limited to U.S. citizens.

COVID-19

Respondents were given the opportunity to comment on how the COVID-19 pandemic affected scholars; only 2% of respondents (51) gave feedback. Respondents felt that some of the COVID-related eligibility and funding extensions were insufficient and that the

pandemic affected their ability to obtain a postdoc and also delayed the completion of a fellowship.

Comments and Suggestions on Changes to Existing NIH Policies, Programs, or Resources

Respondents provided a variety of suggestions to improve existing NIH policies, programs, or resources. For example, respondents suggested that National Research Service Award (NRSA) (F and T), career development (K), and R01 awards could be modified to address numerous concerns about the postdoctoral experience, including compensation, mentoring, professional and career development, accountability, and tenure. There was an interest in expanding existing NIH awards, including career development opportunities and loan repayment programs. Respondents commented that direct funding to scholars would help reduce power imbalances and that programs to support nonacademic scientists might reduce the pressure on scholars to become academic, tenure-track researchers. Respondents highlighted innovative existing NIH scholar programs, which could be expanded to include other institutes and centers, more research areas, and increased overall funding, along with the piloting of new programs that focus on areas of improvement for the postdoctoral experience. Respondents recognized that NIH already has some programs that support scholars planning to enter nontraditional careers; these could be expanded and new pilot programs developed.

Comments and Suggestions on Proven or Promising External Resources or Approaches

Respondents shared examples of domestic and international resources and approaches from outside NIH that could be used as models for improving the postdoc experience. These examples included resources from academia, nonprofits, professional societies, and government agencies. Respondents highlighted several noteworthy academic postdoctoral programs that excelled in areas such as recruitment, evidence-based teaching, and career transitions. Respondents also provided examples of programs for nontraditional careers in research administration, biotechnology, and technology transfer. Additional resources were suggested in the areas of mentoring, training, quality of life, and DEIA/harassment, including mentor/mentee compacts, peer-to-peer inclusivity programs, and resiliency training. Respondents also recommended strategies to improve data collection and information dissemination related to postdoctoral scholars.

Summary and Conclusion

The RFI responses included a range of comments, concerns, and suggestions about the status of the postdoctoral training system. Most responses (87%, 1,818) came from individuals and those within academic organizations. Respondents held a wide variety of professional positions, with large numbers of responses from postdoctoral scholars and graduate students. A diverse set of advocacy groups and professional associations and societies also submitted responses.

Receiving the most comments, the top postdoctoral concern mentioned was that scholars are not adequately compensated financially for their level of education, expertise, and skills. Respondents also proposed that all scholars receive a standard set of employment benefits, including health insurance, retirement, vacation leave, and parental leave.

Respondents commented that postdoc roles and responsibilities are not well defined, and there are opportunities to improve standardization and accountability in this area. Although there may be a training aspect to the postdoc, respondents felt that postdocs play a role more similar to semi-independent scientists and should be considered scholars rather than trainees. There were mixed opinions on the duration of the postdoc, though respondents generally felt that clarification of postdoc roles, responsibilities, and outcomes should inform the optimal postdoc tenure.

Respondents felt that postdoc recruitment could similarly be improved with more standardized approaches. There was also concern that postdocs are not receiving sufficient training, mentorship, and professional and career development for nontraditional careers, given the limited likelihood of achieving a tenured academic position. Due to the temporary nature of the postdoc position, there is an overall lack of job security and satisfaction that disproportionately affects international scholars, based upon their immigration status. Respondents highlighted that challenges with DEIA are connected to many issues in the postdoc ecosystem.

Respondents had concerns about a lack of expertise in mentorship and suggested standardized mentorship training for PIs, scholars, and key institutional staff, which could be made more accountable using strategies such as mentorship plans. Respondents also felt there is a general lack of support for professional and career development for postdocs, especially in non-research areas and for nonacademic careers. Suggested approaches to improve professional and career development were aimed at providing additional expertise, standardization, and accountability.

Respondents also raised significant concerns about postdocs' quality of life, including a limited sense of community, mental health challenges, and a perception that scholars are not valued as essential members of the academic research community. Respondents felt that there is not enough transparency, reporting, data and tracking, and accountability about harassment in the research community. These quality-of-life issues disproportionately affect vulnerable populations. Respondents recognized that international scholars face a unique set of challenges related to both immigration and non-immigration issues.

Finally, respondents provided diverse input on potential solutions to improve the postdoctoral training ecosystem, including suggestions on changes to existing NIH policies, programs, or resources and proven or promising external resources and approaches that could inform NIH's efforts.

Acknowledgements

Special thanks to the Postdoctoral RFI Coding Team and the OD/DPCSPI/Office of Portfolio Analysis's Matt Perkins.

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OD/DPCPSI/OAR	Issel Anne Lim
OD/DPCPSI/OBSSR	Deshirée Belis
OD/DPCPSI/OBSSR	Sarika Parasuraman
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Appendix

Coding Table and Selected Comments

The comments in Table 1 below are taken directly from the RFI responses. Removed text is denoted by ellipses. Minor typos have been corrected.

Primary Category: 1. Perspectives on the Academic Postdoc

Code	Subcode	Selected Comment(s)
Objective	A1. Research Training	I view the postdoctoral position as a full-time position that allows for one to receive pertinent research training that will allow them to move onto their independent careers.
	A2. Transition to Independent Scientist: Academic Researcher	Mastering the skills of a research scientist that you learned as a graduate student. Preparing for a future role as a mentor and PI.
	A3. Transition to Independent Scientist: Non-academic (e.g., Industry)	I view the postdoc as a steppingstone to my next career stage. For me, I am trying to learn valuable skills that will translate well to a career in industry and establish a track record of productivity in my current role as a postdoc.
	A4. Transition to Non-research Position (e.g., Policy, Admin)	... learn new techniques and expand on the knowledge area into what one is interested in, and also learn more about biotech, pharma, policy, academia, etc. to transition to an independent position afterwards.
	A5. Generate Research Publications	Another key responsibility of academic postdocs is to publish their research findings in peer-reviewed academic journals. This requires them to write research articles and present their findings at academic conferences.
	A6. Other	While academic postdocs are primarily focused on research, some are also involved in teaching activities, such as supervising undergraduate or graduate students, giving lectures, and leading lab sessions.

Primary Category: 2. Fundamental Issues and Challenges

Code	Subcode	Selected Comment(s)
Compensation	B1. Salary	The primary challenge is that the postdoc salary is too low considering their qualifications. Postdocs are mostly at an age where they are starting families and wanting to settle down, but the NIH regulated postdoc salary is not sufficient to support a family.
	B2. Employment Status and Benefits	Limited benefits: Postdocs often receive limited health and dental care, as well as limited vacation time. Moreover, when I transitioned to my F32, I lost my employment status and was taxed on the full cost of my healthcare benefits.
Career Prospects, Satisfaction and Job Security	C1. Academic Pathway	Recruitment has finally been inhibited by the low salary and poor academic job prospects that have plagued academia for years.
	C2. Non-academic Pathway	The current salary for postdocs is incredibly low resulting in many grad students leaving for higher-paying jobs and post docs leaving academia early for higher-paying industry positions.
	C3. Training and Professional Development	Postdocs are not given opportunities to grow professionally. There is a lack of training on how to budget, grant writing, opportunity to serve as a reviewer, serve on a committee to plan a conference, how to manage a lab, how to deal with conflict, etc.
	C4. Other	The academic postdoc position, intended to be a temporary and transitional career stage, is often ill-defined in terms of length, expectations, next steps, etc., creating a period of instability that may be looked upon unfavorably compared to other opportunities.
Mentorship	D1. Negative or Unfavorable Experience	Poor mentorship, often the result of lack of PI mentorship training.
	D2. Other	... level and style of mentoring among PIs varies widely regarding research development, guidance, and preparation for work after the postdoc, which can affect career development negatively.

Code	Subcode	Selected Comment(s)
Quality of Life Concerns	E1. Work Life Balance	No work/life balance (i.e., hours and workload are often the same if not more than that of a Ph.D., leading to burnout and loss of passion for the sciences/field that I was initially interested in).
	E2. Mental Health	Mental health issues such as anxiety and depression due to poor mentoring, unbalanced power dynamics, and hostile work environments.
	E3. DEIA Issues and Harassment	In my own experience, being bullied as a woman has been extremely difficult and my work, which I was leading myself, has been frequently minimized by others.
		There is a lack of diversity and inclusion in postdoctoral training programs, which can create a sense of isolation.
E4. Other	Postdocs are underappreciated and perform labor that tends to go unacknowledged or uncredited.	
International Scholar Concerns	F1. Non-immigration Issues	There are limited opportunities for international postdocs to apply for funding, because many fellowship (F32 and T32) opportunities require citizenship.
	F2. Immigration Issues	Complex immigration policies add to everyday burden of not knowing how long we can stay; how difficult it will be to transition to the next type of visa and if that will be even possible.
COVID-19	G1. General Comments	The biggest fundamental issue that I have faced, other than substantial COVID-related career setbacks, has been in channeling my postdoctoral position into a PI position.
Other	H1. General Comments	Issues with the long process and inefficiencies of scientific publishing unnecessarily extend postdoc training duration and slow the dissemination of science.

Primary Category: 3. Existing NIH Policies, Programs, or Resources

Code	Subcode	Selected Comment(s)
Funding Programs	I1. NRSA Awards (T and F Grants)	Drop the payback agreement for F32/T32. Postdocs should be compensated like any real job without the threat of having to pay the money back, no matter how unlikely that possibility may be.
	I2. R01 Awards	Increase R01 modular budget accordingly so that it will cover a postdoc's salary while still having funds for supplies and recharges.
	I3. K Awards	A greater variety of K-awards (such as K01s) would be helpful, as not all postdocs immediately decide that an academic career is what they want (and miss out on the tight window).
	I4. Other Programs	PhDs, unlike clinical researchers, rarely qualify for the NIH loan repayment program. Expanding this program would greatly improve my financial standing.
Policies	J1. General Comments	Changing policy to make postdocs "employees" (not trainees) would allow them to be paid competitive salaries with benefits.
Resources	K1. Training	NIH needs to require progress reports not only on research progress but also on postdoc training and career development.
	K2. Travel	Provide more travel awards to ensure postdocs can attend conferences.
	K3. Other	Collecting metrics on postdoc satisfaction on an annual basis will position NIH to adjust policy accordingly based on the needs of postdoctoral researchers.
Workforce Diversity	L1. General Comments	... funding fellows directly could help to diversify the pool of researchers and increase equity in the workforce, particularly for underrepresented groups who may not have access to the same level of funding as others.
Other	M1. General Comments	Align funding dates with academic years.

Code	Subcode	Selected Comment(s)
External Resources	N1. Period of Postdoc Service	... duration of training (e.g., T32) or mentored research (e.g., K award) may need to be longer to allow acquisition of increasingly complex skills.
	N2. Title and Postdoc Role	This variation in title creates differences in salary, tax burden, access to benefits (such as health, pension, parental leave, vacations, childcare, etc.).
	N3. Culture Change	... culture change could include examination of hiring, admission, and review practices; prioritizing career preparation as an integral component of professional training; and valuation of non-normative behavior, thinking, research, and career paths.
	N4. Recruitment and Career Development	NIH should incentivize and provide tools to conduct large postdoc recruitment events that are equitable and accessible to all.
		Track faculty/institutional use of Individual Development Plans (IDPs) to emphasize importance of reaching research milestones and of career development/advancement for postdocs.
	N5. Compensation	Providing a similar payscale and benefits with other federal like FDA, EPA, NIST, or government labs would eventually enhance the postdoctoral training ecosystem.
	N6. Benefits of Employment	NIH should conduct surveys to understand the financial challenges faced by postdocs in terms of benefits and employee status in various universities.
N7. Mentorship	NIH can encourage strong mentorship by requiring a mentorship plan to be submitted for every postdoc (and graduate student) funded on a research project grant and by providing guidelines on its research awards as to the expectations of the institutions, advisors, and trainees.	

Code	Subcode	Selected Comment(s)
Other Approaches	O1. Domestic	Establishing a Postdoc Training Advisory Group for postdocs to directly provide their ideas, feedback, and input into shaping the postdoctoral training experience and advocating for their needs.
	O2. Outside of U.S.	Implement an accreditation system of institutions and/or investigators according to various metrics incorporating the postdoctoral experience (e.g. suitability for internationals, recorded evidence of workers moving onto better opportunities, gender/disability parity) similar to the Athena Swan system used by the U.K. to measure gender parity in STEM fields.
	O3. Other	Perhaps building interdisciplinary postdoctoral training teams or creating early career investigator grants that are interdisciplinary.
Other	P1. General Comments	NIH should use its prominence to communicate the excitement of a biomedical research career to those interested in this career.

Request for Information (RFI): Re-envisioning U.S. Postdoctoral Research Training and Career Progression within the Biomedical Research Enterprise

Notice Number:
NOT-OD-23-084

Key Dates

Release Date:
February 14, 2023

Response Date:
April 14, 2023

Related Announcements

None

Issued by

Office of The Director, National Institutes of Health ([OD](#))

Purpose

The National Institutes of Health (NIH) seeks information from extramural research community members regarding the current state of postdoctoral research training and career progression within the biomedical research enterprise. NIH is particularly interested in understanding the perspective and experience of recent and current postdoctoral trainees, postdoctoral office leaders, as well as graduate students considering becoming postdoctoral trainees within the academic sector. This RFI will assist NIH in hearing the voices of postdoctoral trainees along with others impacted by this unique and skilled training position, and in exploring ways to address some of the fundamental challenges faced by the postdoctoral trainee community. This information will inform the development of recommendations by the NIH Advisory Committee to the Director ([ACD](#)), an advisory group that provides advice on matters pertinent to NIH mission responsibilities in the conduct and support of biomedical research, medical science, and biomedical communications.

Review of this entire RFI notice is encouraged to ensure your response is comprehensive and to have a full understanding of how it will be utilized.

Background

NIH supports postdoctoral training through its [extramural](#) research programs and its own [intramural](#) training program. These efforts have supported the development of highly trained biomedical scientists who have the necessary knowledge and skills to pursue independent careers in the biomedical research workforce. Concerns about the postdoctoral training system and recruitment of qualified postdoctoral trainees have grown in recent years. [Data](#) published by the National Science Foundation suggest that the number of postdoctoral researchers may be declining, presenting an uncertain future for the overall U.S. biomedical research enterprise. These challenges have recently been severely compounded by the COVID-19 pandemic and the ensuing global economic environment. NIH seeks to evaluate the status of the postdoctoral training process, to understand fundamental issues affecting the postdoctoral trainee process, and to identify possible solutions to address these issues. Toward this end, an [ACD working group](#) has been established to explore the status of the postdoctoral training system, identify and understand critical factors and issues relating to the perceived decline in the number of postdoctoral trainees, and provide recommendations that address those factors to the NIH Director.

Information Requested

This RFI invites input on factors influencing postdoctoral training from the community. NIH is particularly interested in receiving input from trainees (e.g., graduate students, postdocs), as well as early-stage investigators, biomedical faculty, training directors, postdoctoral and graduate student office leaders, biotech/biopharma industry scientists, and research education program advocates. NIH is particularly interested in hearing about promising solutions to address current

challenges affecting the postdoctoral trainee community. Input sought includes, but is not limited to, the following:

- Perspectives on the roles and responsibilities of the academic postdoc (e.g., what the postdoctoral position means to you, how you view it).
- Fundamental issues and challenges inhibiting recruitment, retention, and overall quality of life of postdoctoral trainees in academic research.
- Existing NIH [policies](#), [programs](#), or [resources](#) that could be modified, expanded, or improved to enhance the postdoctoral training ecosystem and academic research career pathways.
- Proven or promising external resources or approaches that could inform NIH's efforts to enhance the postdoctoral training ecosystem (e.g., improving postdoctoral recruitment, training, working environment, mentoring, job satisfaction).

How to Submit a Response

All comments must be submitted electronically on the [submission website](#).

Responses must be received by 11:59:59 pm (ET) on April 14, 2023.

Responses to this RFI are voluntary and may be submitted anonymously. Please do not include any personally identifiable information or any information that you do not wish to make public. Proprietary, classified, confidential, or sensitive information should not be included in your response. The Government will use the information submitted in response to this RFI at its discretion. **The Government reserves the right to use any submitted information on public websites, in reports, in summaries of the state of the science, in any possible resultant solicitation(s), grant(s), or cooperative agreement(s), or in the development of future funding opportunity announcements.** This RFI is for informational and planning purposes only and is not a solicitation for applications or an obligation on the part of the Government to provide support for any ideas identified in response to it. Please note that the Government will not pay for the preparation of any information submitted or for use of that information.

We look forward to your input and hope that you will share this RFI opportunity with your colleagues.

Inquiries

Please direct all inquiries to:

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