

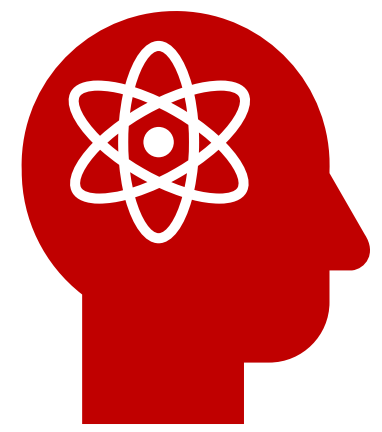
Pursuit of Fellowship Funding Through Peer Review Writing Groups

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Introduction

Pursuing independent funding as a predoctoral or postdoctoral fellow requires navigating the intricate steps of preparing an extramural grant application. The Toxicology T32 Training Grant and Workforce Development Core of the New Jersey Alliance for Clinical and Translational Science (NJ ACTS) developed an interactive grant writing group of predoctoral and postdoctoral fellows mentored by a trained/qualified coach. Through this peer review group, participants meet weekly for 3 months to develop fellowship application components for submission to NIH and other private foundations. Sessions are moderated by a senior faculty member trained by the National Research Mentoring Network. From 2019 to 2021, participant grant submissions and reviews of the program were collected, as well as demographics for the 2022 cohort. Over this period, 32 predoctoral and 19 postdoctoral fellows participated in the peer review writing groups, with another 24 trainees currently enrolled. In 2020, the peer review writing group moved to Zoom, enabling the expansion of training to include an additional 2 NJ universities and 6 colleges across the nation. A brief survey was emailed to participants in Fall 2022 that contained Likert and open-ended questions about their participation in the writing group. Of the 41 survey respondents, 78% submitted fellowship applications to NIH (N=28) or a private foundation (N=4). Eight of these applications are currently under review or have been resubmitted for peer review. 54% of reviewed applications have been awarded funding through NIH, a private foundation, diversity supplements, or career grants. Over 90% of participants have recommended the writing group to other trainees. In conclusion, a weekly grant writing group of predoctoral and postdoctoral fellows is an effective means to receive peer review of fellowship application components and to gain support for submissions to obtain extramural funding.



Target Learning Community:
Predoctoral and Postdoctoral Fellows

Learning Goals

- ✓ Understand the process required for preparing and submitting an NIH application.
- ✓ Appreciate the steps involved in the NIH review process.
- ✓ Develop grant application components on a weekly basis.
- ✓ Foster skills in peer review through evaluating components of grant applications.
- ✓ Network with biomedical and translational science trainees outside of the primary degree program.
- ✓ Improve communication of research goals and anticipated outcomes.
- ✓ Apply knowledge of rigor and reproducibility in designing grant applications.

Learn about our Grant Writing Training Programs



Program Overview

Overall Goal



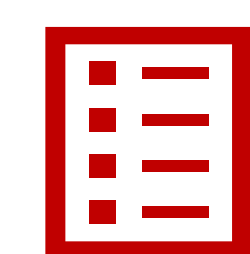
Development of an effective interactive grant writing group comprised of predoctoral and postdoctoral fellows mentored by a trained coach.

Participant Demographics



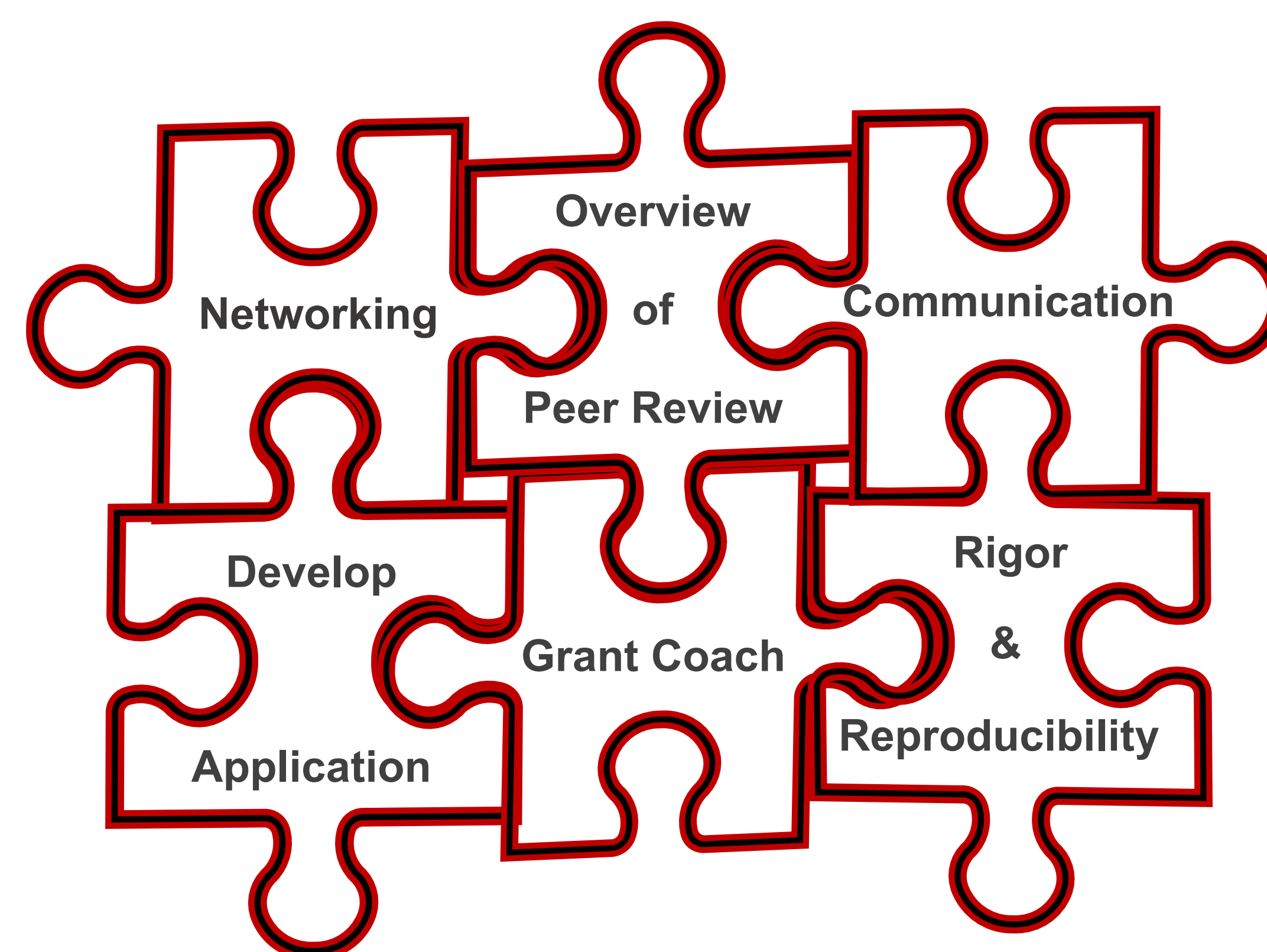
51 Completed
24 Currently In-Training

- 9 Universities**
- 70% Female**
- 30% Underrepresented Minority Background**
- 35% First Generation in College**



41 Follow-up Survey Respondents

Writing Group Components



Weekly Timeline



Tuesday: Submissions Due

Tuesday-Thursday: Peer Review

Thursday - Zoom Meeting of Participants and Coach

Thursday - Peer Discussion, Instruction, and Q&A

Overview of Outcomes

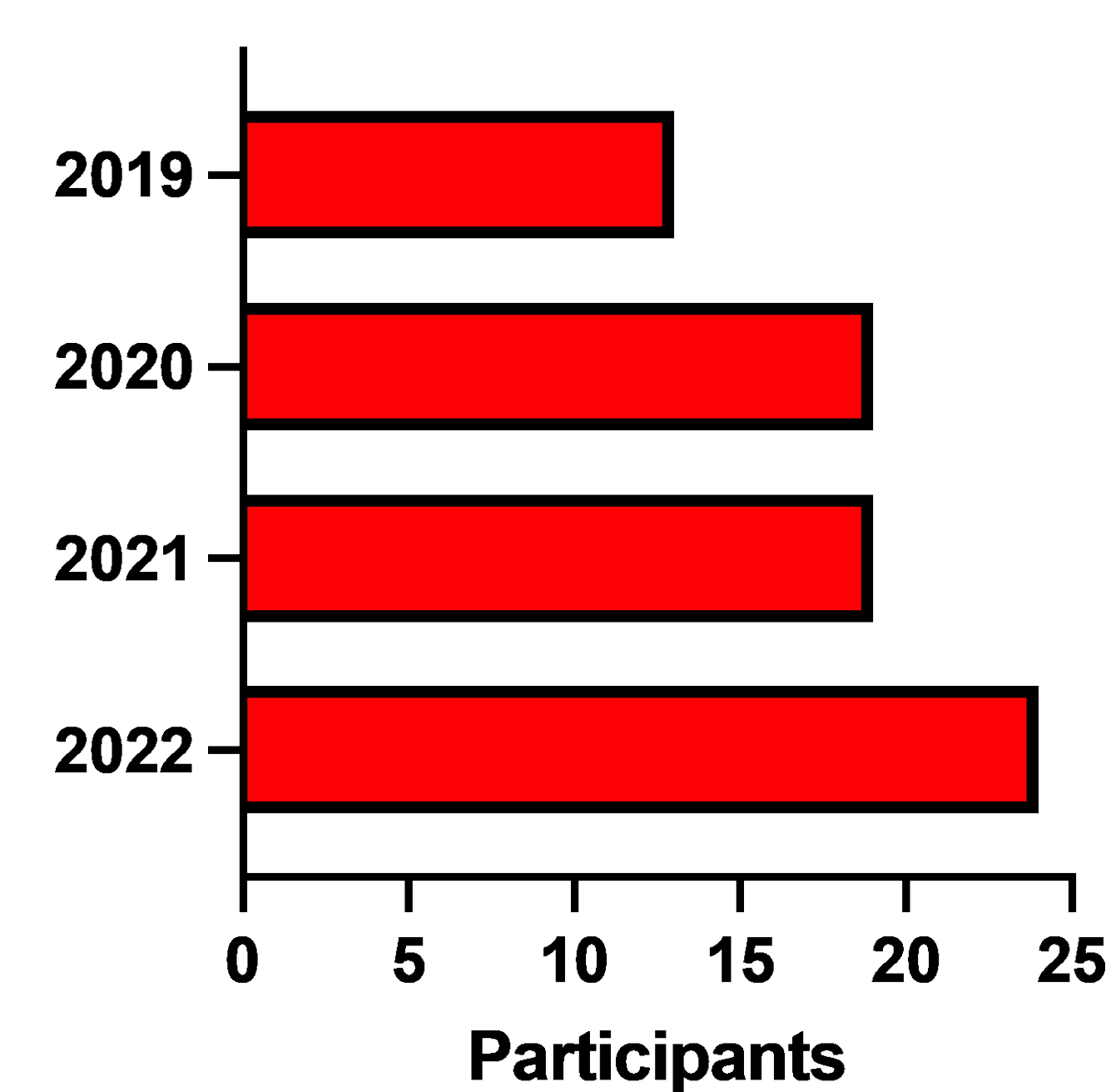


Figure 1. Number of Participants. Over a 4-year period, the number of participants has doubled following the transition to a Zoom only format.

PhD Student
MD/PhD Student
Postdoc

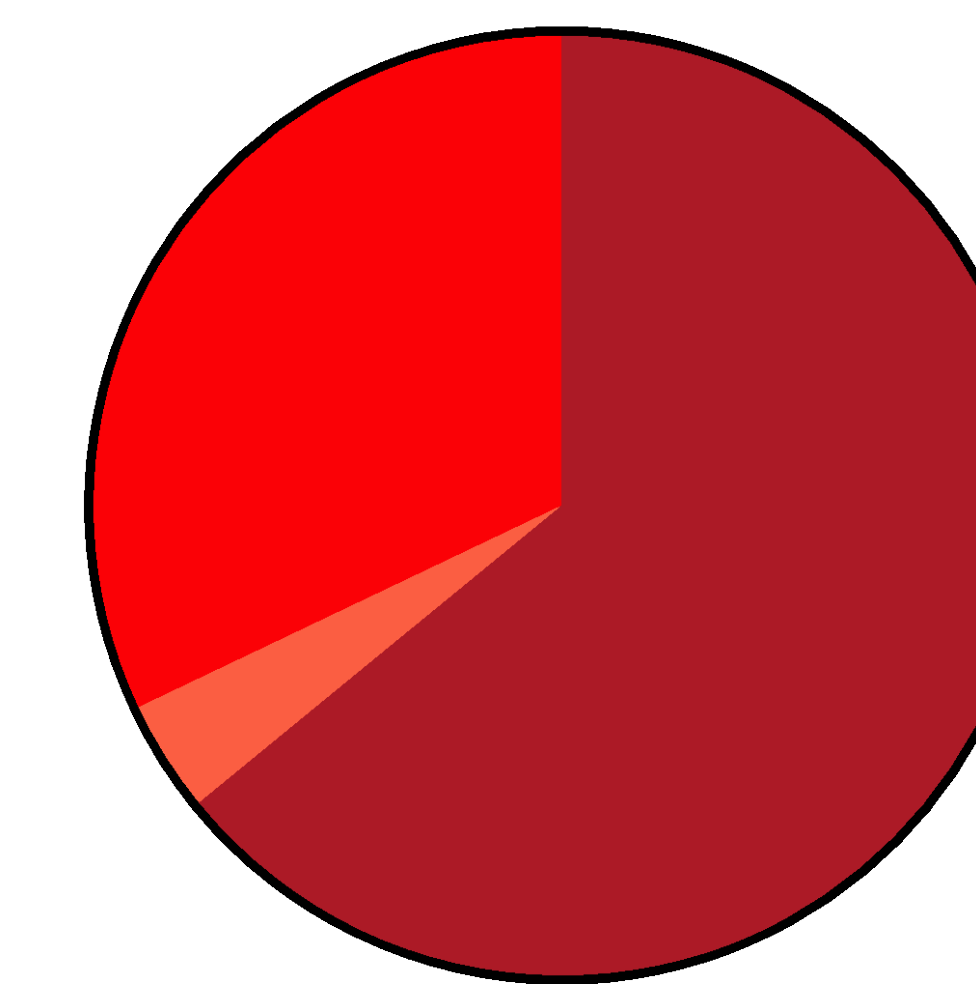


Figure 2. Trainee Type. The majority of participants were PhD students.

Are You Planning a Career in Translational Research?

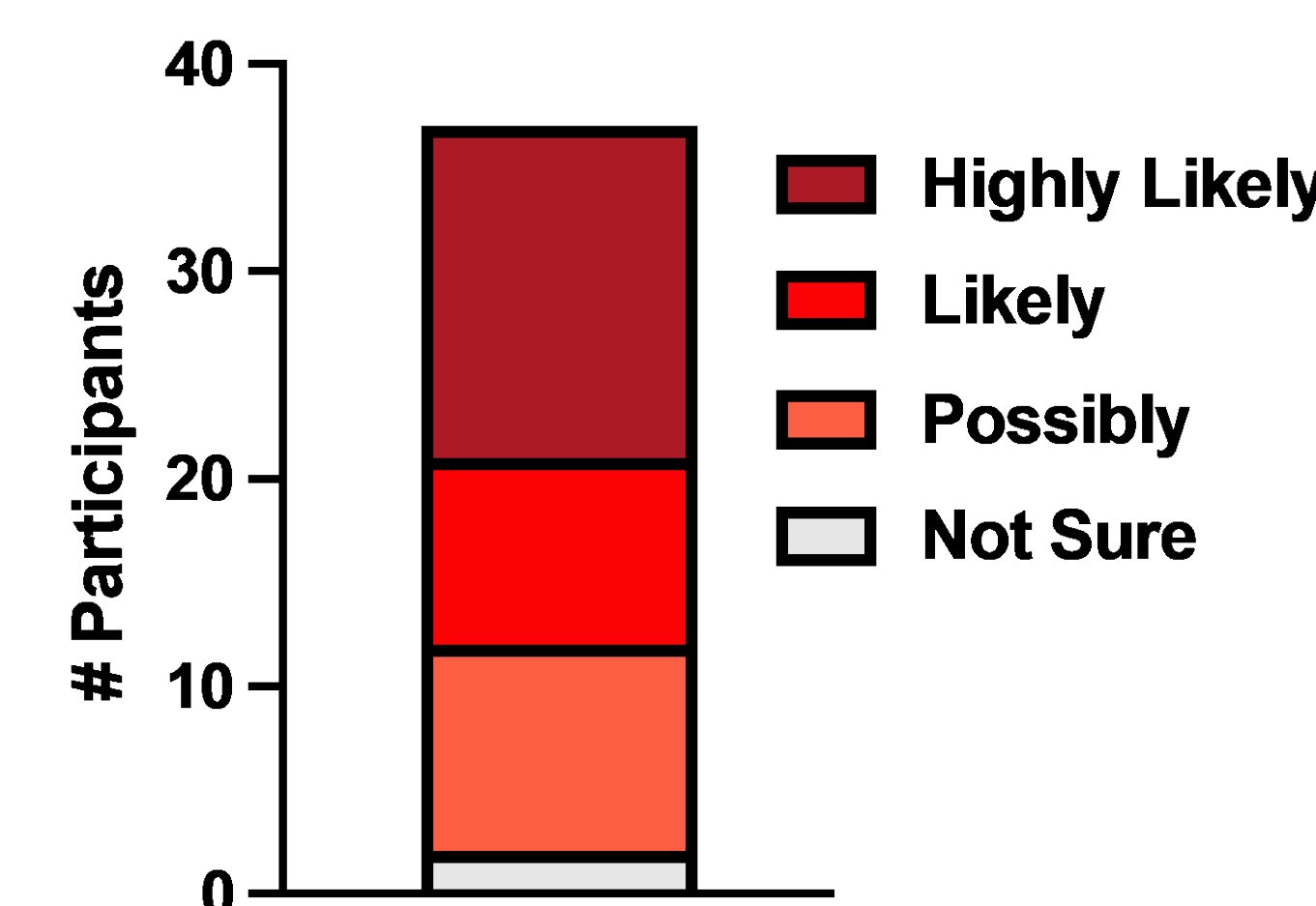


Figure 4. Career Plans. Participants assessed the likelihood of pursuing a career in translational research.

Did You Recommend The Writing Group?

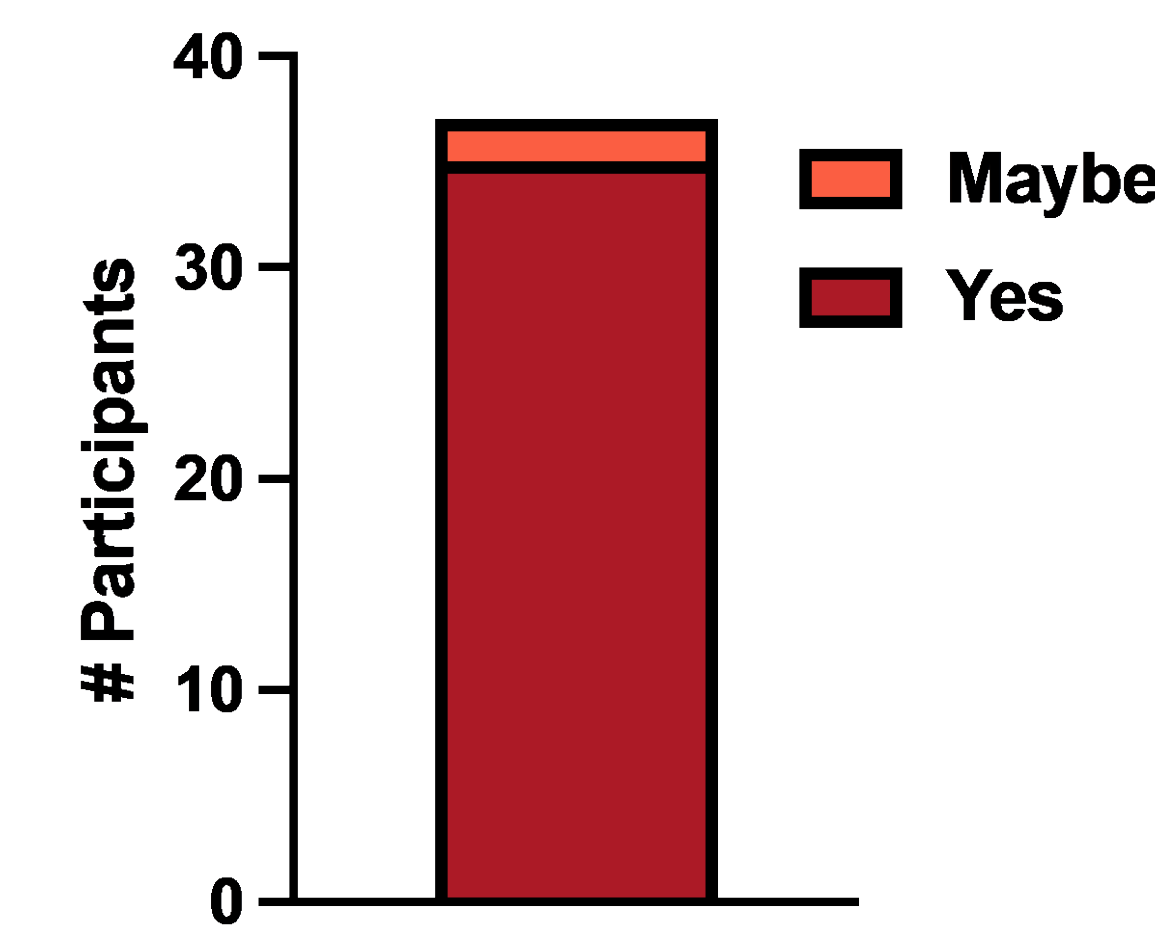


Figure 5. Recommendation. The majority of participants have recommended the writing group to other trainees.

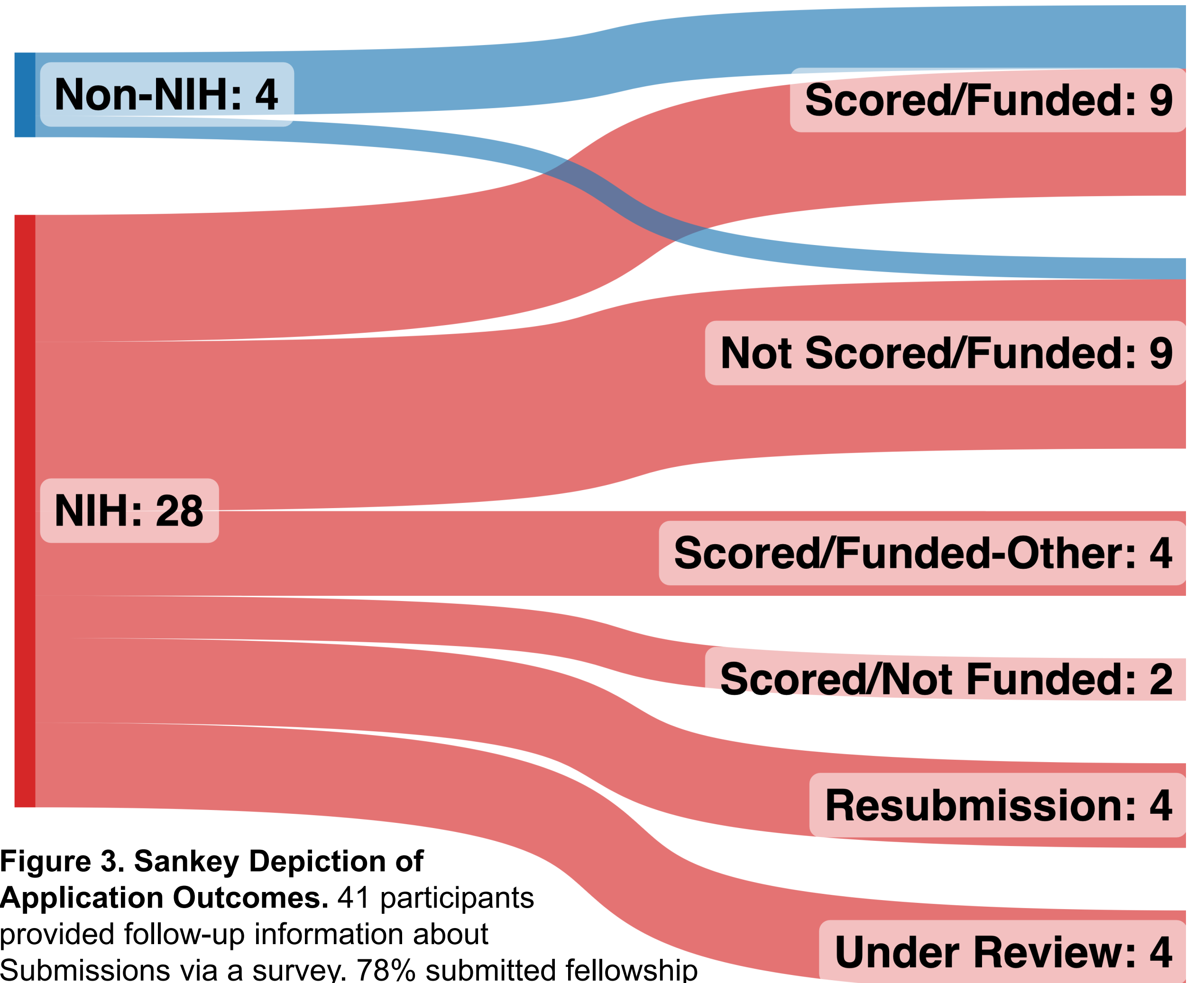
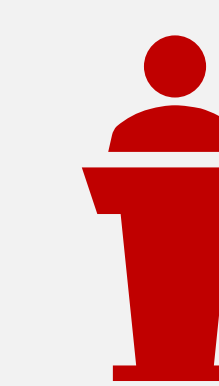


Figure 3. Sankey Depiction of Application Outcomes. 41 participants provided follow-up information about Submissions via a survey. 78% submitted fellowship applications to NIH (N=28) or a private foundation (N=4). Eight of these applications are currently under review or have been resubmitted for peer review. 54% of reviewed applications have been funded as NIH fellowships, diversity supplements (listed as Scored/Funded-Other), career grants, or non-NIH fellowships. Made with Sankeymatic.com

Key Quotes from Participants



"Even though I did not end up submitting an F32, this training was incredibly valuable. Taking the time to summarize my background, current training, and future goals in a succinct way was invaluable when preparing for other presentations and progress reports. This, in addition to receiving feedback from individuals at varying career stages and in many other professions, allowed me to learn how to communicate the ideas that I have in a way that I previously have not had to do."



"While I did not submit a fellowship at the completion of the course, it did provide me a great resource for long term evaluation of academic grant writing. With the knowledge of this course, I feel much more comfortable and confident pursuing the academic track and applying for the K99 track in a postdoc position. Without this course I would have been much more overwhelmed and way less likely to pursue this track."



"This course helped me prepare my F31 when I had no idea how to even begin. I am the first student in my lab to ever submit an F31 and I did not know how many non-science sections were needed and had no place to start from. This course is the reason why my grant was as successful as it was for the first submission."



"From my time in the writing, I thought the semester schedule and weekly exercises were very effective in keeping students on track and accountable. What I found most valuable was the feedback from fellow students during every class."

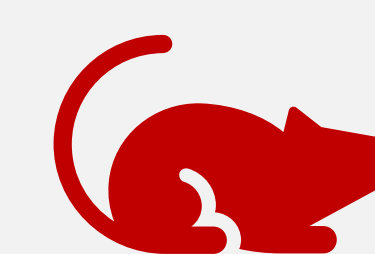
Examples of NIH Funded Fellowships



F31ES034269
Exposure to Zearalenone and its Impact on Maternal and Fetal Health



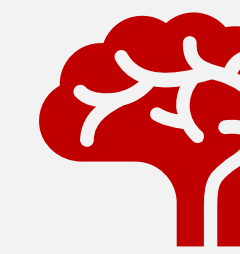
F31HL160196
Barriers and Predictors of Physical Fitness among Volunteer Firefighters



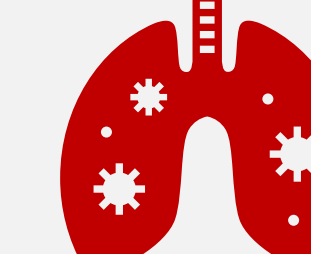
F31ES032319
Impact of the Placenta Barrier on Fetal Nutrition and Growth Restriction



F32GM140669
3D Genome Organization and Gene Expression in Drosophila



F31NS122438
Role of a NIMA-related Kinase in Neuronal Microtubule Stability and Transport



F32ES030984
Ozone Toxicity: Targeting the Resolution of Inflammation

Take Home Message

A weekly grant writing group of predoctoral and postdoctoral fellows is an effective means to receive peer review of application components and gain support for submissions to obtain extramural funding.

Acknowledgments

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