## SOCR/UMich: NIHMS 2024 TWD Predoc-T32 PI Survey Analytics

## SOCR (Ivo Dinov)

## July 05, 2024

This report presents an analysis of the pre-meeting survey of the PIs/PDs of NIGMS T32 Predoctoral Programs, prior to participation in the July 8-10, 2024, TWD T32 PD/PI Meeting in Bethesda, MD.

The current co-Chairs of the T32 Predoctoral Program PDs/PIs Steering Committee are Catherine Grimes (Delaware) and Ivo D. Dinov (Michigan). Over 80 Predoc T32 PDs/PIs are registered to participate in the conference and many are expected to actively engage in this special session. The goal of this pre-conference survey is to gather background information to guide the discussions during the 90-minute special session (Monday July 8, 2024, 1:30-3:00PM).

This brief analysis of the PI/PD pre-conference survey is completed using SOCR/DSPA analytical protocols and partially utilized generative AI models (GAIMs). As of today's date, July 05, 2024, the survey's lly utilized generative AI models (GAIMs). As of today's date, 23 survey responses were collected and used in this analysis. At a later stage the protocol may be rerun, if additional responses are submitted, or to account for follow up (post-conference) survey analysis.

## Pre-meeting Survey Summary

## Topics of (PI/PD) Interest

- Common Themes:
  - Interest in new Funding Opportunity Announcements (FOAs).
  - Discussions about stipends, including increasing them and how to supplement them.
  - Mechanisms to increase support for T32 Principal Investigators (PIs) and other training-related topics.

#### Interest in Presenting or Leading a Discussion

• Responses: Most responses to this question indicated lack of interest to present/lead.

### **Common Themes**

- Gratitude towards the conference organizers.
- Concerns about the complexity of grants and administrative burden.
- Positive feedback and thanks for organizing the survey and conference.

## Number of Predoctoral Students

- Responses indicate a range from 5 to 14.5 students per program.
- Some programs reported both funded fellows and independently supported students/trainees.

## Program Successes (Past 5 Years)

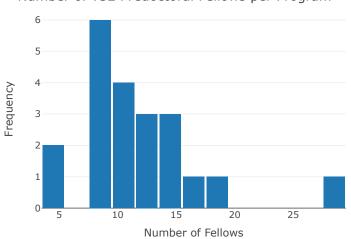
- High job placement rates in STEM fields after graduation.
- Successful publication and obtaining fellowships by trainees.
- Increased focus on mentor training and encouragement of internships.
- Notable achievements of graduating students.

## Program Challenges or Areas for Improvement (Past 5 Years)

- Fiscal limitations and caps on funded slots.
- Institutional support for proposal preparation.
- Challenges in tracking students and their training activities.
- Funding to match salary increases and coordination across multiple departments.

## **Data Visualizations**

## Number of Predoctoral Students



Number of T32 Predoctoral Fellows per Program

**Topics of Interest** 

PI Topics to Discuss, Hear, Learn About

training administrators campus program medical stipends college grant datafoas pis Support leave increasing key supplement school funding things issues navigating institution mechanism **Program Successes and Challenges** 



T32 Predoctoral Successes & Challenges

## Qualitative summaries

# Sentiment for What topics are you interested in hearing/learning/discussing in more detail?

The aggregate sentiment from the survey responses indicates a proactive and constructive attitude towards improving the T32 Predoctoral Programs. Respondents are eager to discuss new funding opportunities, enhance financial support for students, and implement better support mechanisms for PIs. There is a strong desire for effective program management and improved mentor training. The positive sentiment highlights the community's commitment to enhancing the overall quality and effectiveness of the training programs.

## • Funding and Grants:

- New FOAs: Respondents expressed a keen interest in learning more about new Funding Opportunity Announcements (FOAs). There is curiosity about the latest opportunities and how to effectively leverage them.
- **Stipends**: Many respondents highlighted the need for discussions on stipends, including strategies for increasing stipends and ways to supplement them. This reflects concerns about funding adequacy and financial support for students.
- Support Mechanisms:

- T32 Support: There is a significant interest in mechanisms to increase support for T32 Principal Investigators (PIs). This includes exploring additional funding sources, administrative support, and best practices for managing training programs.
- **Mentor Training**: Respondents are interested in enhancing mentor training programs to improve the quality of mentorship and support provided to students.
- Program Management and Improvement:
  - Tracking and Evaluation: Interest in methodologies and tools for better tracking students and evaluating training activities was expressed. This includes improving data collection and analysis for program improvement.
  - Coordination Across Departments: Some responses pointed to the need for better coordination in multi-department training grants, suggesting a desire for strategies to enhance collaborative efforts.

### Sentiment Analysis

- **Positive Sentiment**: The overall sentiment regarding the topics of interest was largely positive. Respondents showed enthusiasm for engaging in discussions that could lead to improved funding strategies, better support mechanisms, and enhanced program management.
- Concern and Need for Improvement: While the sentiment was generally positive, there were underlying concerns about funding adequacy and administrative burdens. These concerns reflect a need for continuous improvement and support in managing training programs effectively.

## Examples of T32 Predoctoral Program successes (over the past 5 years)

Key successes include high rates of job placement, significant achievements in publications and fellowships, and notable improvements in mentor training and program recognition. Efforts to increase diversity and support underrepresented groups have also been successful. Overall, the responses reflect pride in the programs' accomplishments and optimism for continued success and improvement.

- Student Achievements:
  - Graduation and Job Placement: Many respondents highlighted high rates of job placement in STEM fields after graduation, with specific mentions of success rates as high as 98%. This indicates strong program outcomes in terms of preparing students for successful careers.
  - Publications and Fellowships: Successes in trainees publishing their research and obtaining fellowships were frequently mentioned. This reflects the effectiveness of the programs in fostering research skills and providing opportunities for students to advance their careers.
- Program Enhancements:
  - Mentor Training: Increased focus on mentor training has been a notable success. Improved mentorship quality has likely contributed to the overall success of the programs.
  - Internship Encouragement: Programs that have encouraged internships have seen positive outcomes, suggesting that practical, hands-on experiences are beneficial for trainees.
- Recognition and Awards:
  - Student Accomplishments: Specific achievements of graduating students, such as awards and recognitions, were mentioned. These accomplishments highlight the caliber of students and the quality of training they receive.
  - **Program Recognition**: Some programs received institutional or national recognition for their training efforts, indicating a high level of excellence and impact.
- Diversity and Inclusion:

- Increased Diversity: Efforts to increase diversity within the programs have been successful. This includes recruiting trainees from diverse backgrounds and ensuring inclusive training environments.
- **Support for Underrepresented Groups**: Specific successes in supporting underrepresented groups in STEM were highlighted, reflecting a commitment to equity and inclusion.

#### Summary

- **Positive Sentiment**: The sentiment regarding program successes is overwhelmingly positive. Respondents are proud of the accomplishments of their students and the improvements made in their training programs.
- Gratitude and Pride: There is a sense of gratitude towards the efforts of mentors and program administrators, and pride in the collective achievements of the programs.
- **Optimism for the Future**: The positive outcomes and recognition received provide an optimistic outlook for the future of the programs.

## Examples of T32 Predoctoral Program challenges or areas for potential T32 Predoctoral Program Improvements (over the past 5 years)

Funding and financial constraints, particularly related to stipends and support funding, are major concerns. Administrative burdens, such as proposal preparation and tracking, are also significant challenges. Effective coordination of multi-department programs and ensuring high-quality mentorship are areas for improvement. Additionally, efforts to enhance diversity and inclusion need to be strengthened. Despite these challenges, the sentiment is constructive, with respondents committed to finding solutions and improving their programs.

### • Funding and Financial Constraints:

- Fiscal Limitations: Respondents frequently mentioned fiscal constraints as a major challenge. This includes caps on funded slots and insufficient funding to match salary increases.
- Stipend and Support Funding: Challenges in providing adequate stipends and additional financial support for students were highlighted. There is a need for more funding to support the growing financial demands of training programs.
- Administrative and Institutional Support:
  - Proposal Preparation Support: Lack of institutional support for T32 proposal preparation was a common concern. Respondents indicated that the administrative burden of preparing proposals is a significant challenge.
  - Tracking and Reporting: Difficulty in tracking students and training activities over time was mentioned. This includes challenges in collecting, maintaining, and reporting accurate data for program evaluation.
- Program Coordination and Management:
  - Interdepartmental Coordination: Coordinating training grants that involve multiple departments was cited as a challenge. There is a need for better strategies to manage cross-departmental programs effectively.
  - Mentorship and Training Quality: Ensuring high-quality mentorship and consistent training across diverse programs was identified as an area for improvement. Some respondents mentioned the need for more standardized training protocols and mentor support.
- Diversity and Inclusion:
  - Recruitment and Retention: Challenges in recruiting and retaining a diverse cohort of trainees were noted. There is a need for more targeted efforts to attract and support underrepresented groups in STEM fields.

- **Inclusive Training Environments**: Creating and maintaining inclusive training environments that support all students was highlighted as an area needing ongoing attention and improvement.

### Summary:

- **Constructive Sentiment**: The sentiment regarding program challenges is constructive, with PI respondents providing thoughtful feedback on areas needing improvement.
- **Concern and Urgency**: There is a sense of concern about the sustainability and effectiveness of the programs if these challenges are not addressed. Respondents express urgency in finding solutions to these issues.
- **Commitment to Improvement**: Despite the challenges, there is a strong commitment to improving the T32 predoctoral programs. PI respondents are keen to address these issues to enhance the overall quality and impact of their training efforts.