CIRA Early-Career Scientists Panel: "The Nuts and Bolts of NIH Review"

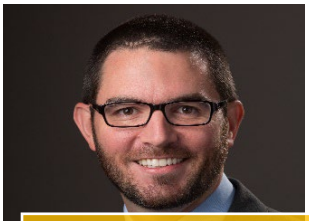
April 29, 2024

The National Institutes of Health (NIH) peer review ensures that applications for funding receive fair, independent, expert, and timely scientific reviews, so that NIH can fund the most promising research.

Jaimie Meyer, MD, MS, FACP
Yale School of Medicine
Panelist

LaRon E. Nelson, PhD, RN, FNP, FNAP, FNYAM, FAAN
Yale School of Nursing
Panelist

Sheela Shenoi, MD, MPH
Yale School of Medicine
Moderator



Jeffrey Wickersham, PhD
Yale School of Medicine
Moderator

Key Takeaways

Developing your research ideas:

- Review available funding priorities and solicitations (e.g., NOSI, PA, RFA) that align with the proposed research ideas.
- Brainstorm with potential collaborators who share common interests, have complementary skills and expertise, and provide local contextual insights.
- Draft specific aims and pitch them to the Program Officer (PO) (Scientific/Research Contact listed at the bottom of funding opportunity page). Connect directly with PO by email or at conferences, or have a mentor to make an introduction.
- Contact the pre-award office at home institution early to develop a timeline and create a proposal checklist (i.e., the scavenger hunt).

Writing your grant proposal:

- Budget your time – 6-8 weeks at the minimum. (Note: scavenger hunt takes the longest; the office of sponsored research needs the proposal package 7 days in advance of the actual due date).
- Schedule writing blocks into your calendar.
- Let your family and friends know that you will need TLC.
- Read the funding announcement carefully.
- Look for opportunities for internal peer reviews and/or allocate time to request feedback from colleagues and mentors.

During NIH peer review:

- Once submitted to NIH, your proposal will be assigned to a study section or a special emphasis panel consisting of three reviewers.
- Each reviewer will score for Significance, Innovation, Approach, Investigator, and Environment and consider Human Subjects Protection and Budget.
- Funding decisions are made on the basis of the reviewers' scores and the amount of available funds that vary by institute and year.

After NIH peer review:

- In most cases, investigators will receive a summary statement that includes an overall impact score, the reviewers' critiques, and a summary of the discussion.
- Applications considered as non-competitive ("not discussed") will receive the reviewers' critiques but not an overall impact score.
- Arrange to meet with the PO who may help interpret the review results and give guidance in discussing next steps.

CIRA Early-Career Scientists Panel: "The Nuts and Bolts of NIH Review"

Important things to remember:

- Take the critiques as constructive criticism to help rewrite and improve the proposal.
- Reviewers read and review grant proposals on top of their other responsibilities, and often when they might be tired, hungry, or in transit. Remember to write your grant proposal with clear and consistent language and format throughout.
- Don't assume that the reviewers are completely familiar with the area of science.
- Everyone gets rejected. Don't take it personally!

Resources

National Institutes of Health

- Information for Applicants
- Planning and Writing (including grant writing tips and sample grant applications)
- Scoring and Summary Statements (including assigning an overall impact score)
- First-Level Peer Review (including "not discussed")
- (Archived) Workshop for Early Career Investigators in HIV
- (Archived) NIH Grants Process: A Brief Walk-Through for Beginners
- Upcoming and Archived Events: NIAID Grant Writing Webinar Series

Yale University

- Center for Interdisciplinary Research on AIDS (CIRA) (peer review, Core consultation, pilot funding, career consultation)
- Office of Physician-Scientist and Scientist Development (grant library, mock study section, grant writing course)
- Yale Center for Analytical Sciences (YCAS) (study design consultation, statistical design and analysis)
- Yale Center for Clinical Investigation (YCCI) (budgeting, recruitment, clinical trial planning)

Co-organized by the Center for Interdisciplinary Research on AIDS (CIRA) and the Yale Global HIV/AIDS Research Network (GARNER). CIRA is supported by National Institute of Mental Health Grant No. P30MH062294, Trace Kershaw, PhD, Principal Investigator.