Uncle Sam wants YOU to get an NIH training grant: Everything you need to know about applying for pre-doctoral NIH funding

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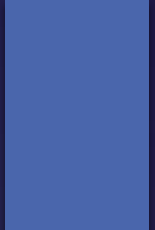
Panelists

- **Stephanie Manasse (Drexel University):** Recipient of NIMH NRSA F31 (2015-2017), *Novel Assessment of Affective Distress Intolerance in Binge Eating*

- **Dr. Evan Forman (Drexel University):** NIH PI, Mentor/Primary sponsor on Stephanie Manasse's NRSA and one previously funded NIDDK F31

- **Dr. Nancy Sherwood (HealthPartners Institute):** NIH PI, NIH reviewer; has served on review panels for training grants

- **Dr. Jessica Magidson (Harvard Medical School/Mass General):** Recipient of NIDA NRSA F31 (2010-2012), *Examining the Effect of Behavioral Activation on Substance Abuse Outcomes*, Recipient of NIDA R36 (2012), *Mediators of the Relationship between Depression and HIV Medication Adherence*, NIDA K23 pending funding (2016-2021): *Hybrid Effectiveness-Implementation Trial for ART Adherence and Substance Use in HIV Care in South Africa*

- **Dr. Scherezade Mama (Penn State):** Recipient of NINR NRSA F31 (2012-2013), *Predicting Physical Activity Adoption among Minority Women using SEM and Participatory Research*

This panel

- Focused on pre-doctoral NIH funding, especially National Ruth Kirschstein National Research Service Awards (NRSAs; F31s)

  - First mechanism in NIH's "trajectory" of research funding (e.g., F31, F32, Ks before R grants)

- Facts are easy to find; practical and useful advice is not

- Primary Aim: Cover material that cannot be found on NIH website

Format of the panel

- Divided into sub-topics

- 15 minutes per topic:
    - Considerations regarding the decision to apply
    - The grant writing process
    - The review process
    - Successful mentorship of predoctoral applications

- We will speak for 5-10 minutes; questions at the end of each topic, and at the end of the panel

Considerations regarding the decision to apply for NIH pre-doctoral grant funding

Question & Answer: Considerations regarding the decision to apply for NIH pre-doctoral grant funding

The grant writing process

Matching training and research aims: very important!

- CONCEPTUALIZE YOUR RESEARCH PROJECT AND TRAINING PLAN **TOGETHER**

- Thinking about each in isolation is **highly problematic**

- In theory, your training plan is much more important than your research strategy; in practice reviewers are inconsistent

- Focus on integration and make sure both are of the highest quality

Example Rationale

- Identifying maintenance factors using non-self-report methods for binge eating pathology is research area
  - Used my published research and presentations as proof of this

- In the application, emphasize how qualified I am… HOWEVER:
  - I don't have *enough* training in emotion regulation/distress tolerance, even though I care about *affective* maintenance factors of binge eating
  - I need to know more about using behavioral measurement for measuring affect
  - EMA is another important way to measure affective changes, but I don't have experience with this yet, either
  - **I can't get these things without an F31 (protected research time) and extra training**

Let's match up project aims with training aims…

Training aims

1. Develop proficiency in methods related to the <u>development and validation of laboratory-based behavioral paradigms</u>, specifically for eating- and affect-related constructs

2. Develop expertise in the <u>role and ecologically-valid measurement of affect-related constructs</u> in the maintenance of eating pathology.

3. Obtain advanced training in quantitative methods, especially in the evaluation of <u>psychometrics</u> and <u>analysis of data</u> obtained by momentary sampling.

Project aims

1. To test the hypothesis that the <u>developed behavioral paradigm</u> will demonstrate <u>sound psychometric properties</u> as demonstrated by good concurrent, discriminant, and criterion validity.

2. To test the hypothesis that affective distress intolerance as measured by the paradigm will <u>differentiate individuals expected to have relatively low and high distress intolerance</u>, i.e., a control sample (n=40) and those with binge eating pathology (n=40).

3. To test the hypothesis that <u>affective distress intolerance will moderate the momentary association between negative affect and binge episodes</u> (measured by EMA)

Choosing a mentorship team

► Your sponsor should be at your institution

► Possible to have an external co-sponsor, but need to justify heavily, and you will likely get dinged anyway

► Add a co-sponsor (or even a co-primary sponsor) if your sponsor does not have expertise in one of the main parts of your research plan,, consider adding a co-sponsor or co-primary sponsor (ideally, at your institution)

  ► OR if your sponsor doesn't have funding

► Limit the number of consultants when possible

► Keep everyone as close as possible to your institution so you can make the case that they will actually play an active role in your research

  ► Best if you or your mentor has collaborated or published with members of your team

My team

Sponsor: Evan Forman   Expert in eating pathology and use of EMA

Co-sponsor: Meghan Butryn   Role of distress tolerance in eating pathology

Consultants:

Edward Selby (Rutgers)   Use of mood inductions in eating disorder research, emotion regulation across psychopathology

Carl Lejuez (UMD)   Development and validation of behavioral measures, esp for distress tolerance

Ross Crosby (North Dakota)   Expert in statistical analyses, with a specialty in EMA data analyses

Question and answer:
The grant writing process

The review process

Question and answer:
The review process

Successful mentorship of predoctoral NIH applications

Topics in mentorship of pre-doctoral NIH grants

▶ What makes someone a good candidate to apply for these awards

    ▶ Realistic assessment of who is competitive

    ▶ Encouraging students to apply

▶ Building applicant skills (no matter the outcome)

    ▶ Part of the rationale is to learn grantsmanship, scientific reasoning

    ▶ Help student realize that no matter what, she will learn a lot

Topics in mentorship of pre-doctoral NIH grants

- Facilitating applicants' competitiveness
  - Helping students build a line of research; theoretical and systematic review manuscript
  - Have them help you with your own grants

- Help student anticipate/adaptively respond to critiques and undesirable scores; teach lessons re: need for repeated attempts, perseverance

- Investing time does pay off!
  - Spending time reading many drafts; help students' training and strength of proposal
  - Act as a "pressure test," the toughest possible reviewer

Question and answer: Successful mentorship of predoctoral NIH applications

Closing

► Final question and answer

► Contact: Stephanie Manasse (smm522@drexel.edu)