NIDUS PILOT GRANTS OVERVIEW

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PILOTS TASK FORCE CO-LEADERS

NIDUS
Network for Investigation of
Delirium : Unifying Scientists

Visit deliriumnetwork.org/pilots for all information about NIDUS pilot grant program

WEBINAR OVERVIEW

- Goals of NIDUS Pilot Program

- Funding Update

- Who can apply?

  - Junior vs. Experienced Investigators

- Elements of NIDUS Pilot Proposal

- Overview of review process

- Review Criteria

- Q & A

FUNDING ANNOUNCEMENT

- We have received additional funding from the NIH/NIA to offer **two additional pilot awards** this year!

- We will award a grand total of **FOUR** $50,000 Pilot Awards

GOALS OF THE NIDUS PILOT PROGRAM

Overarching aim: To support pilot studies to advance innovation in delirium research, targeted to priority areas.

- Why?
  - Advance field towards innovate research areas likely to have strong impact
  - Support new investigators entering the field of delirium research
    - Junior Investigators
    - Investigators established in other areas of research transitioning to delirium

WHO CAN APPLY?

- **Any researcher interested in pursuing a delirium-focused research program**

  - Open to basic scientists, translational researchers, clinical researchers

  - Does not need to have substantial prior experience in delirium, but should demonstrate commitment to delirium as focus area.

  - Open to early career and experienced investigators (separate application tracks available)

  - Open to international applicants

JUNIOR INVESTIGATOR TRACK

- Aimed for early-career investigators who plan to dedicate a significant portion of their professional effort on delirium.

- No more than 10 years from completion of final training degree (e.g. physician board certification, PhD, nursing degree, etc.)

- Not intended for investigators who have received significant extramural funding such as NIH R-awards, K23, K08, K12, KL2 or AHA Young Investigator Awards.

- Must have appropriately-qualified mentor.

- Should have at least 50% protected time to pursue research.

- Application includes submission of mentor statement and career development plan

EXPERIENCED INVESTIGATOR TRACK

- Aimed at experienced researchers who aim to use the pilot money to develop ongoing scientific investigations to further delirium research.

- Should have track record of successful prior funding (does not need to be in delirium specifically)

- Should have completed training (e.g. fellowships, PhD studies, post-doc, etc.)

PRIORITY AREAS FOR PILOT GRANTS

- 3 priority areas likely to have broad impact on delirium field have been identified:

  - **Interrelationship of delirium and dementia**: Research that will provide greater insight to the relationship between delirium and dementia.

  - **Innovative studies to identify more effective prevention or treatment approaches for delirium**: Proposals focused on development of new prevention or treatment strategies for delirium, especially multicomponent approaches.

  - **Elucidating delirium pathophysiology**: Research that will shed light on underlying pathophysiology and biological mechanisms of delirium, biomarkers, and may involve animal models or basic laboratory approaches.

- **Priority areas not exclusive - proposals related to any aspect of delirium research are eligible and will be considered by reviewers**

ELEMENTS OF A NIDUS PILOT PROPOSAL

- Title Page

- Abstract

- Scientific Plan

- Career Development Statement (Junior Investigator Track)

- Delirium Research Program Statement

- Appendices

SCIENTIFIC PLAN

- Main narrative of your pilot proposal
  - Specific aims/hypotheses
  - Background and significance of research topic
  - **Research design and methods**
  - Importance of project for career development or overall research goals

Should include:

- Study design
- Sample inclusion/exclusion criteria
- Statistical Analysis plan
  - Including sample size/power
- Strengths and limitations of design

HOW CAN THIS ALL FIT IN 3 PAGES?

- Include *focused* background information, specific to your proposed research area

- Methods: Provide enough detail so reviewers can understand and evaluate what you are proposing, but not necessarily step-by-step.

  - If you are proposing use of a novel or uncommon method, may need to provide more information.

APPENDICES

- References

- PI and co-investigators' NIH biosketches

- Institutional Resources and Environment (1 page)

- Budget (no specific format required)

- Budget justification

- Project timeline with quarterly milestones

- Any other key information

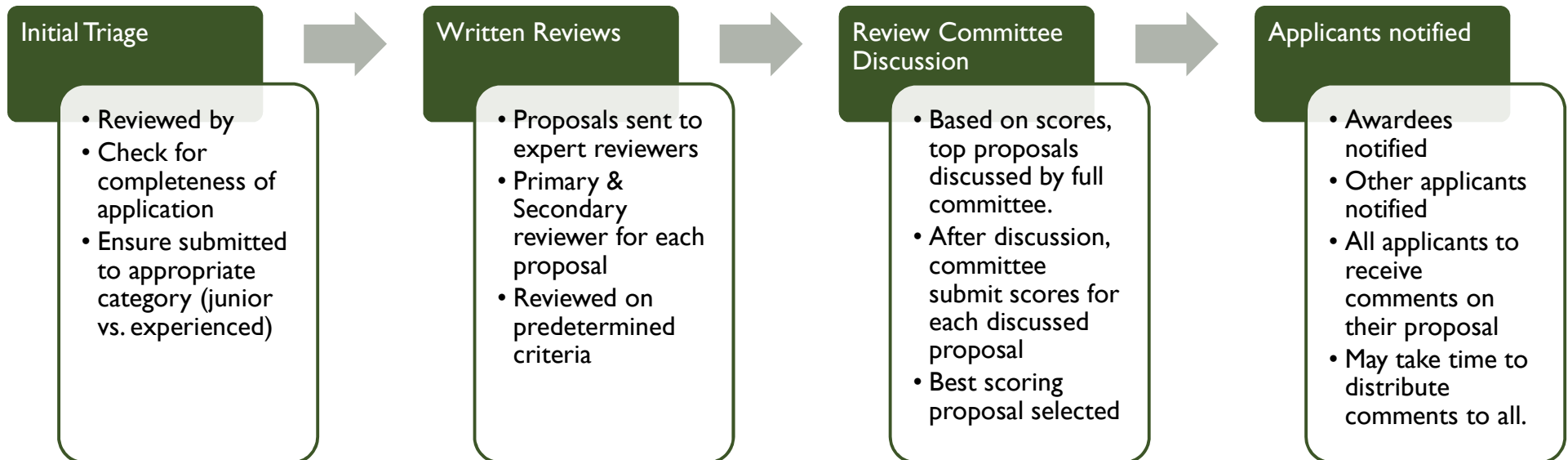## JUNIOR INVESTIGATOR: CAREER DEVELOPMENT PLAN & MENTOR STATEMENT

- Career Development plan:
  - Clearly outline how pilot award will contribute to career development
  - Identify how applicant will develop delirium-focused research portfolio

- Mentor Statement:
  - Should be specific and personal to indicate that mentor and mentee have established relationship.
  - Include information on role mentor will play, how often mentor and mentee will meet, etc.

TIPS FOR APPENDICES

- <u>Biosketches</u>: ensure all biosketches are tailored to specific proposal

- <u>Budget Justification</u>: clearly explain rationale for budget choices. If salary or other costs will be covered from other sources, state clearly in justification.

- <u>Resources and Environment</u>: describe resources available at your institution/research setting including research facilities, available tools/equipment if relevant, educational or career development opportunities.

GRANT REVIEW PROCESS

NIDUS

Initial Triage
- Reviewed by
- Check for completeness of application
- Ensure submitted to appropriate category (junior vs. experienced)

Written Reviews
- Proposals sent to expert reviewers
- Primary & Secondary reviewer for each proposal
- Reviewed on predetermined criteria

Review Committee Discussion
- Based on scores, top proposals discussed by full committee.
- After discussion, committee submit scores for each discussed proposal
- Best scoring proposal selected

Applicants notified
- Awardees notified
- Other applicants notified
- All applicants to receive comments on their proposal
- May take time to distribute comments to all.

REVIEW CRITERIA

- Criteria reviewed on a 9 point scale (1 = best, 9 = worst)
  - Significance
  - Investigators
  - Innovation
  - Approach
  - Environment
  - Feasibility
  - Evidence of Commitment to Establish a Delirium Research Program
  - Career Development (Junior Investigator Only)
  - Overall Impact

SIGNIFICANCE: *WILL THE WORK ADVANCE THE FIELD?*

- Does the project address an important problem or critical barrier to progress in the field?

- If the aims of the project are achieved, how will scientific knowledge, technical capability, and/or clinical practice be improved?

- How will successful completion of the aims change the concepts, methods, technologies, or clinical interventions in the field?

INVESTIGATORS

- Focus on the qualifications and expertise of the members of the research team for the work proposed

  - Do they have the expertise to do the proposed work?

- If the applicant is junior level, do they have appropriate experience and training?

  - Have they lined up the appropriate team to help?

- If established, do they have a track record in the area? NIH funding?

- If the project is collaborative or multi-PD/PI, do the investigators have complementary and integrated expertise?

INNOVATION

- Is the application novel or does it improve previous work?

- Does the application challenge and seek to shift current research or clinical practice paradigms by utilizing novel concepts, approaches, or methodologies?

APPROACH

- Are the overall strategy, methodology, and analyses well-reasoned and appropriate to accomplish the specific aims of the project?

- Are potential problems, alternative strategies, and benchmarks for success presented?

- If the project is in the early stages of development, will the strategy establish feasibility and will particularly risky aspects be managed?

FEASIBILITY – INCLUDED IN ASSESSMENT OF APPROACH

- Is the project overly ambitious?

- Can the aims be achieved?

  - Within the timeline stated?

  - Within the budget given?

- Is there convincing evidence that the work can be done?

ENVIRONMENT

- Will the scientific environment contribute to the probability of success?

- Are the institutional support, equipment, and other resources adequate for the project?

- Will the project benefit from unique features of the scientific environment, subject populations, or collaborative arrangements?

CAREER DEVELOPMENT

- Does the applicant have a compelling career development plan?

- Does the career development plan include specific information on how the award will contribute to their career trajectory?

- Does the applicant have an appropriate mentor?

OVERALL IMPACT

- Likelihood for the project to exert a sustained, powerful influence on the research field involved

- Assessment of the strengths and weaknesses outlined for each of the five scored criteria

- An application does not need to be strong in all categories to be judged likely to have major scientific impact
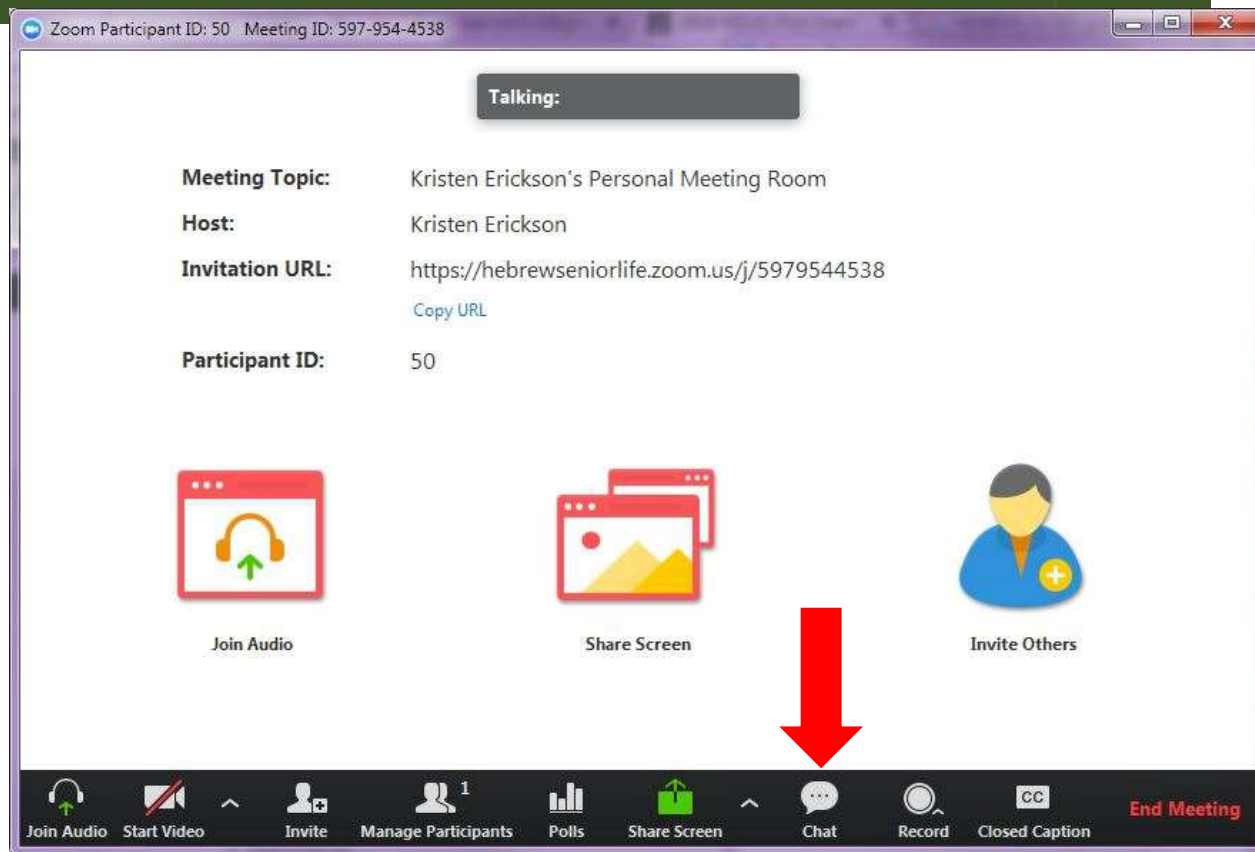
FREQUENTLY ASKED QUESTIONS

NIDUS

- *Are indirect (F&A) costs covered?*

  - **Yes.** The Pilot award will cover up to $50,000 direct costs and indirect costs up to 63% for US institutions and 8% for foreign institutions.

- *Can international researchers apply? Do they need a collaborator in the US?*

  - **Yes,** international applicants welcome. A US-based collaborator or coinvestigator is not required.

- *What is the start date if I receive the award?*

  - We are planning for a start date in **April 2020**, but this may be negotiable.

QUESTIONS?

- Use the chat feature in Zoom to type your questions – we will answer as many as possible

- Emails:

- nidus@hsl.Harvard.edu

- Avidanm@wustl.edu

- Thomas.Robinson@ucdenver.edu

- Website: deliriumnetwork.org/pilots

ADDITIONAL GRANT WRITING RESOURCES

- Common Mistakes in Writing Applications (From NIH/NIMH)

- NIH Sample Applications and More (From NIH/NIAID)

- Best Practices for Mixed Methods Research (From NIH/OBSSR)

- Methodological and Statistical Issues in Research Proposals (slides by Richard Jones ScD and Thomas Travison PhD, presented at 2017 Delirium Boot Camp)

- Note: Many resources listed here are tailored to NIH grant applications, for specific formatting instructions for NIDUS Pilot grants please refer to the instructions on our website.

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