Division of Environmental Biology (DEB)
Virtual Office Hour

Today’s topic:
How to Write a Great Proposal

Welcome to the DEB Virtual Office Hour.
We will begin soon.

Please submit questions via the Q&A button available to you on ZOOM. Please set to “Send anonymously”
Program Officers in attendance today

- Matt Herron – Evolutionary Processes (mherron@nsf.gov)
- Kendra McLauchlan – Ecosystem Sciences (kmclauch@nsf.gov)
- Bruce Lieberman- Systematics and Biodiversity Science (blieberm@nsf.gov)
- Leslie Rissler- Evolutionary Processes (lrissler@nsf.gov)
- Heather Throop- Ecosystems Science (hthroop@nsf.gov)
- Doug Levey- Population and Community Ecology (dlevey@nsf.gov)

Facilitators – Christina Washington, Bill Lawson, and Megan Lewis
Recent Solicitations and DCLs

Find links to all recent solicitations and Dear Colleague Letters at the bottom of the DEB webpage (WebSearch: NSF DEB) under Funding Opportunities and Popular Links

Remember – Core DEB solicitation (NSF 21-504) has no deadlines and no submission limits.

- NSF 20-525 – Faculty Early Career Development Program (CAREER) – Deadline July 26
- NSF 20-564 – Opportunities for Promoting Understanding through Synthesis (OPUS) – Deadline Aug. 2
- NSF 21-584 – Research Experiences for Teachers Sites in Biological Sciences (BIORETS) – Deadline Aug. 2
- NSF 21-590 – Predictive Intelligence for Pandemic Prevention Phase I: Development Grants – Deadline Oct. 1
- DCL 21-021 – Career-Life Balance Supplement
- DCL 20-033 – Developing and Supporting the National Ecology Observatory Network (NEON) User Community
- BIO 18-001 – Biological Sciences Temporary/Rotator Program Officer
DEB Virtual Office Hour

• DEB Office Hours: second Monday of each month, 1-2 pm Eastern Time
• Today: How to Write a Great Proposal

• Volunteer to review for DEB: https://www.surveymonkey.com/r/DEBexpertise

Upcoming Topics:
July: No Office Hours; we’ll be back in August!
August 9: PAPPG Funding Opportunities
September 13: BIO Postdoc Fellowship Program
October 18: Intro to DEB and the DEB Core Program Solicitation
November 8: Updates on Dimensions of Biodiversity Research
December 13: How to Write a Great Annual Report and Other Post Award Actions
DEB Office Hours webpage has upcoming topics, registration, and recap posts

https://debblog.nsfbio.com/office-hours/
Questions:

• Submit your questions via the Q&A box on your screen and set to “Send anonymously”

• For recently asked questions and future office hour topics, see the DEB blog (https://debblog.nsfbio.com/)

• For specific questions about your project, please contact a Program Officer
**Program Solicitation**

**NSF 20-542**

**Historically Black Colleges and Universities**

**Award Information**
- Anticipated Type of Award: Standard Grant or Continuing Grant
- Estimated Number of Awards: 25
- Anticipated Funding Amount: $10,000,000

**Eligibility Information**
- Who May Submit Proposals:
  - Proposals may only be submitted by the following:
    - Proposals may only be submitted by accredited Historically Black Colleges and Universities (HBCUs) that have faculty members who conduct research in science and/or engineering and/or STEM education.
- Who May Serve as PI:
  - The Principal Investigator for an Excellence in Research Project must be a full-time faculty member or researcher at the HBCU from which the proposal is submitted.
- Limit on Number of Proposals per Organization:
  - There are no restrictions or limits.
- Limit on Number of Proposals per PI or Co-PI:
  - There are no restrictions or limits.

**Proposal Preparation and Submission Instructions**

**A. Proposal Preparation Instructions**
- Letters of Intent: Submission of Letters of Intent is required. Please see the full text of this solicitation for further information.
- Preliminary Proposal Submission: Not required
- Full Proposals:

**B. Budgetary Information**
- Cost Sharing Requirements:
Writing a Proposal is different than writing a Paper

A Proposal is:

• aimed at sponsor goals: service attitude, future-oriented, work that should be done

• project-centered: objectives and activities

• persuasive rhetoric: ‘selling’ the reader, personal tone, conveys excitement

• team-focused: feedback needed

• strict length constraints: brevity rewarded

• accessible language: easily understood
Four Key Elements to a Successful Research Proposal

1. Great idea
2. Fit with current research expertise & career development plans
3. Includes a clear strategy, including benchmarks, timelines, and metrics
4. Clearly demonstrates Intellectual Merit and Broader Impacts
Before You Write: Key Points

1. Find the right Program
   • This is crucial and not always easy, since there are many programs at NSF
   • Identify program priorities
   • Review recent awards in public database (nsf.gov)

2. READ the solicitation/announcement

3. Get feedback on your project overview from peers and Program Directors (2-pager)

4. Establish your timeframe for writing and submitting the proposal
Project Summary

The Project Summary IS NOT an abstract of the proposal

Overview – contains clear statement of overarching goal/hypothesis; identifies gap in current knowledge that will be addressed by this research; includes aims and methods

Intellectual merit - potential to advance knowledge

Broader impacts - potential to benefit society or contribute to specific, desired societal outcomes

Informative to other scientists in the same field

Understandable to the broad audience within the scientific domain – often the first thing a reviewer reads
Project Description

• Identify the scientific community that will care most about your results and write for that audience.

• Consider these key questions for Intellectual Merit:

  • What fundamental question does the research answer?
  • Why is the work important?
  • What has already been done?
  • How does the preliminary data support the hypothesis or justify the rationale?
  • What do you intend to do?
  • How does the proposed research move the field forward?
Project Description: Broader Impacts

What is the societal benefit of the proposed project/activity?

- Advance discovery and understanding while promoting teaching, training, and learning
- Broaden participation of underrepresented groups
- Enhance infrastructure for research and education
- Broad dissemination to enhance scientific and technological understanding

When developing your broader impacts activities

- Make sure activities are related to the research
- Novelty is NOT a requirement
- Use resources like ARIS (https://www.researchinsociety.org)
- Be clear on the target – who will benefit from the proposed activities
- Be specific!
What would a postdoctoral Fellow gain out of coming to your lab?

How will you foster the Fellow’s career?

What resources does your institution have available to advance the Fellow’s professional development?

What type of networking opportunities are available?

Who else will mentor the Fellow, and why that person?
Data Management Plan- two pages

Required by PAPPG for all proposals

1. The types of data, samples, physical collections, software, curriculum materials, and other materials to be produced in the course of the project;
2. The standards to be used for data and metadata format and content (where existing standards are absent or deemed inadequate, this should be documented along with any proposed solutions or remedies);
3. Policies for access and sharing including provisions for appropriate protection of privacy, confidentiality, security, intellectual property, or other rights or requirements;
4. Policies and provisions for re-use, re-distribution, and the production of derivatives; and
5. Plans for archiving data, samples, and other research products, and for preservation of access to them.
Check over proposal before you submit

• Make sure all required documents are supplied
• Budget for what you need to accomplish
• Make sure that there is a clear and logical flow from the big questions
• Describe contingency plans
• Use diagram and/or table if experimental design is complex
• Check for typos, clear images
• Have others read your proposal
• Read the solicitation AGAIN- does proposal fit?
• Read through the PAPPG proposal preparation checklist