

# Division of Mathematical Sciences (DMS)

## Virtual Office Hour

### Date: May 15, 2023

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

Please submit questions via the Q&A box  
available to you on Zoom.

Moderators (VOH team): Jennifer Connell, J. Matthew Douglass,  
Carmen Franceschi, Stacey Levine, Adriana Salerno, Chris Stark,  
**Jeremy Tyson**, David Waldner



# Division of Mathematical Sciences (DMS)

## Today's Agenda

Program Directors present (and topics discussed) include

- Junping Wang – Deputy Division Director (Announcements and general updates)
- Tomek Bartoszynski (CAREER – Faculty Early Career Development Program)
- Adriana Salerno (NSF's Broader Impacts merit review criterion)

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In the body of the message, put the following command:  
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### Suggest a topic for future VOH:

Send email to [dms-voh@nsf.gov](mailto:dms-voh@nsf.gov)



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## Questions during VOH

- Following the presentations, we will have a live Q&A session
  - Submit your questions via the Q&A box.
  - Questions can be submitted anonymously.
  - We will focus on questions of interest to a wide audience.
  - For specific questions about a particular project, contact a cognizant Program Officer.
- For recently asked questions/copy of slides, see <https://www.nsf.gov/mps/dms/presentations.jsp>.



# Division of Mathematical Sciences (DMS)

## Opportunities and upcoming deadlines

- Upcoming events

<https://www.nsf.gov/events/index.jsp?org=DMS>

- Directorate for Technology, Innovation and Partnership (TIP) Updates Webinar, May 31, 2023, 1:30 -2:30 pm Eastern time

<https://new.nsf.gov/events/nsfs-directorate-technology-innovation-partnership/2023-05-31>

- NSF Virtual Grants Conference, June 5-8, 2023

<https://new.nsf.gov/events/nsf-virtual-grants-conference-june-5-8-2023/2023-06-05>

- DMS funding opportunities

<https://www.nsf.gov/funding/programs.jsp?org=DMS>



# Division of Mathematical Sciences (DMS)

## Opportunities and upcoming deadlines

- Upcoming full proposal deadlines

[https://www.nsf.gov/funding/pgm\\_list.jsp?ord=date&org=NSF&sel\\_org=DMS&status=1](https://www.nsf.gov/funding/pgm_list.jsp?ord=date&org=NSF&sel_org=DMS&status=1)

- Partnerships for Research Innovation in the Mathematical Sciences (PRIMES):  
Target Date May 26, 2023
- Mathematical Sciences Infrastructure Program: Target Date August 1, 2023
- Research Training Groups in the Mathematical Sciences: Deadline August 8, 2023



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## CAREER Program

- **Solicitation:**

<https://www.nsf.gov/pubs/2022/nsf22586/nsf22586.htm?org=NSF>

- **Submission Deadline: July 26, 2023** (Wednesday) by 5PM submitter's local time
- CAREER submissions can come **only through** grants.gov or research.gov

The Faculty Early Career Development (CAREER) Program is a **Foundation-wide** activity that offers the National Science Foundation's **most prestigious awards** in support of early-career faculty who have the **potential to serve as academic role models in research and education** and to lead advances in the mission of their department or organization.



# What should be in a CAREER proposal?

- Compelling research plan
  - Highly competitive, should match expectations in disciplinary programs
  - Appropriate scope for 5 years
  - Strike a balance between do-able research activities and more risky / ambitious pursuits
  - Keep reviewers in mind, often a broader panel than for standard research grants
- Innovative but do-able education plan (more on next slide)
- Plan for effective integration of research and education
- Letter from the department Chair:
  - Support for the PI's proposed research & education activities
  - Description of how the PI's goals and responsibilities mesh with the institution and department
  - Commitment to professional development of the PI (mentoring, whatever is needed to support the PI's efforts to integrate research & education)
  - Verification that the PI is eligible for the CAREER program.



# CAREER Education Plan

- Can include:
  - Curriculum & pedagogy,
  - Outreach (K-12 students & teachers, or the general public),
  - Mentoring at any level (majors and non-majors),
  - Teacher preparation & professional development.
- Go beyond what is expected from any Assistant Professor in your field.
- Workload should not be unreasonable.
- Based on sound rationale: Informed by what has been successful in the past.
- Plan for assessing the success.





# CAREER: Upcoming Webinars

- 2023 Foundation CAREER Program Information Webinar
  - Monday, May 15, 2023, 3:00-4:30 pm Eastern time (immediately following this Virtual Office Hour)
  - Thursday, May 25, 2023, 3:00-4:30 pm Eastern time
  - Register in advance for this webinar at <https://new.nsf.gov/events/2023-nsf-career-program-informational-webinar/>
- CAREER proposal submission logistics webinar
  - Held as part of the **Spring 2023 NSF Virtual Grants Conference**
  - Tuesday, June 6, 2023 from 3:00 to 4:00 pm Eastern time
  - Will include a demo of how to prepare a CAREER proposal in Research.gov, review of the system-related requirements in the CAREER proposal submission timeline guidance, and a Q&A session.
  - Submit questions in advance to [careerproposalprep@nsf.gov](mailto:careerproposalprep@nsf.gov).
  - Register in advance for the **Spring 2023 NSF Virtual Grants Conference** at <https://nsfpolicyoutreach.com/23-spring-grants-conference/>.



# Broader Impacts

- **full participation** of women, persons with disabilities, and individuals from underrepresented minority groups in science, technology, engineering, and mathematics (STEM);
- improved **STEM education** and educator development at any level;
- increased public **scientific literacy** and **public engagement** with science and technology;
- improved well-being of individuals in society;
- development of a diverse, **globally competitive** STEM workforce;
- increased **partnerships** between academia, industry, and others;
- improved national security;
- increased economic competitiveness of the U.S.;
- use of science and technology to inform **public policy**;
- **enhanced infrastructure** for research and education



# Broader Impact Resources

- <https://www.nsf.gov/oia/special/broaderimpacts/>
- <https://www.nsf.gov/pubs/2002/nsf022/bicexamples.pdf>
- <https://beta.nsf.gov/science-matters/nsf-101-five-tips-your-broader-impacts-statement>



# Virtual Office Hour: Questions from registration

1. CAREER
  - A. Is it possible to apply for a CAREER award and another NSF award in the same year? Specifically, is it possible to apply for a CAREER award and a LEAPS award in the same year?
  - B. Any special tips for those who are considering to apply for CAREER as a PI at a primarily teaching institution (PUI)?
2. Broader Impacts
  - A. Are Broader Impacts for PIs with recent PhD.s evaluated differently? Do expectations change with career stage?
  - B. Does every PI have to include certain specific broader impact activities?
  - C. How long should the broader impacts section of the proposal be? Should Broader Impacts be discussed in general or specific terms?
  - D. Can a PI request funding for broader impact activities?
  - E. If a PI collaborates across mathematical disciplines, is it considered a broader impact?
  - F. Do the broader impact activities have to be directly related to the research of the proposal?
  - G. Should PIs focus on past or future accomplishments when discussing Broader Impacts?
  - H. Should a PI include a letter of collaboration if external people or organizations will be involved?
3. General:
  - A. May I submit a one-page summary of my proposal in advance to determine suitability of a submission for a specific program?
  - B. What type of funding opportunities are available for projects to get undergraduate students interested in mathematics?



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## Virtual Office Hour: Thank you

- For slides and recently asked questions, see <https://www.nsf.gov/mps/dms/presentations.jsp>
- Submit questions/suggestions to [DMS-VOH@nsf.gov](mailto:DMS-VOH@nsf.gov)
- Submit questions through event registration form
- For specific questions about your project, contact a Program Officer
- For future Virtual Office Hour topics, see <https://www.nsf.gov/events/index.jsp?org=DMS>
- Next DMS VOH: Thursday June 15 2:00 pm Eastern Time
  - Topics include: Research Experiences for Undergraduates (REU) and REU Supplements
  - Questions can be submitted in advance on the registration form.

