

# Division of Mathematical Sciences (DMS)

## Virtual Office Hour

Date: November 18, 2021

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**,  
Constanze Liaw, LaWanda Myers, Swatee Naik, Adriana Salerno,  
Chris Stark, David Waldner

**Be sure to stay for the Q&A session at the end of the meeting!**



# Division of Mathematical Sciences (DMS)

## Questions and Answers

- Submit your questions via the Q&A box
  - Q&A session is held at the end of the office hour.
  - Questions can be submitted anonymously.
  - We will focus on questions that may be of interest to a wide audience.
  - For specific questions about a particular program or solicitation, first, be sure to read the webpage or the solicitation, then if needed - contact a cognizant Program Officer.
- For recently asked questions/copy of slides, see <https://www.nsf.gov/mps/dms/presentations.jsp>
- Next DMS Virtual Office Hour: January 2022
  - Date and time TBD, will be announced in the DMS Newsletter
  - Topics include: DMS JMM activities
  - Questions can be submitted in advance on the registration form



# Division of Mathematical Sciences (DMS)

## Today's Agenda

- Upcoming deadlines and Updates from the Division Director – **Juan Meza**
- Statistics – Gabor Szekely, Yulia Gel, **Edsel Pena**, Huixia Wang, Nandini Kannan
- MPS-Ascend – Marian Gidea, **Swatee Naik**, Sandra Spiroff
- LEAPS-MPS – Tomek Bartoszynski, Tiziana Giorgi, Yulia Gorb, Eun Heui Kim, Krishnan Shankar, **Michelle Bushey (OMA)**
- Mathematical Sciences Infrastructure Program – Tomek Bartoszynski, J. Matthew Douglass, Tiziana Giorgi, **Henry Warchall**
- Q&A

### Subscribe to DMSNEWS:

Send email to [listserv@listserv.nsf.gov](mailto:listserv@listserv.nsf.gov)

In the body of the message, put the following command:  
subscribe dmsnews [your name]

### Suggest a topic for future VOH:

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



# Division of Mathematical Sciences (DMS)

## Opportunities and Upcoming Deadlines

- [DMS funding opportunities](#)
- [Upcoming deadlines](#)
  - Statistics, December 1-15 (proposal window)
  - MPS-Ascend, January 6, 2022
  - LEAPS-MPS, January 7, 2022
  - Mathematical Sciences Infrastructure Program, February 1, 2022
- [Updated PAPPG](#) for proposals submitted or due, on/after October 4



# Division of Mathematical Sciences (DMS)

Updates from Division Director Juan Meza

November 18, 2021

- Budget
- MPS AC recap
- JMM



# STATISTICS PROGRAM

## General Information

- **Website**

- [https://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=5556](https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5556)

- **Program Officers**

Gabor Szekely [gszekely@nsf.gov](mailto:gszekely@nsf.gov)

Yulia Gel [ygel@nsf.gov](mailto:ygel@nsf.gov)

Edsel A. Pena [epena@nsf.gov](mailto:epena@nsf.gov)

Huixia (Judy) Wang [huiwang@nsf.gov](mailto:huiwang@nsf.gov)

Nandini Kannan [nakannan@nsf.gov](mailto:nakannan@nsf.gov) (on leave)

- **Submission Deadline: December 15, 2021 (PD 18-1269)**

- **Submission Window:** December 1, 2021 - December 15, 2021



# STATISTICS PROGRAM

## Overview

- **The Program supports** research in statistical theory and methods, including research in statistical methods for applications to any domain of science and engineering.
- **The Program has a vested interest** in the
  - [CAREER program](#)
  - [FRGMS program](#)
  - [RTG program](#)
  - [Conferences and Workshops](#)
- Proposals submitted to another program (e.g., CDS&E-MSS) may list the Statistics Program as a secondary program.



# STATISTICS PROGRAM

## Related Programs and at JSM

- **Related Programs**

- [Algorithms for Threat Detection](#) (ATD)
- [Joint DMS/NIGMS Initiative to Support Research at the Interface of the Biological and Mathematical Sciences](#) (DMS/NIGMS)
- [Computational and Data-Enabled Science and Engineering in Mathematical and Statistical Sciences](#) (CDS&E-MSS)
- [IMR Program](#) (Internet Measurements Research) **Webinar on Monday, November 22, 1-2:30 EST.** Register in advance [here](#).
- [CAS DCL](#) (Critical Aspects of Sustainability – climate related)

- **Statistics Booth at JSM 2022, Aug 6-11 in Washington, DC**

- Opportunities for one-on-one chats with program officers





# Mathematical and Physical Sciences Ascending Postdoctoral Research Fellowships (MPS-Ascend)

- **Program Website**

- <https://beta.nsf.gov/funding/opportunities/mathematical-and-physical-sciences-ascending-postdoctoral-research>

- **November 10 webinar slides**

- [https://www.nsf.gov/mps/mps\\_webpage\\_documents/ascend\\_mps\\_fy22\\_webinar.pdf](https://www.nsf.gov/mps/mps_webpage_documents/ascend_mps_fy22_webinar.pdf)

- **Submission Deadline: January 6, 2022 ([NSF 22-501](#))**

- Proposals are submitted by the fellowship applicant via Fastlane (recommended) or Grants.gov, to the Office of Multidisciplinary Activities (OMA PO Michelle Bushey); must identify a secondary unit of consideration

- **DMS code: 7335 Workforce in the Mathematical Sciences**

- **DMS Program Officers**

Marian Gidea ([mgidea@nsf.gov](mailto:mgidea@nsf.gov))

Swatee Naik ([snaik@nsf.gov](mailto:snaik@nsf.gov))

Sandra Spiroff ([sspiroff@nsf.gov](mailto:sspiroff@nsf.gov))



# MPS-Ascend

## Research fellowship with significant broadening participation and professional development components

- **Purpose**

- To support postdoctoral fellows by facilitating their participation in research environments that will have maximal impact on their future scientific development, who will actively broaden the participation of underrepresented minorities (Blacks or African Americans, Hispanics, Latinos, and Native Americans, incl. Alaska Natives, Native Hawaiians or other Native Pacific Islanders).

- **Eligibility**

- Applicants must be U.S. citizens, nationals, or permanent residents; they must have completed all requirements for the doctoral degree by the start date of the postdoc appointment (no later than October 1).
- Applicants are not required to be members of the underrepresented minority groups mentioned above. It is okay to have applied to Mathematical Sciences Postdoctoral Research fellowship in 2021.

- **Fellowship information**

- The duration of a Fellowship award is between 12 and 36 months and the amount is \$100,000 per year (directly paid to the fellow), including stipend, fringe benefits, and other expenses.



# MPS-Ascend: key proposal components

- **Project Description (10 pages)**
  - Proposed scientific accomplishments, how they relate to the fellow's career goals.
  - A detailed description of how the applicant and the project will serve to broaden participation.
  - While describing the importance of proposed research, be aware of the audience. A review panel will include all areas of mathematical sciences.
- **Sponsoring Scientist Statement (3 pages)**, which describes
  - A substantive mentoring plan, including experience in postdoc mentoring and broadening participation.
  - Suitability of institutional environment and resources and of the match between fellow and sponsor, including alignment of research goals.
  - Agreement to support the fellow in cohort building and professional development.
- **Reference Letters (2-3)**
  - One letter from the doctoral advisor; the sponsoring scientist may not provide a reference letter unless they are also the applicant's doctoral advisor.
  - These letters are uploaded by the candidate, so they are not confidential.

For more details, please see the solicitation and the detailed webinar slides from November 10, 2021. Contact us with any specific questions that are not addressed in these sources.



# Launching Early-Career Academic Pathways in the Mathematical and Physical Sciences (LEAPS-MPS)

- **Program Website**

- <https://beta.nsf.gov/funding/opportunities/launching-early-career-academic-pathways-mathematical-and-physical-sciences>

- **November 9 Webinar Slides**

- [https://www.nsf.gov/mps/mps\\_webpage\\_documents/LEAPS-MPS%20FY22%20webinar.pdf](https://www.nsf.gov/mps/mps_webpage_documents/LEAPS-MPS%20FY22%20webinar.pdf)

- **Submission Deadline: January 7, 2022 ([NSF 22-503](#))**

- **Submit to DMS code: 7335 Workforce in the Mathematical Sciences**

- **DMS Program Officers**

Tomek Bartoszynski ([tbartosz@nsf.gov](mailto:tbartosz@nsf.gov))

Yulia Gorb ([ygorb@nsf.gov](mailto:ygorb@nsf.gov))

Andrew Pollington ([adpollin@nsf.gov](mailto:adpollin@nsf.gov))

Tiziana Giorgi ([tgiorgi@nsf.gov](mailto:tgiorgi@nsf.gov))

Eun Heui Kim ([eukim@nsf.gov](mailto:eukim@nsf.gov))

Krishnan Shankar ([kshankar@nsf.gov](mailto:kshankar@nsf.gov))

# LEAPS-MPS PROGRAM

- **Emphasis**

- Help launch the careers of *pre-tenure/tenure track faculty* in MPS fields at institutions that do not traditionally receive significant amounts of NSF-MPS funding. These might include: *U.S. minority-serving institutions (MSIs), predominantly undergraduate institutions (PUIs), and Carnegie Research 2 (R2) universities* (institution type is emphasized, not a requirement)

- **Intent**

- Initiate viable independent research programs for early career researchers attempting to launch their research careers in MPS supported fields

- **Goal**

- Achieve excellence through diversity and broadening participation (BP) to include members from groups *underrepresented in MPS* (Blacks and African Americans, Hispanics, Native Americans, Alaska Natives, and Native Hawaiians, and other Pacific Islanders)

- **Eligibility**

- pre-tenure/tenure track faculty in MPS fields
- must not have been a PI or co-PI on an NSF research grant
- U.S. citizens or lawfully admitted U.S. permanent residents at the time of proposal submission

# LEAPS-MPS PROGRAM

## • Important Aspects of the Proposal

- must describe the research activities, and how the research performed is
  - a. scientifically compelling and
  - b. on a path that will lead to future opportunities
- must present a specific plan that shows how the proposed BP activities will increase
  - a. the participation of scientists from underrepresented groups and
  - b. the numbers of such individuals that serve as role models for the scientific workforce of the future
- should discuss how the proposed research activities will facilitate development of a subsequent research plan for future proposals

## • Project Description

- not to exceed 15 pages total addressing items above
- must contain a *LEAPS-MPS Impact Statement* (2-3 pages within the 15-page limit) - see solicitation for details.

## • Supplemental Documents

- Institution Letter

For more details, please see the solicitation and the detailed webinar slides from November 9, 2021. Contact us with any specific questions that are not addressed in these.

# INFRASTRUCTURE PROGRAM

## General Information

- **Website**

- <https://beta.nsf.gov/funding/opportunities/mathematical-sciences-infrastructure-program>

- **Program Officers**

Tomek Bartoszynski ([tbartosz@nsf.gov](mailto:tbartosz@nsf.gov))

J. Matthew Douglass ([mdouglas@nsf.gov](mailto:mdouglas@nsf.gov))

Tiziana Giorgi ([tgiorgi@nsf.gov](mailto:tgiorgi@nsf.gov))

Henry Warchall ([hwarchal@nsf.gov](mailto:hwarchal@nsf.gov))

- **Deadlines:** February 1, 2022 and August 2, 2022 (**PD 20-1260**)

- **Scope:** To foster the continuing health of the mathematical sciences research community as a whole. Supported activities have regional or national impact, substantially beyond the submitting institution or the location of an event



# INFRASTRUCTURE PROGRAM

## Program Priorities

**Types of projects supported include**

**1. Novel projects that serve to strengthen research infrastructure**

... cutting across multiple DMS sub-disciplines or involving interdisciplinary collaborations

... creating a new research infrastructure or substantially enhancing an existing infrastructure

**2. Training projects (not fitting DMS Workforce programs MSPRF, RTG, REU Sites)**

... including a core research component for trainees in mathematical sciences

... differing significantly from or greatly enhancing common practice

... serving as models to be replicated

**3. Conferences, Symposia, Working Research Sessions, and Travel Support**

... spanning a wide range of mathematical topics (not within scope of disciplinary programs)





# Division of Mathematical Sciences (DMS)

## VOH: Some questions from registration

- General
  - Are the proposals reviewed by a panel or by individual reviewers?
  - Are there any special format/accommodations for proposals that are revised and resubmitted from a previously submitted proposal?
- Statistics
  - Does the Statistics program allow dual submissions (submit two distinct proposals by the same PI)? Will there be a negative impact?
  - Could a PI who submitted a CAREER proposal, whose decision is still unknown before 12/15, submit a proposal to the regular Statistics Program solicitation?
  - Could one submit a proposal that is purely “data science” in the Statistics Program?
- Ascend and LEAPS
  - (Ascend) May I propose to stay at the same doctoral/postdoctoral institution or return to a previous doctoral/postdoctoral institution for the fellowship?
  - (Ascend) My sponsoring scientist will be away on a sabbatical for a part of the fellowship, so (1) can I have two or more sponsoring scientists, or (2) what do you suggest I do?



# Division of Mathematical Sciences (DMS)

## 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)
- For specific questions about projects, contact a Program Officer
- For future Virtual Office Hour topics, see [https://www.nsf.gov/events/index.jsp?org=NSF&event\\_type=12&orgToSearch=MPS&month=&](https://www.nsf.gov/events/index.jsp?org=NSF&event_type=12&orgToSearch=MPS&month=&)
- Next DMS VOH: January 2022 (check the DMS web page or newsletter for updates)

**HAPPY HOLIDAYS!!**

