



NSF Funding Opportunities: Statistics & Data Sciences

August 6, 2023

2023 JSM Toronto Funding Opportunities Panel

Yulia R. Gel, Program Officer
Division of Mathematical Sciences (DMS)
and
Directorate for Technology, Innovation and Partnerships (TIP)
National Science Foundation

NSF's 3 Major Priorities Align with White House and Congressional Priorities



STRENGTHENING
ESTABLISHED NSF



INSPIRING
MISSING MILLIONS



ACCELERATING
TECHNOLOGY AND
INNOVATION

Advance Emerging Industries for National and Economic Security

Build a Resilient Planet

Create Opportunities Everywhere

Strengthen Research Infrastructure

DIRECTORATE

MPS

MATHEMATICAL
AND PHYSICAL
SCIENCES

DIVISION

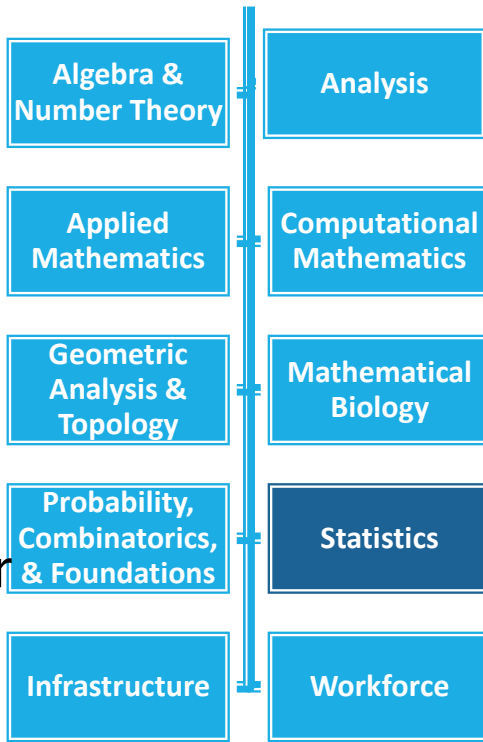
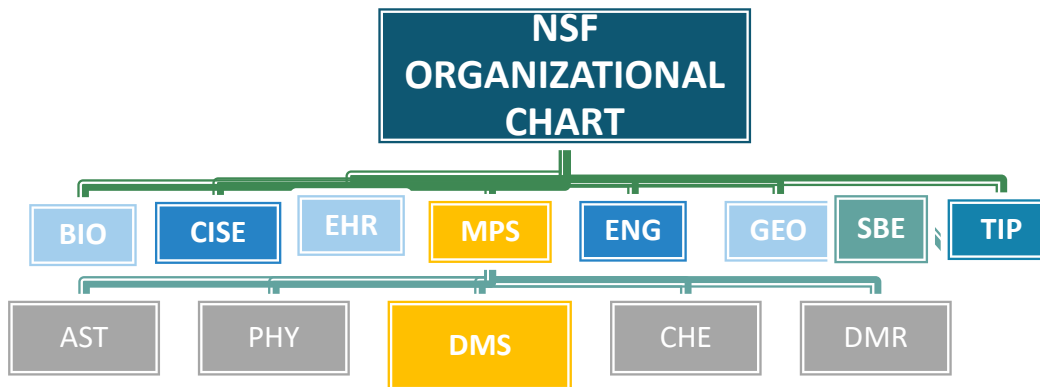
DMS

DIVISION OF
MATHEMATICAL
SCIENCES

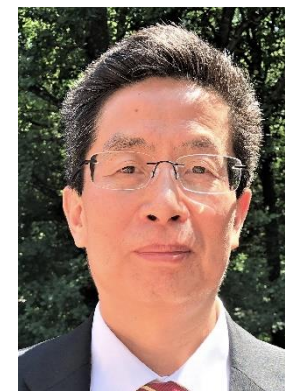
STATISTICS
PROGRAM

Yulia R. Gel
Edsel Pena,
Yong Zeng,
Jun Zhu

David
Manderscheid
Division Director



Junping
Wang
Deputy
Division Director



Statistics Program

- ▶ Support research in statistical theory & methods, including research for applications to any domain of science and engineering
- ▶ [Core Statistics Program](#)
- ▶ [Conferences and Workshops Math Sci.](#)
- ▶ [Focused Research Groups in Math Sci. \(FRGMS\)](#)
- ▶ [Research Training Groups in Math Sci. \(RTG\)](#)



Programs of special interest to students and junior faculty

- ▶ Faculty Early Career Development Program ([CAREER](#))
- ▶ Launching Early-Career Academic Pathways ([LEAPS-MPS](#))
- ▶ Math. & Phy. Sci. Ascending Postdoctoral Research Fellowships ([MPS-Ascend](#))
- ▶ Mathematical Sciences Postdoctoral Research Fellowships ([MSPRF](#))
- ▶ Graduate Research Fellowship Program ([GRFP](#))
- ▶ NSF Mathematical Sciences Graduate Internship ([MSGI](#))



CAREER

- ▶ Support early-career faculty with the potential
 - to serve as academic role models in research and education,
 - to lead advances in the mission of their department or organization.
- ▶ Activities should build a firm foundation for a lifetime of leadership in integrating education and research.
- ▶ **Especially strong focus** on broader impacts such as mentoring and outreach.



LEAPS–MPS

- ▶ Supports the research of pre–tenure faculty
 - in mathematical and physical sciences,
 - with an emphasis on those at institutions that traditionally do not receive significant NSF funding,
 - such as minority–serving, predominantly undergraduate or R2 institutions.
- ▶ **Deadline: January 25, 2024**



MPS–Ascend

- ▶ Supports postdocs in MPS fields who will broaden the participation of traditionally underrepresented groups
- ▶ Fellowships are awards to individuals, not institutions, and are administered by the Fellows.
- ▶ Must be a U.S. citizen (or national) or GC holders.
- ▶ The default duration is 36 months.
- ▶ **Deadline:** October 18, 2023 (2 deadlines per year, October and January)



Interdisciplinary Programs

- ▶ Computational and Data-Enabled Science and Engineering in Math. and Stat. Sciences ([CDS&E-MSS](#))
- ▶ Algorithms for Threat Detection ([ATD](#)) (joint with NGA)
- ▶ Algorithms for Modern Power Systems ([AMPS](#)) (joint with DOE)
- ▶ Joint Initiative in Math Biology ([DMS/NIGMS](#)) (joint with NIH)
- ▶ Planning Proposals to Catalyze Innovative and Inclusive Wildland Fire Science through Diverse Collaborations ([FIRE-PLAN](#)) (cross Directorates)
- ▶ Methodology, Measurement, and Statistics ([SBE/MMS](#))



Methodology, Measurement, and Statistics (MMS) Program

- The MMS Program is an interdisciplinary program in the Directorate for SBE that supports the development of innovative analytical and statistical methods and models for those sciences.
- MMS seeks proposals that are methodologically innovative, grounded in theory, and have potential utility for multiple fields within the social and behavioral sciences.
- Funding Mechanisms:
 - Regular Research Proposals, CAREER, REU, Conferences
- Upcoming Deadlines: August 31, 2023, and January 25, 2024
- MMS Program Officer: Cheryl L. Eavey,
703-292-7269, ceavey@nsf.gov

Mathematical Sciences Institutes–A Community Resource (www.mathinstitutes.org)

- ▶ **AIM**: American Institute of Mathematics.
- ▶ **IAS**: Institute for Advanced Study.
- ▶ **ICERM**: Institute for Computational and Experimental Research in Mathematics, Brown University.
- ▶ **IMSI**: Institute for Mathematical and Statistical Innovation, University of Chicago.
- ▶ **IPAM**: Institute for Pure and Applied Mathematics, UCLA.
- ▶ **SLMath**: Simons Laufer Mathematical Sciences Research Institute, Berkeley, CA.



Support for Conferences and Travel

- ▶ Regional Conferences of the Conference Board of the Mathematical Sciences ([CBMS](#)).
- ▶ National Institutes in the Mathematical Sciences.

Financial support is often available

- ▶ **IMSI**: Long-term program, Algebraic Statistics and our Changing World, Sept 18–Dec 15, 2023
- ▶ **IMSI**: Workshop, Permutation and Causal Inference, Aug 22–25, 2023.
- ▶ Submit your own conference proposals ideally 6+ months in advance



Final Remarks

- Check the published abstracts on the NSF website:
<http://www.nsf.gov/awardsearch>
- Volunteer as a reviewer! Email POs or visit
<https://www.nsf.gov/additional-resources.jsp?org=DMS>
- Subscribe to DMS listserv:
<https://www.nsf.gov/mps/dms/about.jsp>
- **DMS virtual office hours** (VOH):
<https://www.nsf.gov/events/index.jsp?org=DMS>
- Questions? Talk to Program Officers
ygel@nsf.gov (Yulia R. Gel), yzeng@nsf.gov (Yong Zeng),
epena@nsf.gov (Edsel Pena), zhu@nsf.gov (Jun Zhu)

