# Midwest Big Data Innovation Hub

### **Collaboration Cafe**

March 2022







supported by NSF <u>1916613</u>





What We Do

Engage communities, share resources, and build partnerships that harness data science to address societal and scientific challenges.



BigDataHubs.org

## Priority Areas and Cross-cutting Themes

- Advanced Materials and Manufacturing
- Big Data in Health
- Digital Agriculture
- Smart & Resilient Communities
- Water Quality
- Data Science Education and Workforce Development •
- Cyberinfrastructure and Data Sharing



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## Goals:

- Building regional capacity for large-scale proposal response
- Growing a cross-disciplinary network of data science collaborators
- Elevating early career researchers
- Creating a more diverse data science community by actively engaging with non-R1 institutions, including minority-serving institutions (MSIs), tribal colleges and universities (TCUs), and predominantly undergraduate institutions (PUIs)
- Partnering with industry, government, nonprofits, and civic organizations to support translational research and transition-to-practice activities

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## Collaboration Cafe webinar series

### Regular segments:

- Funding opportunity walkthroughs
- Lessons learned from prior awardees
- Researcher lightning talks
- Speed networking
- Small group discussions

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### **Collaboration Cafe resources**



### • MBDH website

- Web page with upcoming sessions
- Short form for engagement
- <u>Slack community</u>
  - Networking
  - Input on future sessions
  - New solicitations
- Shared Google Drive
  - Running notes doc
  - Relevant prior awards to Midwest institutions
- <u>YouTube playlist</u> of webinar recordings

#### **Cafe Ground Rules**

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- Multi-disciplinary team science is a core focus here - all proposal ideas are welcome for discussion
- Research proposals are competitive; some people may not be willing to discuss the details of their projects in this venue
- Private conversations in breakout rooms or Slack private messages are private
- Participating in Collaboration Cafe activities falls under our <u>NSF Code of Conduct</u>



## MBDH engagement on proposals



There are multiple opportunities to have MBDH participate on proposals for this program, or other projects:

- <u>Engagement partner</u>: Communications, outreach, community assessments, participation in Hub events and activities
  - Non-exclusive Letter of Collaboration
  - Minimal to no funding to MBDH
- <u>Collaborative partner</u>: Engagement roles + involvement in developing and managing project activities
  - Non-exclusive Letter of Collaboration, subaward, co-PI roles, etc.
  - Funding to recover costs of MBDH staff time and other expenses
- Note: The MBDH is a neutral party and often provides non-exclusive Letters of Collaboration to multiple proposers to a solicitation











## March Solicitation: NSF CAREER program



	Proposals due: July 25, 2022 5pm [Program overview]		
Program goals	<ul> <li>"A Foundation-wide activity that offers the National Science Foundation's most prestigious awards for faculty members beginning their independent careers."</li> <li>"The intent of the program is to provide stable support at a sufficient level and duration to enable awardees to develop careers not only as outstanding researchers but also as educators demonstrating commitment to teaching, learning, and dissemination of knowledge."</li> </ul>		
Size and duration (max)	<ul> <li>Minimum \$400k total budget over 5 years (\$500k for BIO or Polar)</li> <li>Review prior awards made in your area and talk with NSF PO for additional guidance</li> <li>CAREER awards are eligible for supplemental funding</li> </ul>		
Number of awards (est)	500 per year		
LOI/preproposal?	No, but contacting an NSF Program Officer to discuss the expectations of the NSF Division most aligned with your research is encouraged		
Eligibility limits & other guidance	<ul> <li>1 proposal per PI each cycle; 3 proposals lifetime maximum (1 awarded)</li> <li>Early-career* faculty at all CAREER-eligible organizations*; NSF "especially encourages women, members of underrepresented minority groups, and persons with disabilities to apply"</li> </ul>		

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### NSF CAREER program

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- Who is "early career"?
  - Hold a doctoral degree in a field supported by NSF;
  - Be engaged in research in an area of science, engineering, or education supported by NSF;
  - Hold at least a 50% tenure-track (or tenure-track-equivalent) position as an assistant professor (or equivalent title);
  - Be untenured; and
  - Have not previously received a CAREER award. (Prior or concurrent Federal support for other types of awards for non-duplicative research does not preclude eligibility.)
- What is a "CAREER-eligible organization"?
  - Institutions of Higher Education (IHEs) Accredited 2 or 4 year, including community colleges
  - "Non-profit, non-academic organizations: Independent museums, observatories, research labs, professional societies and similar organizations in the U.S. associated with educational or research activities."

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### NSF CAREER program special requirements & timeline

- Letter of support from home department (specific elements required)
- Letters of Collaboration (specific format required)
  - E.g.: access to a physical site, use of equipment or cyberinfrastructure, access to data
- No co-PIs permitted; some support for senior personnel and/or consultants may be allowed
- "Many programs and Directorates prefer to make more awards by funding CAREER proposals closer to the minimum award size. Proposers should also review the list of recent CAREER awards made in their discipline for guidance on average award size."
- See the detailed Proposal Submission Timeline & milestones supplementary document

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#### I don't have an NSF ID and a PI role to start pr

To apply to the CAREER program, you must have an NSF ID (PI) role at an organization registered with NSF. You reques Administrator is responsible for approving it in advance.

	-		
Target # of Days Before Proposal Submission Deadline	Target Date	Milestone or Action	
	Tuesday,	New users	If you do not h
	July 6,	register for an	prepare propo
20 days	2021	NSF account	systems. For s
			Account to Be
			NSF Account v
			the video tuto
			browser.
	Tuesday,	Register for a PI	To work on p
	July 6,	role and submit	Principal Inve
	2021	PI role request	role. If you do
		to your	this role. Plea
20 days		organization's	Investigator F
		Administrator	
			After request

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### NSF CAREER proposal guidance (from the solicitation)



- "Successful applicants will propose creative, effective research and education plans, along with strategies for assessing these components."
- "The proposed activities should help applicants develop in their careers as both outstanding researchers and educators."
- "While excellence in both education and research is expected, activity of an intensity that leads to an unreasonable workload is not."
- Detailed guidance on: Education Activities, Cross-Disciplinary Perspectives, Cross-Sector Perspectives, Scientific Software Development, International / Global Dimensions,
- See the "Merit Review Principles and Criteria" section





## Other program information and opportunities:

- NSF CISE <u>CAREER Workshop</u>
  - April 4-5, 2022

NSF CAREER program

- NSF IIS Office Hours: Getting Real About CAREER
  - Apr 21 2022 12:00pm CT
- 2022 NSF Engineering CAREER Proposal Writing Workshop
  - May 11-13, 12:00pm 5:00pm CT
- NSF CAREER program webinar
  - TBD; ~June
- Submitted via Research.gov; make sure you set up your account
- Presidential Early Career Awards for Scientists and Engineers (PECASE)

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Contact an NSF Program Officer to discuss the expectations of the NSF Division most aligned with your research.



## Discussion



- Prior experiences with CAREER proposals?
  - What would you do differently (or the same)?
  - What should new proposers be aware of?
  - What was most challenging for you?
  - How has your award influenced your career trajectory?
- Common mistakes or other NSF input
- Other questions







## Get involved

- https://midwestbigdatahub.org/cafe
- info@midwestbigdatahub.org

#### April 21, 2022

3:00-4:00 p.m. CT / 4:00-5:00 p.m. ET

- <u>Topic</u>: Building Smart and Resilient Communities
- <u>Solicitation</u>: NSF Smart & Connected Communities (NSF 22-529)

#### May 19, 2022

3:00-4:00 p.m. CT / 4:00-5:00 p.m. ET

- <u>Topic</u>: Multidisciplinary Data Science in Health
- <u>Solicitation</u>: NSF/NIH "Smart Health and Biomedical Research in the Era of Artificial Intelligence and Advanced Data Science" program (NSF 21-530)



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