

Midwest Big Data Innovation Hub

Collaboration Cafe

August 2022



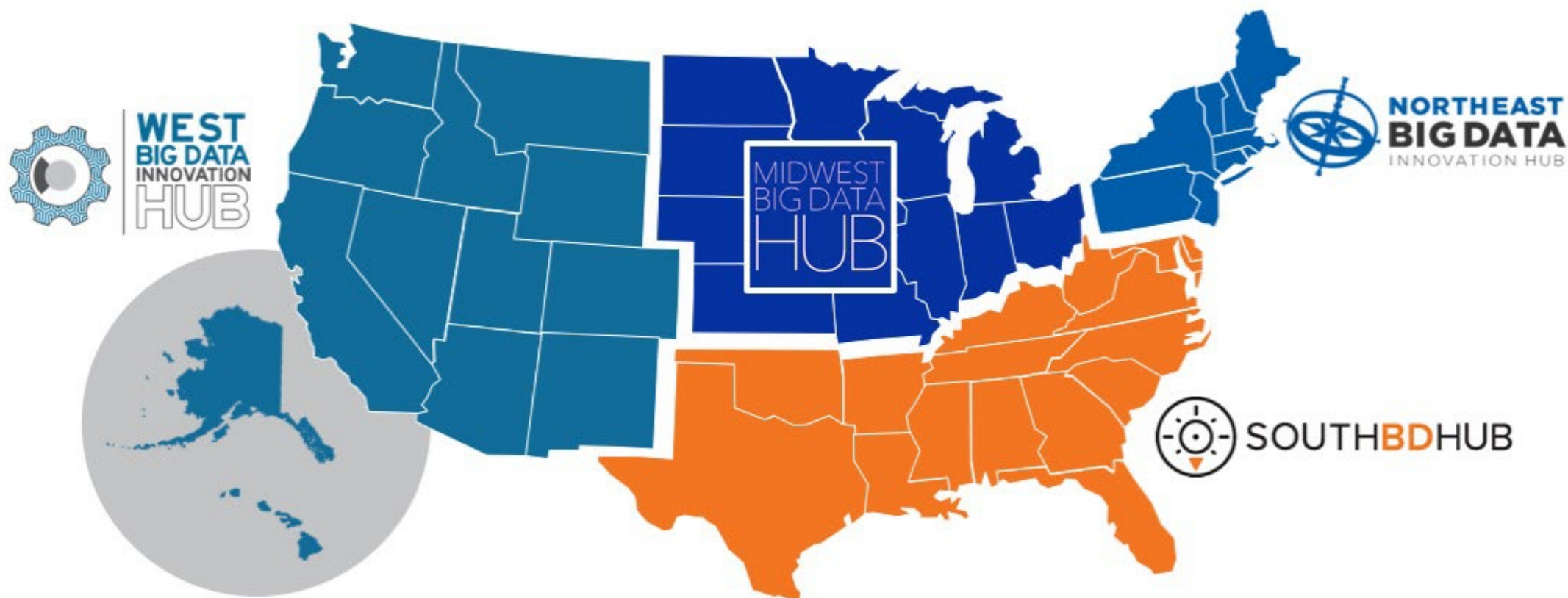
IOWA STATE
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Four regional Hubs, One national mission



What We Do

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



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

Collaboration Cafe webinar series

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

Regular segments:

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

Collaboration Cafe resources

- [MBDH website](#)
 - Web page with upcoming sessions
 - Short form for engagement
- [Slack community](#)
 - Networking
 - Input on future sessions
 - New solicitations
- [Shared Google Drive](#)
 - Running notes doc
 - Relevant prior awards to Midwest institutions
- [YouTube playlist](#) of webinar recordings

Cafe Ground Rules

- 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 [NSF Code of Conduct](#)

MBDH engagement on proposals

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

- Engagement partner: Communications, outreach, community assessments, participation in Hub events and activities
 - Non-exclusive Letter of Collaboration
 - Minimal to no funding to MBDH
- Collaborative partner: 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

August Solicitation: NSF POSE program

Pathways to Enable Open-Source Ecosystems



NSF 22-572	Proposals due: October 21, 2022 [Program overview]
Program goals	<ul style="list-style-type: none"> “The POSE program aims to support managing organizations that will facilitate the creation and growth of sustainable high-impact OSEs around already-developed open-source research products.”
Size and duration (max)	<ul style="list-style-type: none"> Phase I: OSE Scoping Proposals <ul style="list-style-type: none"> \$300k total budget, up to 1 year Phase II: OSE Development Proposals <ul style="list-style-type: none"> \$1.5M total budget, up to 2 years
Number of awards (est)	<ul style="list-style-type: none"> Approx. 10 Phase II awards
LOI/preproposal?	No, but consider contacting a Program Officer to discuss the expectations of the Directorate most aligned with your concept
Eligibility limits & other guidance	<ul style="list-style-type: none"> Do not need to have submitted a POSE Phase I proposal to propose to Phase II No restrictions on number of proposals per PI or per organization Proposals with multiple institutions must have a lead institution and subawardees U.S. accredited institutions of higher education Non-profit, non-academic institutions U.S. for-profit organizations State educational offices or organizations and local school districts



NSF POSE proposal guidance (from the solicitation)

- NSF POSE official [program webinar](#): September 9, 2:00-4:00pm CT
- FAQs and March 2022 webinar recording / slides are [available](#)
- NSF-funded CCRI, CSSI, and other CI projects may be in alignment
- “Aims to fund new managing organizations that catalyze community-driven development and growth of the subject OSEs”
- “Not intended to fund the development of open-source research products, including tools and artifacts.”
- “Not intended to fund existing well-resourced open-source communities and ecosystems.”
- Expected outcomes:
 - (1) to grow the community of researchers who develop and contribute to OSE efforts
 - (2) to enable pathways for the development of collaborative OSEs that could lead to new technology products or services that have broad societal impacts.

NSF POSE Phase II proposal elements

- *Standard elements (Project Summary, Project Description, Budget, etc.)*
 - Title format and keyword requirements
 - Detailed project plan to support the community-driven and collaborative development and deployment of later-stage successful research tools into operational environments.
 - Community outreach plan that (a) outlines activities to engage the intended contributor community that will help to further develop and maintain the technology, and (b) identifies an intended user community or organizations that will serve as early adopters of the technology.
 - A well-developed plan for building an OSE including ecosystem establishment/growth, organizational and governance structure, community building, and sustainability and evaluation plans.
 - Must budget for mandatory OSE training to be held virtually in 2022 and 2023 (approx. 8h/week for 4 weeks)
- *Supplementary Documents*
 - Data Management Plan, including a security plan, and sensitive data plan
 - List of Project Personnel, Collaborators, and Partner Institutions
 - Letters of Collaboration (max. 2 pages; letters do not have to follow the standard NSF format)
- *See the helpful Submission Checklist in the solicitation for more details*

NSF POSE review guidance (from the solicitation)

- Standard NSF “Merit Review Principles and Criteria”
 - “Intellectual Merit”
 - “Broader Impacts”

- Additional Review Criteria for POSE Phase II proposals
 - Does the proposal present a convincing case that the OSE will address an issue of significant societal or national importance that is not currently being adequately addressed?
 - Does the proposal clearly describe the long-term vision for the OSE, including potential partnerships and sustainability?
 - Does the proposal provide convincing evidence that a substantial user base exists for the open-source product that will be the subject of the OSE?
 - Does the proposal justify the OSE within the current technological landscape and present a strong case that an OSE is the best approach for generating impact?
 - Does the proposal present a clear and comprehensive description of the ecosystem within which the OSE will be operating along with plans for ongoing ecosystem establishment/growth and discovery?
 - Does the proposal present a specific, actionable plan for establishing a sustainable organizational structure?
 - Does the proposal present a credible strategy and actionable plan for building a community of contributors and retaining contributors?
 - Does the proposal include a clear, detailed licensing approach for the open-source product that is the subject of the OSE?
 - Does the proposal clearly describe a build and test infrastructure, and procedures to address quality control and security of new content?
 - Does the proposal present a clear, actionable evaluation plan to measure the success of the OSE with respect to its sustainability goals?
 - Does the proposing team have the required expertise and experience to undertake the Phase II activities described in the solicitation?
 - Will NSF support serve as a critical catalyst for the establishment and growth of the OSE towards achieving sustainability?
 - Does the proposal include third-party letters of collaboration from current users of the open-source technology that is the subject of the OSE?

Discussion

- What OSE opportunities exist in the Midwest that collaborators could partner to address?
- What are projects that are at the right level of readiness?
- What does an open source ecosystem look like to you?
- What kinds of community-building activities has your OSS team been engaged in?

Get involved

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

September 22, 2022

3:00–4:00 p.m. CT / 4:00–5:00 p.m. ET

- Topic: Midwest Workshop on Data for Healthy, Resilient Communities
- Solicitation: NIH general workshop proposal

October 20, 2022

3:00–4:00 p.m. CT / 4:00–5:00 p.m. ET

- Topic: Envisioning a Center of Excellence for Midwest CI Workforce Development
- Solicitation: NSF CI Center of Excellence (CoE)

