

Mini-grant Funding Opportunity in Digital Agriculture

Proposal Deadline: April 10, 2017

In March 2016 the Division of Computer and Information Systems and Engineering (CISE) of the National Science Foundation (NSF) established four Big Data Regional Innovation Hubs as part of its investment in the 2015 Big Data Research and Development Initiative. The Midwest Big Data Hub (MBDH) – led by the University of Illinois at Urbana-Champaign, the University of Michigan, Iowa State University, Indiana University, and the University of North Dakota – has identified Digital Agriculture as a primary focal area.

The NSF recently awarded a Midwest “Big Data Spoke” project award to investigators from the University of North Dakota, Iowa State University, the University of Nebraska-Lincoln, and Kansas State University to advance Big Data management and analysis essential to sustainable global food security. One of the objectives of this award is harmonizing and automating big data lifecycles in plant sciences, phenomics, and genomics.

To that end, the University of Nebraska-Lincoln and Iowa State University are launching a mini-grant funding opportunity to address data challenges associated with digital agriculture.

This opportunity will fund teams to pursue projects of one year in length with one or more of the following expected outcomes:

1. Improved democratization of data
2. Interoperability among projects and resources
3. Reuse of agricultural data sets, databases, and computational resources

We anticipate awarding four awards per year for two years, funding a total of eight teams with grants of up to a maximum of \$5,000 each.

Preferred Reporting Outputs:

Refereed publications, white papers, a competitive grant submission, and YouTube How-to Videos.

Two-page Proposal Content:

1. Team Members: Name, title, affiliation, and contact information for each member of the requesting project team.
2. Target Problem: A description of the specific research question(s) that the resources requested will be used to answer and the scientific and societal impacts of the proposed work.
3. Solution Approach: A brief outline of the research approach and how the Big Data Spoke objective of harmonizing and automating big data lifecycles in plant sciences, phenomics, and genomics is integral to the efforts. Include reporting outputs to be crafted.

Additional Required Documents: (not included in the two-page proposal limit)

1. Abstract of your proposal for public posting
2. NSF formatted bios of project team PI/Co-PIs
3. References cited
4. A one-year budget sheet (maximum of \$5,000) with brief budget justification. F&A is not allowed for these grants.

Combine all required documents into a single pdf file and submit your proposal at

<https://app.smartsheet.com/b/form?EQBCT=49b5c3a691ae4a58a5aeb1948ea9e838>

For questions, contact: Dr. Jennifer Clarke (UNL), jclarke3@unl.edu or Dr. Joe Colletti (ISU), colletti@iastate.edu.