



Midwest Big Data Hub

# Mobilizing Partnerships for Data Innovation

October 25, 2016

12th IEEE International Conference on eScience  
Baltimore, MD

## Digital Agriculture - Unmanned Aircraft Systems, Plant Sciences and Education

Travis Desell, University of North Dakota



Images captured from YouTube videos, Digital Ag Spoke All-Hands Meeting, May 2016

[www.midwestbigdatahub.org](http://www.midwestbigdatahub.org)

National Science Foundation through award #1636865

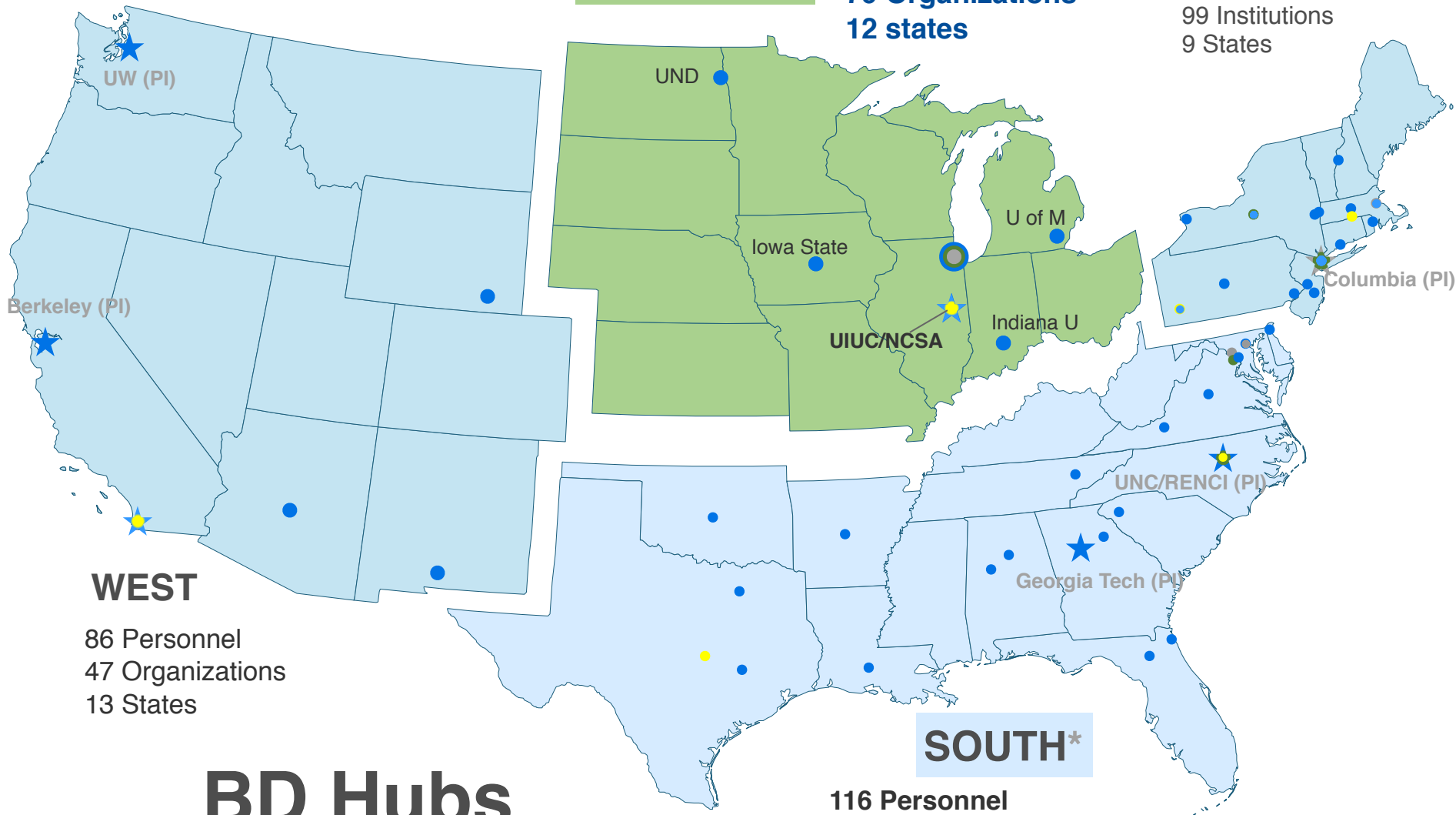
# NSF Big Data Hubs

## MIDWEST

106 Personnel  
79 Organizations  
12 states

## NORTHEAST

193 Personnel  
99 Institutions  
9 States



## WEST

86 Personnel  
47 Organizations  
13 States

## SOUTH\*

116 Personnel  
95 Organizations  
15 States + DC

# BD Hubs

\*South points indicate Senior Personnel



Alaska & Hawaii are part of the West region  
US Territories can participate in any region

# Midwest Big Data Hub



**Ed Seidel**  
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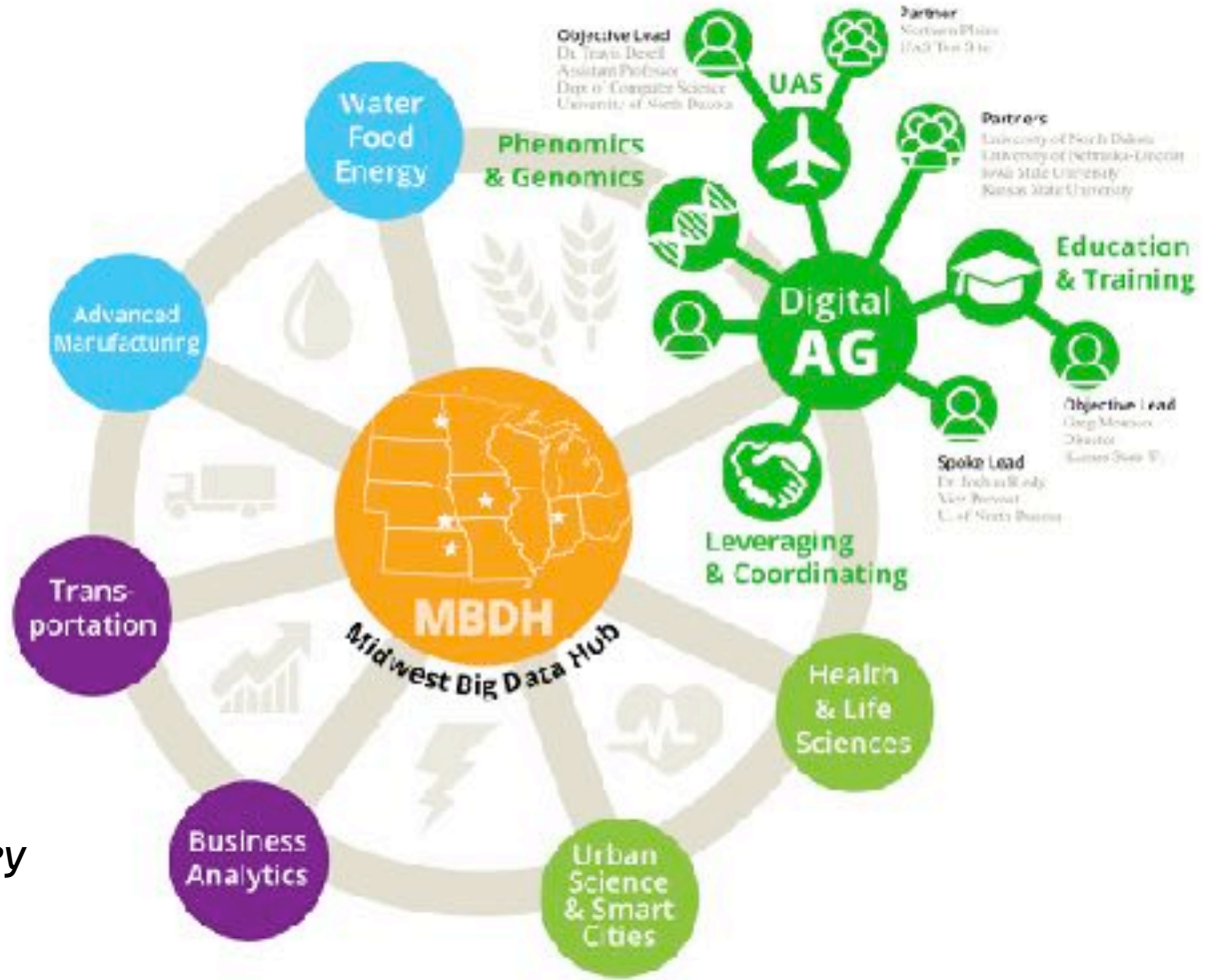
**Sarah Nusser**  
Co-PI (Iowa State)



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**Grant McGimpsey**  
Co-PI, (UND)



# Digital Agriculture Spoke





# Digital Ag Spoke Activities: Fall 2015 – Fall 2016

- Organized initial leadership; list of participants;
- Provide funding opportunities document
- Engaged with Hub on NSF Spoke solicitation stewardship activities
- Assisted with MBDH All Hands meeting, March 21-22
- CCC funding - 3 events: UND Early Career Big Data Summit, ISU Digital Ag Spoke All Hands, U of IA Midwest Big Data Hackathon
- 2 NSF Spoke \$1 mil submissions
  - UND, U of Neb., Kansas State, Iowa State awarded - NSF Spoke: Digital Agriculture - Unmanned Aircraft Systems, Plant Sciences, and Education
- Digital Ag All Hands meeting, May > 100 participants; approx. 20% early career
- Formal & informal connections - e.g., Purdue (North American Plant Phenotyping Network Inaugural Convening Event)

# DA Future Activities

- Formalize leadership & governance
- Operationalize NSF Spoke award
- U of Iowa Environmental Digital Data workshop
- Prepare for next NSF Spoke solicitation
- Knit together Plant science databases - genomic-phenomic
- Workshops: DataFOUR Big Data Summit - May, 2017- DA component
- Hub can assist with master lists, communication of Spoke activities, sharing funding opportunities
- Spoke can share information, results of events, tools & datasets

