



BD Hubs: Midwest: “SEEDCorn: Sustainable Enabling Environment for Data Collaboration”

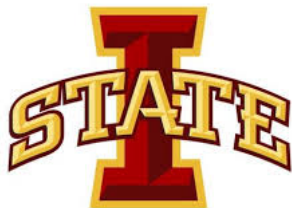
Midwest Big Data Hub

Accelerating the Big Data Innovation Ecosystem

One of four Big Data Regional Innovation Hubs (BD Hubs) funded by the National Science Foundation through award #1550320

Spoke: DIGITAL AGRICULTURE – UNMANNED AIRCRAFT SYSTEMS, PLANT SCIENCES, AND EDUCATION

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Spoke: DIGITAL AGRICULTURE – UNMANNED AIRCRAFT SYSTEMS, PLANT SCIENCES, AND EDUCATION

Advances in Big Data management and analysis are required so that agricultural data can be deployed rapidly and efficiently to address significant societal challenges.

One looming priority – an issue modern agriculture must solve – is how to increase food production by ~70% to feed an estimated global population of >9.6 billion by 2050.

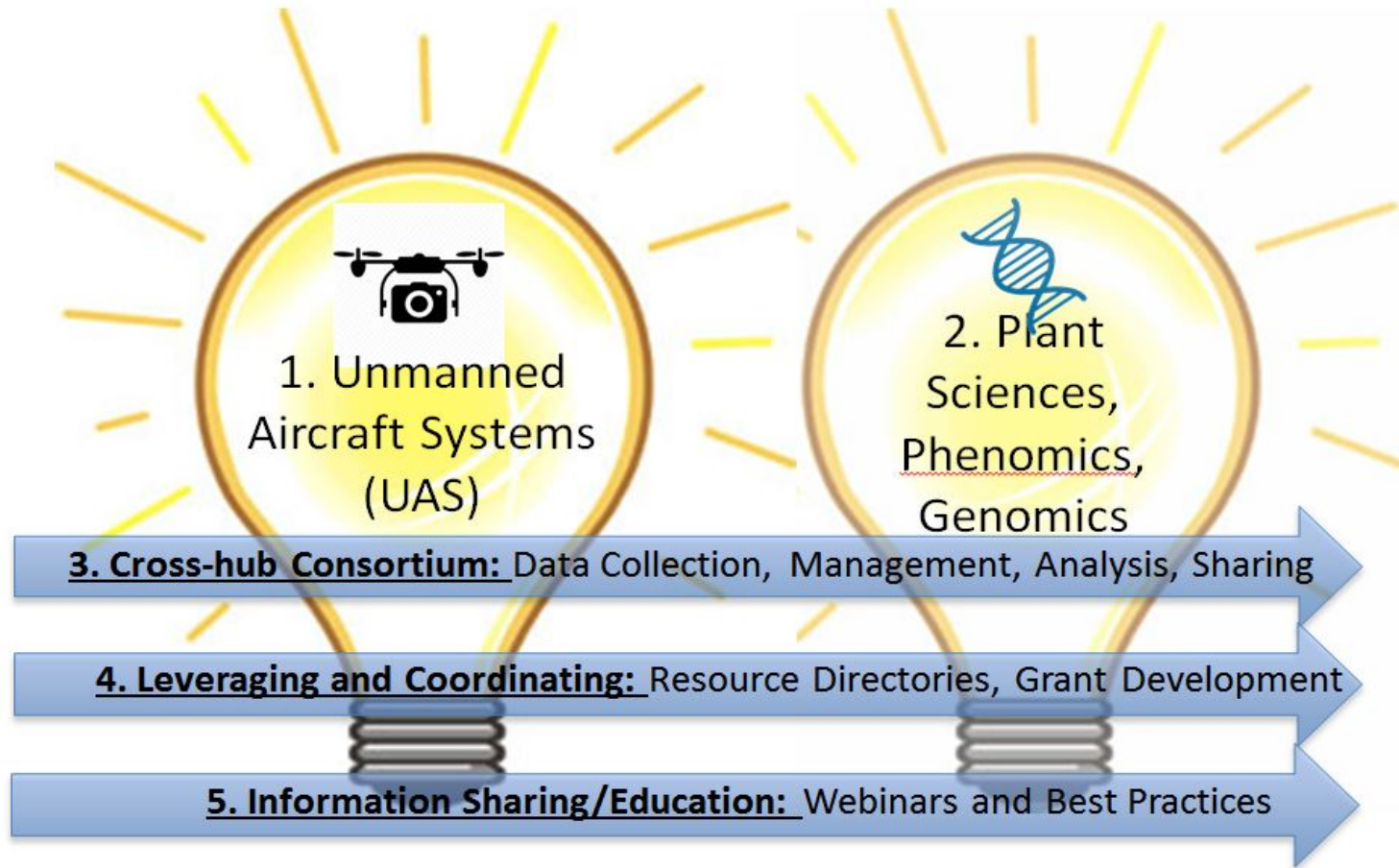
Our *vision* is that coordinated efforts by the academic, industrial, and governmental sectors to automate Big Data lifecycles, improve access to data assets, and train a workforce with relevant skills and expertise, will contribute to solving sustainable global food security.

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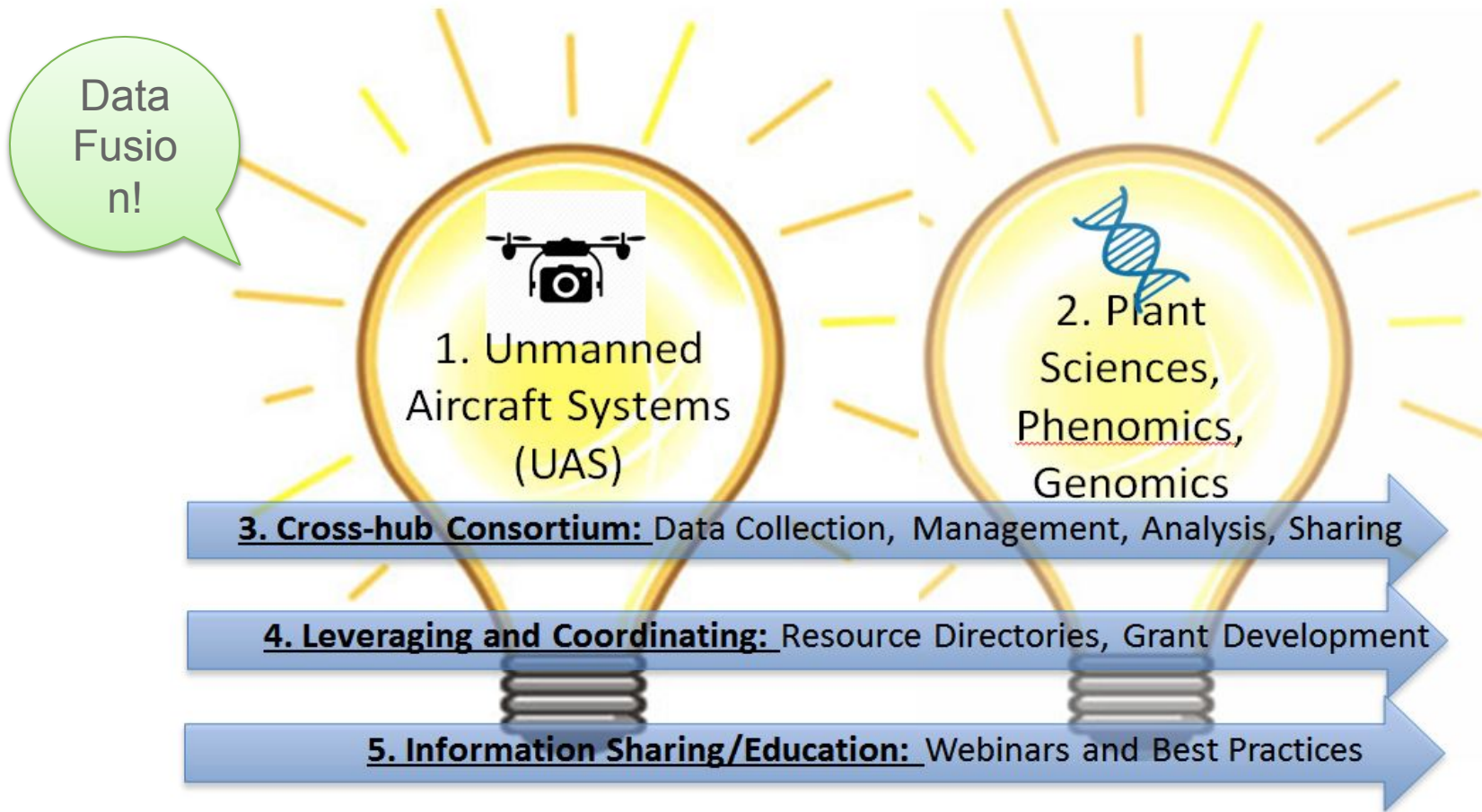


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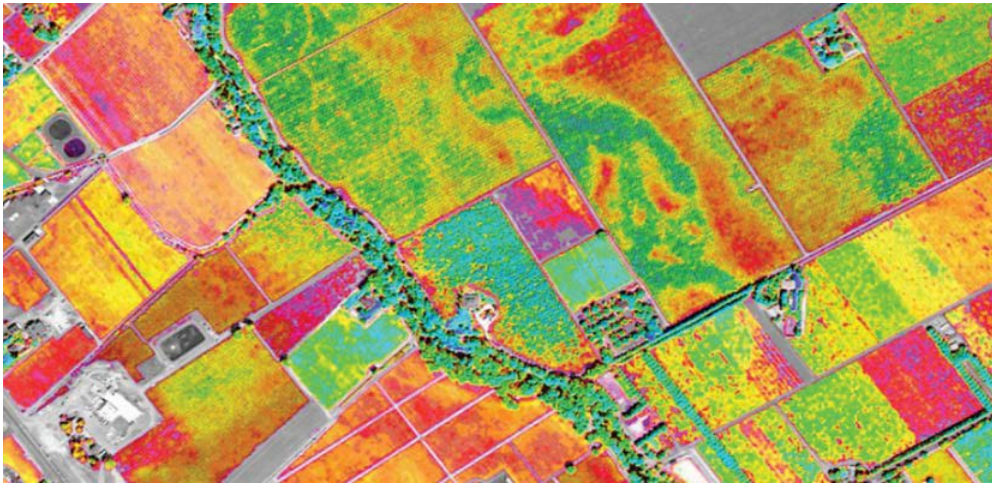
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Harmonize and automate Big Data lifecycles in unmanned aircraft systems (UAS) in agriculture

- large volumes of imaging data related to greenness, geography, temp
- associate with yield, weather, soil measurements, farm management



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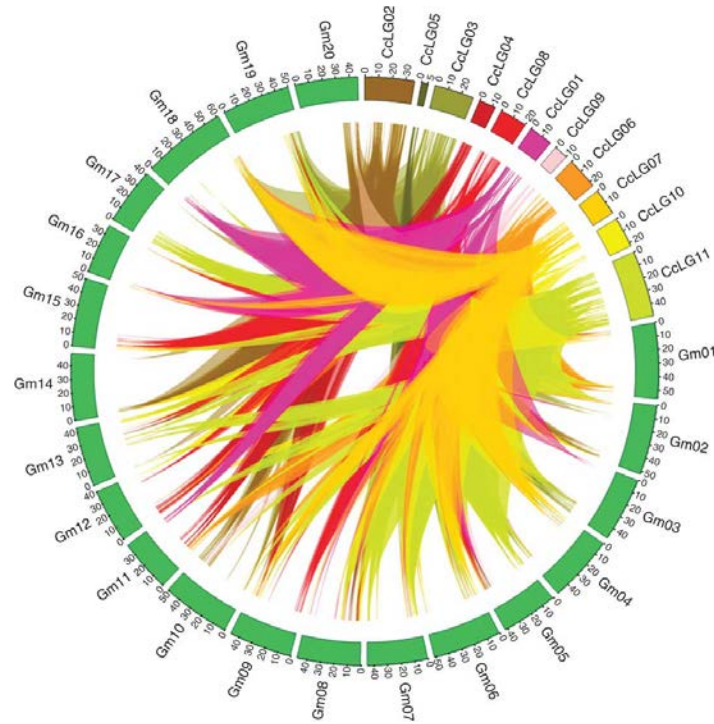
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Harmonize and automate Big Data lifecycles in plant sciences, phenomics, and genomics



doi:10.1038/nbt.2022



MICHIGAN STATE
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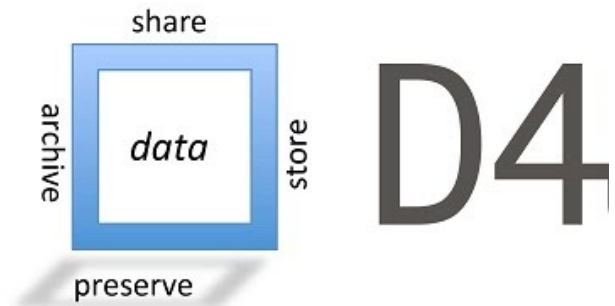


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Information sharing/education and training at all levels.

- data in precision agriculture
- high performance computing
- image processing
- systems biology

- national data service
- globus
- metadata and ontologies



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Additional areas of interest:

animal sciences

crop and farm management

agricultural economics

data sharing

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