

The AgBioData Consortium: Resources and Recommendations for a FAIR Agricultural Data Ecosystem

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PAG 32

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The AgBioData Consortium

- We are Genetic, Genomic and Breeding (GGB) resources that serve the agricultural research community.
- Since 2015, we are a mostly voluntary effort by a dedicated community; now 43 resources and >250 individual members
- Our main goal is to collaborate on common standards and guidelines to enable FAIR data.
- We received NSF Research Coordination Network funding in Sept 2021, and an additional 2 years of support in 2024



Acknowledgements

The AgBioData Working Groups

AgBioData Program Coordinator

Annarita Marrano

AgBioData Steering Committee members

Carson Andorf

Sarah Dyer

Sunita Kumari

Dorrie Main

John P. McNamara

Sushma Naithani

Monica Poelchau

Leonore Reiser

Peter Selby

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Past AgBioData SC members

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Award Abstract # 2126334



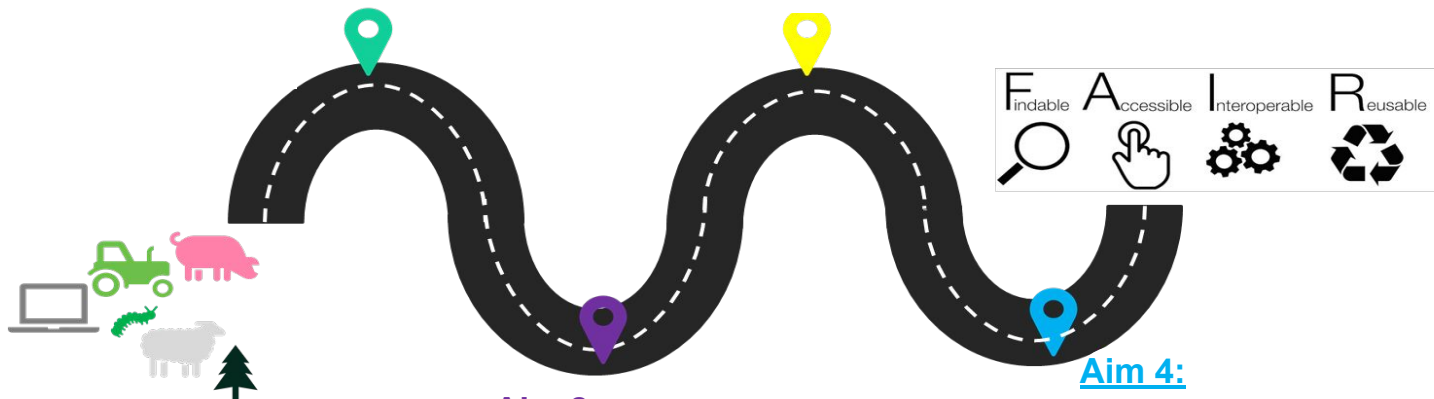
New NSF funding to continue our work through August 2026

Aim 1:

Continue developing recommendations, standards and implementation plans for FAIR data management issues.

Aim 3:

Disseminate and maintain FAIR educational materials for researchers.



Aim 2:

Continue improving diversity, equity and inclusion (DEI) in our network.

Aim 4:

Develop the groundwork for sustainable GGB Databases.



NEW! Opportunities and Resources for active AgBioData participants

- 12 Champion fellowships per year - \$2,000 per award
- 6 Ambassador fellowships per year - \$2,000 per award
- 5 stipends annually at \$600 each to test the education curriculum and provide feedback
- 3 booths per year, including one booth at MANNRS or SACNAS
- Hybrid Workshop in 2026

For more info contact us at
agbiodata@gmail.com
Visit booth #207

Fellowship details



AgBioData Champions will:

- Take on a leadership role in an AgBioData working group, such as chair or co-chair, and/or lead the development of significant outputs like white papers.
- Receive a \$2000 stipend
- Submit a short application (form available soon)

AgBioData Ambassadors will:



- Present on AgBioData work at a scientific conference. The focus of the presentation must be on an AgBioData activity, e.g. working group results
- Receive a \$2000 stipend
- Submit a short application (form available soon)

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Aim 1: New working group: Natural Language Processing (NLP) for Biocuration

Goals:

- Define use cases for applying NLP in biocuration for AgBioData databases (e.g., key research questions).
- Identify common entities curated across AgBioData databases for NLP-driven extraction/curation.
- Summarize existing NLP models, tools, and curated training sets, and identify their limitations with AgBioData-curated content.
- Recommend strategies and next steps to address these limitations and advance NLP for biocuration to the consortium.



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Aim 2: Continue improving diversity, equity and inclusion (DEI) in our network.

- We are specifically recruiting one or more DEI champion(s) to:
 - Continue building and maintaining connections between AgBioData and diverse communities, and
 - Continue to develop DEI awareness in our community
- If you are interested in this opportunity:
 - Contact agbiodata@gmail.com
 - Submit a short application (form available soon)

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Join the steering committee!



Dr. Leonore Reiser
Phoenix Bioinformatics
Principal Investigator



Dr. Monica Poelchau
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Co-PI



Dr. Meg Staton
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Dr. Dorrie Main
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Dr. Sunita Kumari
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Dr. Sushma Naithani
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Washington State University



Dr. Sarah Dyer
EMBL-EBI



Dr. Peter Selby
Cornell University

AgBioData Steering Committee (SC)

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Today's AgBioData Symposium



1. Standards for Genetic Variation: Promoting the Use of Variant Identifiers for Genetic Markers in Agricultural Research
2. Phenotypic Data Standardization and Management
3. An Open Source Educational Curriculum for Creating FAIR Data with Agriculture Databases from the Agbiodata Network
4. Progress and Insights: Sustainability Strategies for AgBioData Databases
5. Database Finder Tool: Enabling FAIR Data Practices for Genomic and Breeding Research
6. Empowering G2P in Agriculture: Building a Collaborative Environment for Single-Cell Applications