Learning how to be FAIR: Open source education tools for AgBioData

AgBioData RCN
Education Working Group
AgBioData

Toward enhanced genomics, genetics, and breeding research outcomes through standardization of practices and protocols across agricultural databases

- 283 members
- 105 working group participants
- Over 40 databases
Educational WG Goals

Create educational curriculum:

- Purpose, structure, and importance of GGB Databases
- How they benefit the entire scientific community via public data deposition/integration
- How databases are essential to FAIR data
Who would benefit from this knowledge? Who would engage with the material?

- Researchers
- Educators, from high school to university
- Students, from high school to university

Who will utilize the materials? Who will advertise the materials?

- Educators
- Databases
- Funding Agencies
- Journals
Modalities

In person, interactive

- Slides
- Activity Descriptions
- Discussion Prompts

Self directed, asynchronous

- Videos
- Activity Descriptions
- Reflection Exercises
Curriculum

► What is a Biological Data Repository?
► FAIR and Databases
► Bio-databases: Types of Data, Finding and Obtaining data
► Data Management Plans/TRUST Principles
► Submitting data
► How to use your library resources
► Databases for agriculture

Slides drafted for 7/7 lessons
Videos complete for 2/7 lessons
Curriculum

► What is a Biological Data Repository?
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The TRUST Principles for digital repositories


*Scientific Data* 7, Article number: 144 (2020)  |  [Cite this article](#)

27k accesses  |  77 citations  |  147 Altmetric  |  [Metrics](#)
White Paper:
“A teaching and training framework for biological data repositories as essential sources for FAIR data, scientific knowledge, and new knowledge generation”

► Motivation and Introduction to Biological Databases
  ► Who, what, why of agricultural databases
  ► Databases are essential to FAIR data

► Skills and competence framework
  ► Competence profiles for high school, bachelor, master and doctoral level
  ► Learning outcomes
Community Feedback

► How will you use this, and how can we help you use this?

► What formats are the easiest to use? (e.g., video lectures, lesson plans, slides, etc.)

► How do we get the word out, and what comes next? (sustainability, expansion, etc.)

► Can you contribute?
## Education WG Membership

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution/Location</th>
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<tbody>
<tr>
<td>Erin Antognoli</td>
<td>USDA National Agricultural Library</td>
</tr>
<tr>
<td>Leyla Cabugos</td>
<td>California Polytechnic State University</td>
</tr>
<tr>
<td>Chao Cai</td>
<td>Purdue University</td>
</tr>
<tr>
<td>Alenka Hafner</td>
<td>Pennsylvania State University</td>
</tr>
<tr>
<td>Beant Kapoor</td>
<td>University of Tennessee, Knoxville</td>
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<tr>
<td>John McNamara</td>
<td>Washington State University</td>
</tr>
<tr>
<td>Annarita Marrano</td>
<td>Phoenix Bioinformatics/AgBioData</td>
</tr>
<tr>
<td>Megan O'Donnell</td>
<td>Iowa State University, University Library</td>
</tr>
<tr>
<td>Leonore Reiser</td>
<td>Phoenix Bioinformatics</td>
</tr>
<tr>
<td>Meg Staton</td>
<td>University of Tennessee, Knoxville</td>
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</tbody>
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Next steps

► We’d love new members
  ► Students welcome!
  ► Additional representation from livestock communities

@AgBioData
Join us on Slack
https://www.agbiodata.org/join-slack
mstaton1@utk.edu