### Preventing Bugs in Data Analysis: Data Skills to Improve the Reliability and Effectiveness of Entomological Research

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This is an exciting time to do research

Software and tools allow us to turn data into information.

People turn information into knowledge.

By making data accessible and putting the data skills and the perspectives in the hands of all researchers, we allow them to answer their own questions and capture their passion and expert knowledge.

### Unleash the potential of data by empowering people

# How do we scale data skills and literacy along with data production?

Researchers want these skills

BRAEMBL community survey report

Training in the Gaps: Active researchers

Active researchers and employees are learning these skills "on the job".

Need to develop and deliver training that fits their time and needs.

Training that is immediate, accessible, appropriate for their level and relevant to their domain.

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- ▶ Include not only technical skills, but also ways of thinking about data and knowing what's possible
- Opportunity for deliberate practice, hands-on training with feedback during learning
- ► Researchers need to build confidence and the belief that they are capable of computational work, all allians

Level of Data Management/Analysis Skills (Post-Workshop)

#### Instructor outcomes

- People learn new technical skills
- ▶ They have a community no more 'lone informatician'
- People become better communicators
- ► Gain value from giving back and empowering people with the skills they have learned are valuable

#### Community!

An active and engaged community of instructors and learners, both using and advocating for best practices in effective and reproducible research

#### How can you or your organization be involved

- Request a workshop