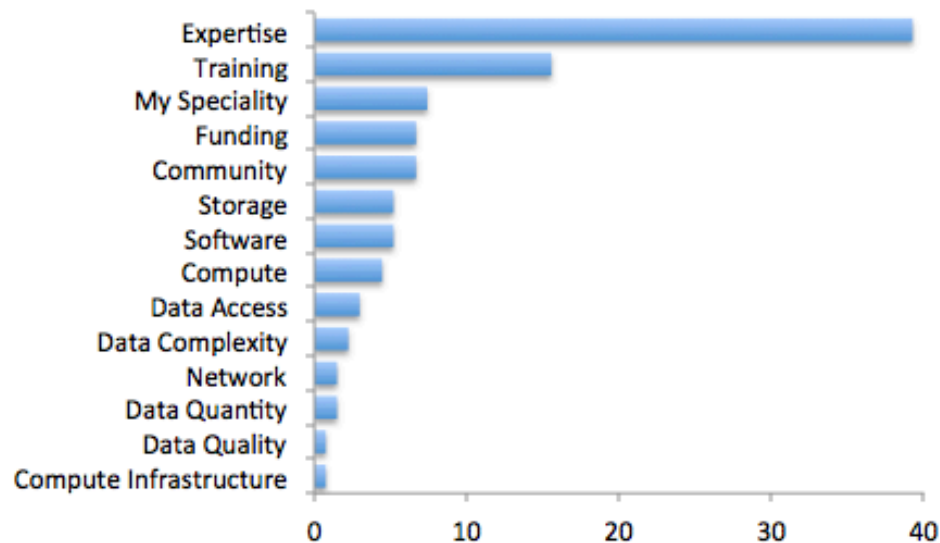


THE CHALLENGE

a lack of expertise in how to develop software and analyze data effectively and efficiently

What is your biggest bioinformatics difficulty?



Survey, Bioinformatics Resource Australia—EMBL (BRAEMBL)

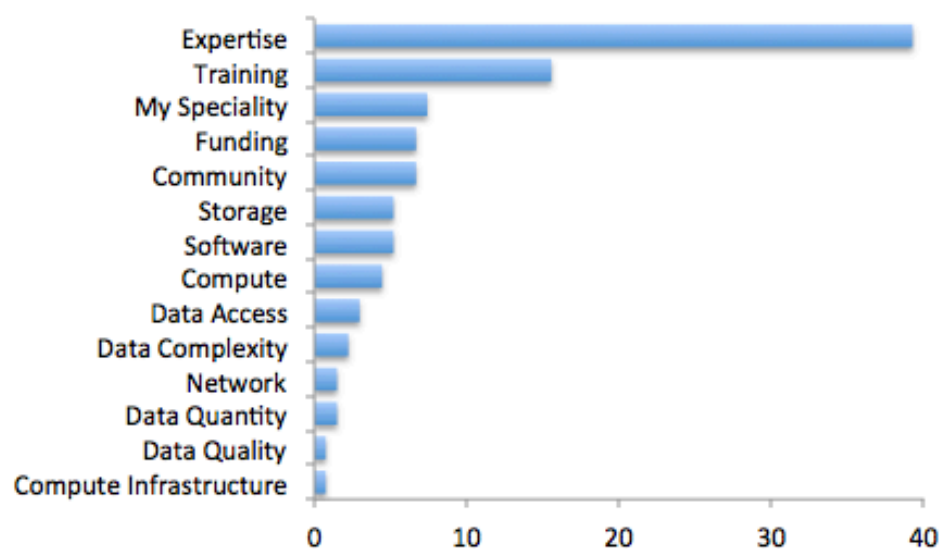
THE CHALLENGE

a lack of expertise in how to develop software and analyze data effectively and efficiently

THE OPPORTUNITY

high quality, widely available training based on sound scientific principles and best practices

What is your biggest bioinformatics difficulty? What is the most useful thing that [could be done] for you?



Survey, Bioinformatics Resource Australia—EMBL (BRAEMBL)



Teach basic lab skills
for scientific computing
so that researchers can do more
in less time and with less pain.

*Teach basic concepts, skills and tools for
working effectively with data
especially to those
without prior computational experience.*

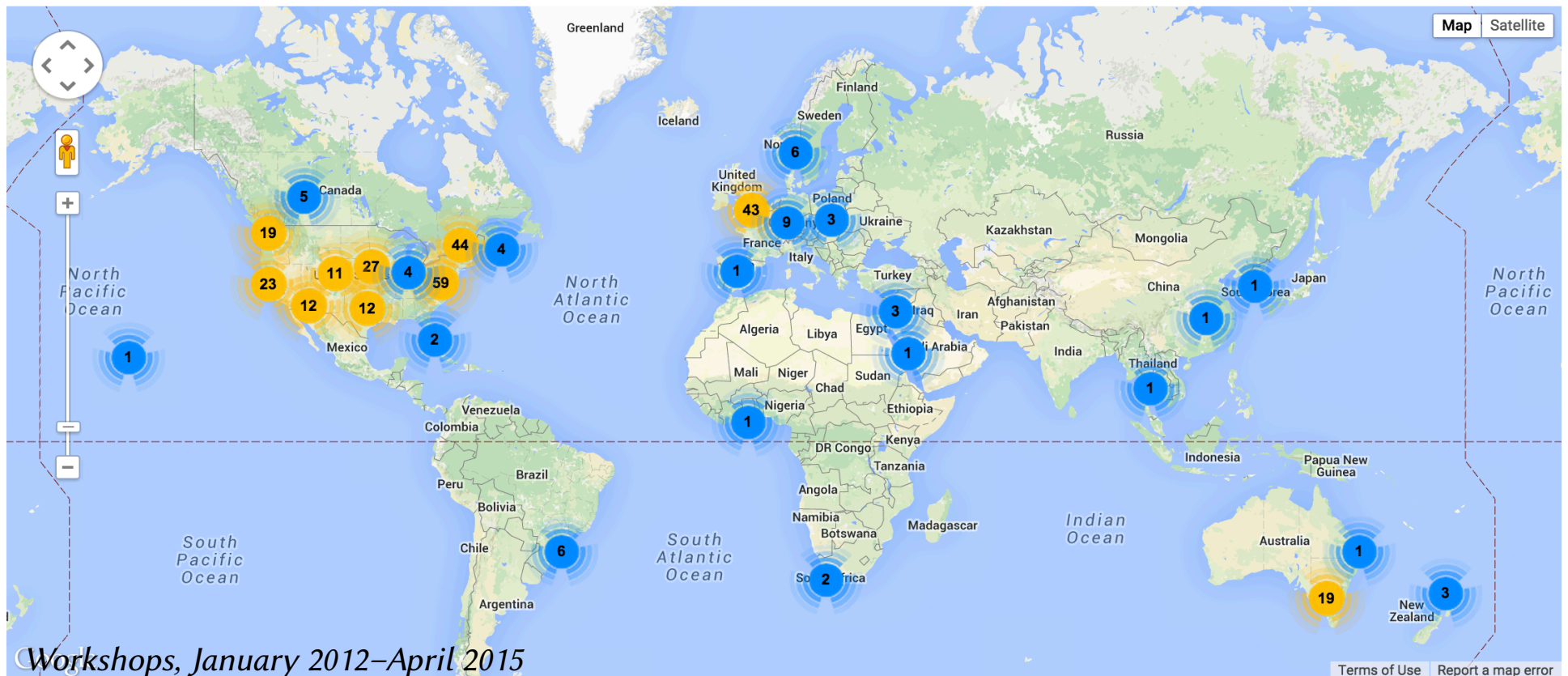




WORKSHOPS

Since January 2012, we've taught

- 340+ two-day workshops
- to 10,000+ learners
- with 250+ volunteers
- in 25+ countries.





WORKSHOPS CURRICULUM

- Task automation (Unix shell)
- Modular programming (Python, R, MATLAB)
- Reproducibility and collaboration (Git and GitHub)





WORKSHOPS CURRICULUM OUTCOMES

- Enable researchers to save half a day a week (or more) for the rest of their careers.
- Prepare researchers for reproducible research, high-performance computing, and open science.
- Enable researchers to tackle entirely new kinds of problems.

<http://software-carpentry.org>



OVERVIEW

- Sister organization of SWC
- Officially began November 2014 (with NSF support)
- 24 workshops planned in 2015



OVERVIEW

CURRICULUM

- Domain-specific data focus (biology, genomics, geoscience, social sciences)
- Data analysis in effective and reproducible way
- Novices targeted (no prerequisites or prior assumed knowledge)

<http://datacarpentry.org>