

Development of a Biosecurity Sequence Screening Training Course for Bioengineers

Background

This course aims to increase awareness about proactive biosecurity sequence screening measures that are recommended to sustainably grow the bioindustrial manufacturing sector. Although guidelines for sequence screening exist, many bioengineers have not been taught this material or had the opportunity to learn how to put these concepts into practice for their strain engineering work.

Number of Participants by Job Sector



Academia



U.S. Government



Industry



Non-profit



U.S. Government Contractor

Impact

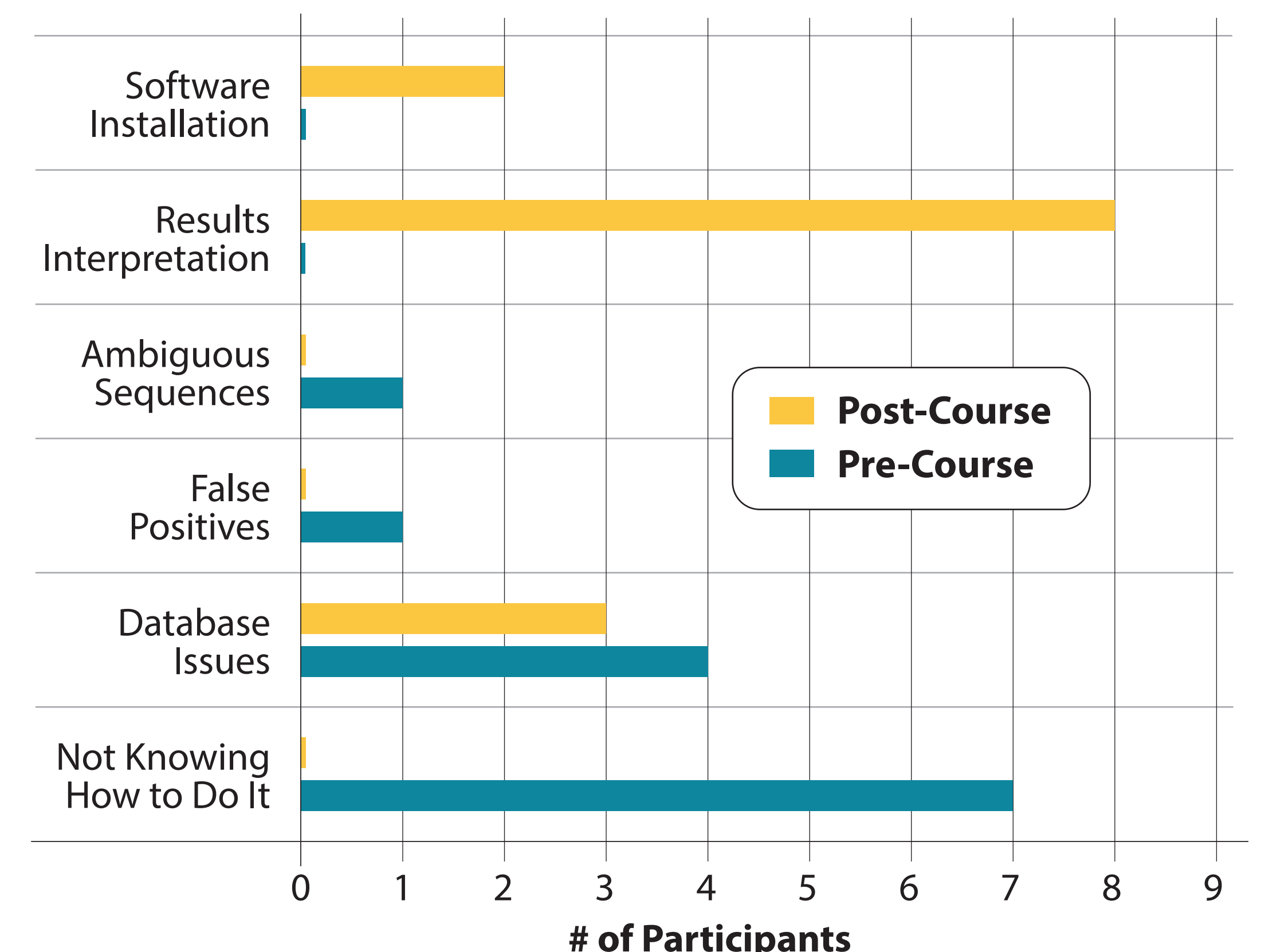
BioMADE members Signature Science, Rice University, and Aclid, developed a biosecurity sequence screening training course for bioengineers to promote the safe use of bioengineering technology. On March 31, 2023, this one-day, live training course provided participants with the relevant background, example test datasets, hands-on experience, and practical knowledge to leverage open-source software to perform nucleotide screening on a range of case studies and sequence types that were representative of potential bioengineered sequences.

Outcomes

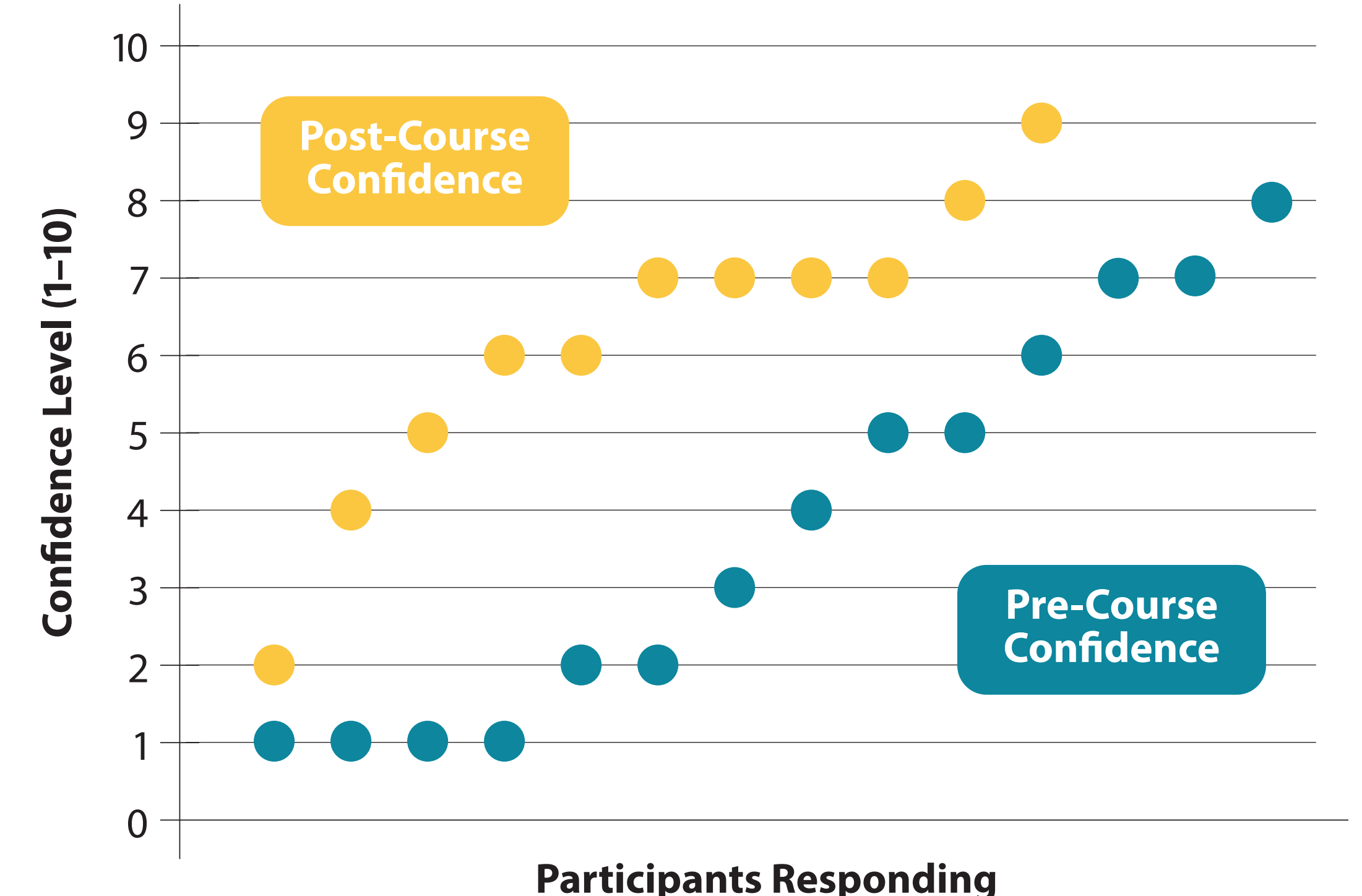
The March 31st course delivery was considered successful because of the participation numbers (goal = >5 course participants) and assessment of participant experience (goal = improved biosecurity screening knowledge in post-course survey results compared to the pre-course survey results).

In addition to the March 31st live course delivery to members of BioMADE and the U.S. Government, the other major project deliverable will be the creation of online course modules, which will be released to the public by October 2023.

The Biggest Challenges with Sequence Screening



Participant Confidence



MEMBER PARTNERS

signature
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