Table 1: Examples of how different types of trainees might use subsets of the training modules to meet their specific training needs.

	Graduate student who would like to learn in detail how to use reproducibility tools for data recording and pre-processing and is willing to learn R programming tools	**Principal investigator** who does not program but would like to learn how his/her research team could improve reproducibility of data recording and pre-processing	**Biostatistician** who would like to understand barriers faced by collaborators in implementing reproducibility principles early in research projects	**Technician** in charge of running and pre-processing mass spectrometry data	**Undergraduate student** who wants an introduction to improving reproducibility of data recording
Improving the Reproducibility of Experimental Data Recording					
• Separating data recording and analysis	Yes	Yes	Yes	No	Yes
• Principles and power of structured data formats	Yes	Yes	No	No	Yes
• The 'tidy' data format: an implementation of a structured data format	Yes	Yes	No	No	No
• Designing templates for 'tidy' data collection	Yes	Yes	No	No	No
• Example: Creating a template for 'tidy' data collection	Yes	Yes	Yes	No	No
• Power of using a single structured 'Project' directory for storing and tracking research project files	Yes	Yes	No	No	Yes
• Creating 'Project' templates	Yes	No	No	No	No
• Example: Creating a 'Project' template	Yes	Yes	Yes	No	No
• Harnessing version control for transparent data recording	Yes	Yes	No	No	Yes
• Enhance the reproducibility of collaborative research with version control platforms	Yes	Yes	No	No	Yes
• Using git and GitLab to implement version control	Yes	No	No	No	No
Improving the Reproducibility of Experimental Data Pre-Processing					
• Principles and benefits of scripted pre-processing of experimental data	Yes	Yes	No	Yes	No
• Introduction to scripted data pre-processing in R	Yes	No	No	Yes	No
• Simplify scripted pre-processing through R's 'tidyverse' tools	Yes	No	No	Yes	No
• Complex data types in experimental data pre-processing	Yes	Yes	Yes	Yes	No
• Complex data types in R and Bioconductor	Yes	No	Yes	Yes	No
• Example: Converting from complex to 'tidy' data formats	Yes	Yes	Yes	Yes	No
• Introduction to reproducible data pre-processing protocols	Yes	Yes	No	Yes	No
• RMarkdown for creating reproducible data pre-processing protocols	Yes	No	No	Yes	No
• Example: Creating a reproducible data pre-processing protocol	Yes	Yes	Yes	Yes	No