

Table 1: Roles of our team of investigators in developing the proposed training materials.

| | Brooke Anderson | Michael Lyons | Mercedes Gonzalez- Juarrero | Marcela Henao- Tamayo | Gregory Robertson |
|----------------------------------------------------------------------------------------------------------|--------------------|------------------|-----------------------------------|-----------------------------|----------------------|
| Improving the Reproducibility of Experimental Data Recording | | | | | |
| • Separating data recording and analysis | Author | Tester | | | Author |
| • Principles and power of structured data formats | Author | Author | | | Tester |
| • The 'tidy' data format: an implementation of a structured data format | Author | | Tester | Author | |
| • Designing templates for 'tidy' data collection | Author | Tester | Author | | |
| • Example: Creating a template for 'tidy' data collection | Author | | Tester | | Author |
| • Power of using a single structured 'Project' directory for storing and tracking research project files | Author | | Author | Tester | |
| • Creating 'Project' templates | Author | | | Author | Tester |
| • Example: Creating a 'Project' template | Author | | Author | Tester | |
| • Harnessing version control for transparent data recording | Author | Author | | | Tester |
| • Enhance the reproducibility of collaborative research with version control platforms | Author | Tester | | | Author |
| • Using git and GitLab to implement version control | Author | Author | Tester | | |
| Improving the Reproducibility of Experimental Data Pre-Processing | | | | | |
| • Principles and benefits of scripted pre-processing of experimental data | Author | | Author | Tester | |
| • Introduction to scripted data pre-processing in R | Author | Author | Tester | | |
| • Simplify scripted pre-processing through R's 'tidyverse' tools | Author | | Author | | Tester |
| • Complex data types in experimental data pre-processing | Author | | Tester | Author | |
| • Complex data types in R and Bioconductor | Author | Tester | | Author | |
| • Example: Converting from complex to 'tidy' data formats | Author | Tester | | Author | |
| • Introduction to reproducible data pre-processing protocols | Author | Author | | | Tester |
| • RMarkdown for creating reproducible data pre-processing protocols | Author | | | Tester | Author |
| • Example: Creating a reproducible data pre-processing protocol | Author | | | Tester | Author |