Data Management Skills for Open Science: A Cancer Research UK & UKRN Workshop

Nov 11, 2020 (online)

Programme:

9:15  Registration open

9:30  Core concepts in reproducibility.

This will cover the background of the problems that this workshop is addressing, answering questions such as: What is the reproducibility crisis? What are the key problems for reproducible research? How can we solve these key problems in our research? Participants will identify and discuss how these issues affect their own research areas.

10:40  Coffee Break

11:00  Literate programming with R Markdown. This will introduce students to Integrated Development Environments (example: RStudio) and provide students with the skills necessary to create an R Markdown file, which will ensure that study documents are reproducible and linked to analyses conducted in R in such a way that when the analyses are updated the document is automatically updated.

12:00  Lunch

13:00  Using GitHub for reproducible research. This will introduce students to the git version control system and GitHub service for analytical code. In addition to version control, students will learn about the best ways to make code accessible, interpretable and usable by others, including appropriate code structure, documentation and open source licensing.

14:00  Coffee break

14:20  Github - continued

15:20  Break

15:40  Putting it together: Creating reproducible workflows. This will synthesize the other course elements and allow students to practice creating a reproducible workflow from start to finish, including using data repositories and linking these with R Markdown and Github to perform a reproducible analysis and integrating it with the Open Science Framework. This module will be practical and make use of publicly available datasets.

16:40  Finish