Practical steps toward more reproducible research

On 26 November 2021 the University’s Reproducibility Working Group hosted a workshop for researchers from across Cambridge to explore approaches to supporting more reproducible research. Talks were provided by Professor Alexander Bird (Faculty of Philosophy), Dr Florian Markowetz (Cancer Research UK Cambridge Institute) and Dr Maria Tsapali (Faculty of Education) exploring approaches to reproducible research and reasons to work reproducibility across qualitative and quantitative research.

Talks were followed by interdisciplinary discussion sessions designed to identify the obstacles to reproducible research across Cambridge and how these might be tackled. The key findings from the discussions included:

- Training on reproducibility, including statistical training, reproducible methods and use of key tools exist in departments across the University, but more needs to be done to share provision and create synergies and central provision where possible.
- Training should begin at undergraduate or Masters level to build key skills early.
- Awareness of training, and the importance of reproducibility training, needs to be enhanced.
- The need for University guidance on how to make research reproducible, particularly to overcome key challenges to reproducibility such as balancing reproducibility with the need to protect sensitive or confidential data.
- That the University can help by making the production of open and reproducible research as painless as possible, for example by facilitating peer review of codes and providing easy access to data storage and expertise in best practice.
- That reproducibility looks very different across the disciplines and that in some areas transparency and methods reproducibility will be the focus, rather than reproducible outcomes.

The Reproducibility Working Group will draw on the ideas raised at this workshop to help shape proposals for future University approaches to supporting reproducible research. The group plans to host a number of further events to map, consolidate, and extend existing resources for reproducibility across Cambridge with the aim of boosting grassroots activities and magnifying their impact across all levels of the institution.

For more information and resources on reproducible research see: UK Reproducibility Network: https://www.ukrn.org/

The recording from this session is available here: OR at Cam: Reproducibility - YouTube