Openness & Reproducibility in Research

Courtney Soderberg
Statistical & Methodological Consultant

Thursday, April 23
presentation & lunch noon-1 pm
hands-on workshop bring laptop! 1-3 pm
Mellon Institute Social Room
S Bellefield entrance 4400 5th Ave

RVSP! tinyurl.com/RSVP-open-science

presentation
An academic scientist’s professional success depends on publishing. Current practices incentivize researchers to make design, analysis, and reporting decisions that promote novel, positive and exciting results and ignore negative results. These incentives inflate the rate of false effects in published science. When incentives favor novelty over replication, false results persist in the literature unchallenged, reducing efficiency in knowledge accumulation. This talk touches on the evidence and challenges for reproducibility in scientific research, then delves deeper into initiatives to nudge incentives and norms toward practices that can improve reproducibility.

hands-on workshop bring laptop!
Using example studies, participate in creating a reproducible project from start to finish. Learn:

• Strategies to increase the validity of statistical results (i.e., power analysis and preregistration)
• Ways to increase research transparency and reproducibility (i.e., documentation and version control)
• How to use open source tools, including the Center for Open Science’s Open Science Framework, to easily incorporate reproducible, transparent practices into your current scientific workflow

sponsored by
Carnegie Mellon University Libraries & Office of Research
University of Pittsburgh University Library System
Health Sciences Library System