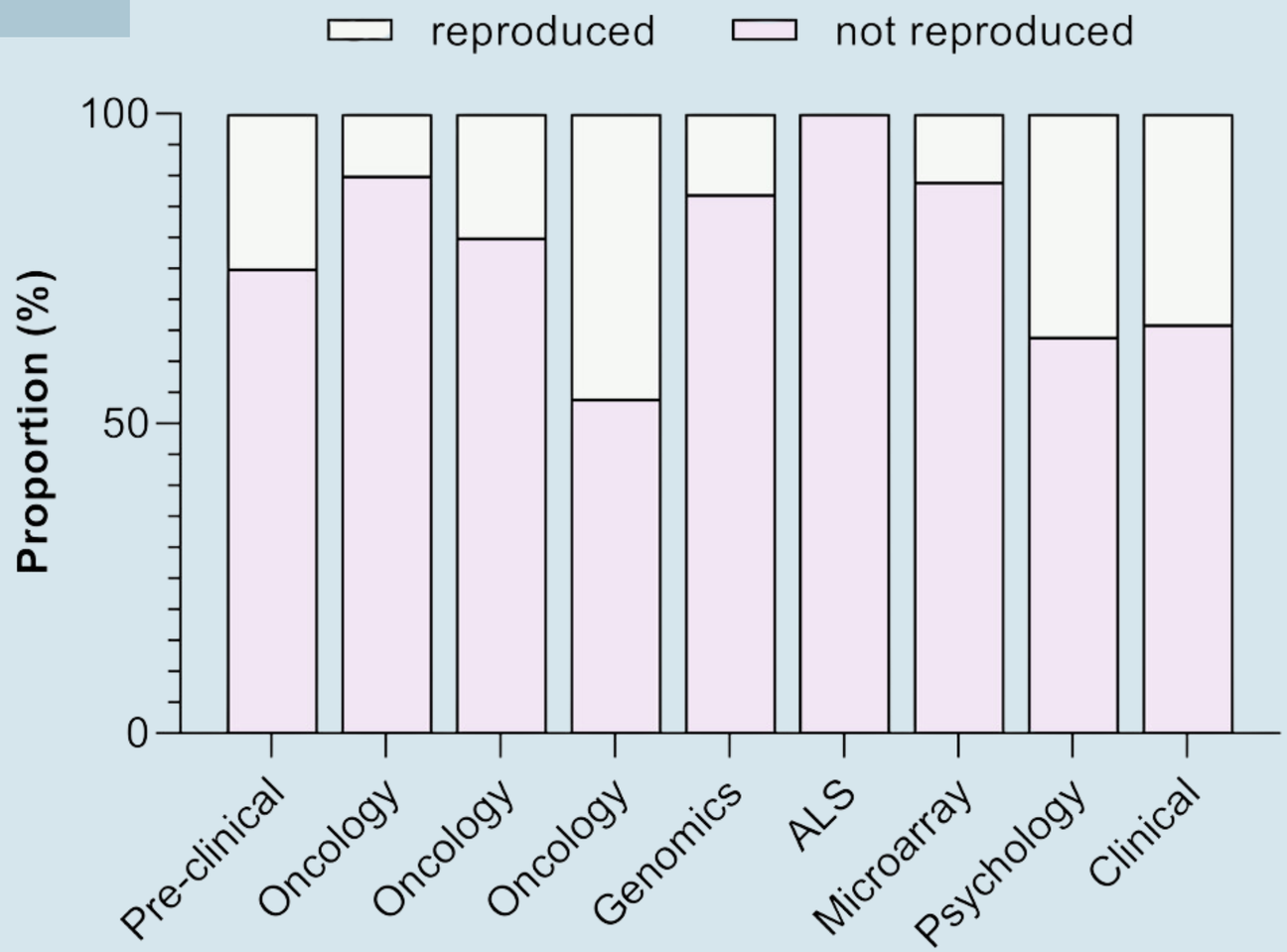
Reproducibility and the ReproducibiliTea initiative

LU Open Science Days
2024-11-19

Jane Fisher

AdvanSci
RESEARCH SOLUTIONS

What is Reproducibility?



55-100% of nonclinical and clinical study results **cannot be reproduced**!

References: Prinz F et al. Nat Rev Drug Discov. 2011; 10:712, Begley CG et al. Nature. 2012; 483:531–533, Haibe-Kains B et al. Nature. 2013; 504:389–393, Timothy M et al. eLife. 2021; 10:e71601, DeVeale B, et al. PLoS Genet. 2012; vol. 8 pg. e1002600, Perrin S. Nature. 2014; 507:423–425, Ioannidis JP et al. Nat Genet. 2009; 41:149–155, Open Science Collaboration. Science. 2015;349:aac4716, Ioannidis JPA. JAMA. 2005;294(2):218–228;

ReproducibiliTea

- JOURNAL CLUB INITIATIVE FROM OXFORD
- STARTED IN 2018
- 119 INSTITUTIONS IN 29 COUNTRIES
- HELPS RESEARCHERS CREATE LOCAL OPEN SCIENCE JOURNAL CLUBS
- DISCUSS DIVERSE ISSUES, PAPERS AND IDEAS ABOUT IMPROVING SCIENCE, REPRODUCIBILITY AND THE OPEN SCIENCE MOVEMENT

Read more here

ReproducibiliTea

LUND BIOMEDICINE

JOIN US FOR MONTHLY DISCUSSIONS ON REPRODUCIBILITY, RESEARCH INTEGRITY, RESEARCH QUALITY, AND OPEN SCIENCE
FIKA WILL BE PROVIDED!

WHERE:
ROOM 10,
THE SPARK,
MEDICON VILLAGE

WHEN:
DEC 18 AT 5 PM
DATES FOR
2025 TBA

ReproducibiliTea

Organized by

AdvanSci
RESEARCH SOLUTIONS

SIGN UP

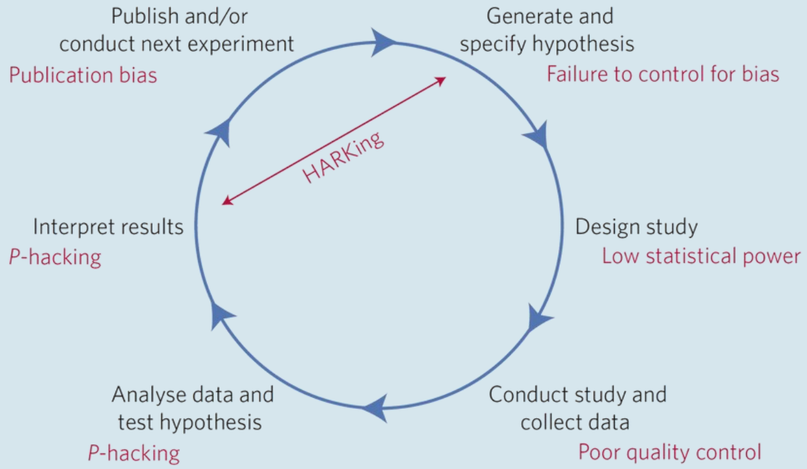
READING LIST

TOPICS WE HAVE DISCUSSED SO FAR INCLUDE...

A Manifesto for Reproducible Science

Marcus R Munafò et al.

2017 | Nature Human Behaviour



Threats to reproducible science

ARRIVE

equator network

Reporting guidelines

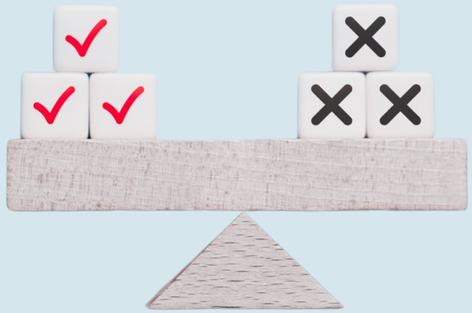
OSF

Open science platforms

SIGN UP

Publication Ethics in the Era of Artificial Intelligence

Zafer Kocak | 2024 | JKMS



Benefits and risks of AI

Table 3. Author's guide before writing and submitting an AI-assisted manuscript

Journals generally ask you to declare/indicate
• Which AI model was used, when and by whom?
• The rationale for the use of AI and how it is used
• All prompts and responses
• Where in your article the AI-generated content appears?
During the manuscript writing process
• Check the accuracy of all references
• Ensure that all concepts are properly attributed
• Ensure that the language used is neutral and inclusive
• Check the similarity of text for plagiarism
• Read the journal and/or publisher's AI policy carefully

AI = artificial intelligence.

Guidelines for authors

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Preventing Bad Behavior in Academia

Rayane da Cruz Albino et al. 2024 | Science

Authorship ethics

Publish or perish culture

Career stability

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Open Science

STATISTICS

WORK ENVIRONMENT & MENTAL HEALTH

Incentives

Reporting Guidelines

Reproducibility

RESEARCH TRAINING

RESEARCH DESIGN

Pre-Registration

Research Integrity

CAREER

Transparent reporting

ReproducibiliTea

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