

Reading List | BDK19 | Unit 1

Replication, Validation and the spectrum of Reproducibility

Suggested readings on the following topics:

1. Issues with scientific reproducibility in the media
2. Improving clinical reproducibility
3. NIH efforts to enhance scientific reproducibility
4. Reproducibility Initiative
5. Improving identification of cell lines

Issues with scientific reproducibility in the media

No, science's reproducibility problem is not limited to psychology

<https://www.washingtonpost.com/news/speaking-of-science/wp/2015/08/28/no-sciences-reproducibility-problem-is-not-limited-to-psychology/>

Trouble at the lab

<http://www.economist.com/news/briefing/21588057-scientists-think-science-self-correcting-alarming-degree-it-not-trouble>

NIH efforts to enhance scientific reproducibility

NIH plans to enhance reproducibility

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4058759/>

Improving clinical reproducibility

A call for transparent reporting to optimize the predictive value of preclinical research

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3511845/>

Drug development: Raise standards for preclinical cancer research

<http://www.nature.com/nature/journal/v483/n7391/full/483531a.html>

Reproducibility Initiative

Over half of psychology studies fail reproducibility test

<http://www.nature.com/news/over-half-of-psychology-studies-fail-reproducibility-test-1.18248>

Science Forum: An open investigation of the reproducibility of cancer biology research

<http://elifesciences.org/content/3/e04333v1>

Improving identification of cell lines

Fixing problems with cell lines

<http://science.sciencemag.org/content/346/6216/1452>

Reproducibility: changing the policies and culture of cell line authentication

<http://www.nature.com/nmeth/journal/v12/n6/full/nmeth.3403.html>