

Information and Resources Addressing Falsification of Data in Research

These resources were compiled by members of the ACEP Research and Academic Affairs Committees, July 2019

According to the United States Office of Research Integrity (ORI), research misconduct is defined as "fabrication, falsification, or plagirarism in proposing, performing, or reviewing research, or in reporting research results."¹

The following resources have been identified by the Academic Affairs and Research Committee for use by the emergency medicine researcher for following research best practices.

WEBSITES

Resources

- U.S. Department of Health and Human Services The Office of Research Integrity ORI, located in the Department of Health and Human Services (HHS) oversees and directs Public Health Service research integrity activities on behalf of the Secretary of HHS. The website contains a number of resources, such as newsletters, misconduct case summaries and much more.
- <u>Electronic Code of Federal Regulations</u> (CFR) Public Health Service Policies on Research Misconduct. The CRF is the, "codification of the general and permanent rules published in the Federal Register by the departments and agencies of the Federal Government produced by the Office of the Federal Register (ORR) and the Government Publishing Office."²
- <u>ACEP Ethics and Legal</u> ACEP's website that provides resources to help emergency physicians navigate ethical and legal challenges.
- NIH Article "What is Ethics in Research and Why is it Important?" by David B. Resnik, JD, PhD
 Published December 1, 2015

News Stories

- https://www.onlineuniversities.com/blog/2012/02/the-10-greatest-cases-of-fraud-in-university-research/
- https://ankura.com/insights/strategies-for-preventing-research-misconduct/
- https://leapsmag.com/researchers-behaving-badly-why-scientific-misconduct-may-be-on-the-rise/
- https://www.livescience.com/64353-top-retracted-papers-2018.html
- https://www.the-rheumatologist.org/article/tainted-research-repeatedly-re-used-to-assess-drug-effectiveness/

¹ https://ori.hhs.gov/frequently-asked-questions

² https://www.ecfr.gov/cgi-bin/text-idx?SID=0b07ed68cf889962cae6c2b45d89150b&node=pt42.1.93&rgn=div5

BOOKS

- A surgeon's guide to writing and publishing available for purchase
- Ethical Dilemmas in Emergency Medicine available for purchase

JOURNAL ARTICLES

- How Many Scientists Fabricate and Falsify Research? A Systematic Review and Meta-Analysis of Survey Data – Published May 29, 2009
- How Do Real and Falsified Data Differ? Psychology of Survey Response as a Source of Falsification Indicators in Face-to-Face Surveys Published June 27, 2013
- Data fraud in clinical trials Published Nov 1, 2015
- A statistical approach to detect interviewer falsification of survey data Published June 2012
- Scientific Integrity Principles and Best Practices: Recommendations from a Scientific Integrity
 Consortium Published February 27, 2019
- Why do scientists fabricate and falsify data? A matched-control analysis of papers containing problematic image duplications Published April 12, 2017
- Evaluation of the Inclusion of Studies Identified by the FDA as Having Falsified Data in the Results of Meta-analyses: The Example of the Apixaban Trials Published March 4, 2019
- Fraud and misconduct in clinical research: A concern Published April June 2013
- Scientific Misconduct and Medical Journals Published November 20, 2018
- <u>Scientific misconduct: falsification, fabrication, and misappropriation of credit</u> Published in the Handbook of Academic Integrity 2016
- The value of statistical tools to detect data fabrication Published April 22, 2016
- <u>Perspectives on Scientific Misconduct and Fraud in Clinical Trials</u> Published September 20, 2012

GENERAL ARTICLES

- <u>The Code of Misconduct</u> Published September 1, 2018 by the American Society of Hematology
- <u>Learning from cases of research misconduct</u> Published January 2014 by the American Psychological Association
- Advice on dealing with research misconduct Published May 24, 2016 by Elsevier

ADDITIONAL RESOURCES

- World Map of Scientific Misconduct
- <u>Council of Science Editors White Paper on Publication Ethics</u> First published in 2006 and
 most recently updated in 2012, the paper provides an overview of the roles and responsibilities in
 publishing, authorship responsibilities, review responsibilities and many other aspects of research
 integrity.
- <u>Committee on Publication Ethics</u> "What to do if you suspect fabricated data" decision tree for suspected fabricated data in a published manuscript.
- <u>The Importance of Ethical Conduct in Scientific Research</u> Information paper, Committee on Ethics American Chemical Society, November 2017.