

Everyday Ethics for PhD

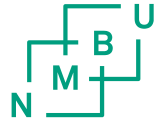
Jane Ludvigsen

NMBU, Ås 10.04.2019



<http://www.spsp.org/news-center/blog/moral-character>

Research Ethics



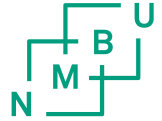
- How can you tell if it is good research?



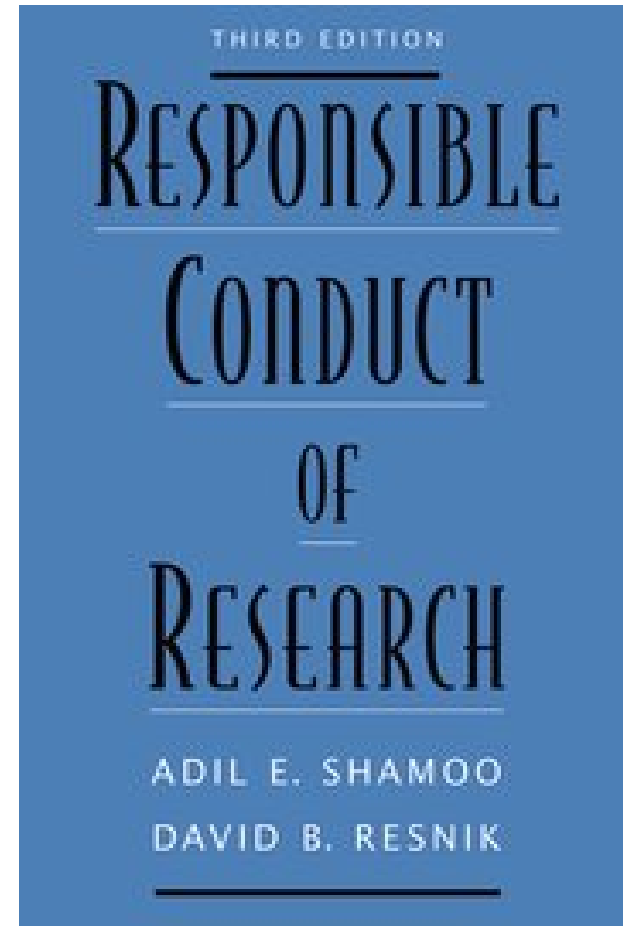
<https://www.infosurv.com>

The concept of "research ethics" refers to a diverse set of values, standards, and institutional regulations that contribute to constituting and regulating scientific activities.

Research Ethics



- **Honesty**
- **Objectivity**
- **Integrity**
- **Carefulness**
- **Openness**
- **Respect for Intellectual Property**
- **Confidentiality**
- **Responsible Publication**
- **Responsible Mentoring**
- **Respect for colleagues**
- **Social Responsibility**
- **Non-Discrimination**
- **Competence**
- **Legality**
- **Animal Care**
- **Human Subjects Protection**



Adapted from Shamoo A and Resnik D. 2015. Responsible Conduct of Research, 3rd ed. (New York: Oxford University Press).

Ethical issues in research

- Publishing, authorship and co-authorship
- Plagiarism and fairness
- Storage and archiving of raw data
- Protection of personal data *)
- Animal care



www.systemation.com

Ethical tools to enhance our knowledge and consciousness

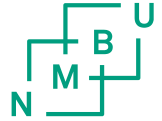
- The NMBU ethical guidelines
- National Research Ethics Committees (www.etikkom.no)

*) You must notify *NSD* of projects that will process personal data.

Check here whether you have to notify your project:

<https://nsd.no/personvernombud/en/notify/index.html>

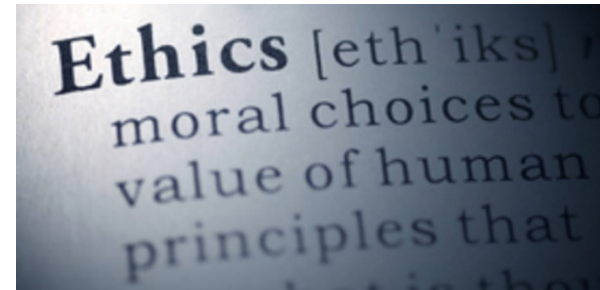
The NMBU Ethical Guidelines



Link to the NMBU ethical guidelines:

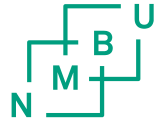
<https://www.nmbu.no/en/about-nmbu/management/committees/ethics/summary-of-nmbu-s-ethical-guidelines>

- Fundamental values
- Working and learning environment
- Teaching and supervision
- **Good research practice**
- **Publishing, authorship and co-authorship**
- Protection of humans and animals involved in research
- Protection of the environment
- Loyalty to the institution
- Research misconduct
- Whistle-blowing and procedures for handling deviations



<https://cp.compendia.no/nmbu/hse-manual/>
accessible only within NMBU wifi or via VPN

Publishing, authorship and co-authorship



THE AUTHOR LIST: GIVING CREDIT WHERE CREDIT IS DUE

The first author
Senior grad student on the project. Made the figures.

The third author
First year student who actually did the experiments, performed the analysis and wrote the whole paper. Thinks being third author is "fair".

The second-to-last author
Ambitious assistant professor or post-doc who instigated the paper.

Michaels, C., Lee, E. F., Sap, P. S., Nichols, S. T., Oliveira, L., Smith, B. S.

The second author
Grad student in the lab that has nothing to do with this project, but was included because he/she hung around the group meetings (usually for the food).

The middle authors
Author names nobody really reads. Reserved for undergrads and technical staff.

The last author
The head honcho. Hasn't even read the paper but, hey, he got the funding, and his famous name will get the paper accepted.

Criteria for authorship credit: Vancouver convention

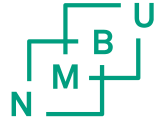


<http://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html>

Authorship credit should be based on:

- 1) Substantial contributions to: the concept or design of the work; or the acquisition, analysis, or interpretation of data for the work; **AND**
 - 2) Drafting the work or revising it critically for important intellectual content; **AND**
 - 3) Final approval of the version to be published; **AND**
 - 4) Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.
-

Publishing, authorship and co-authorship



- The most common source of arguments and misconduct allegations
- Responsibility of co-authors is a key issue in fraud cases

WHAT TO DO?

- *Discuss with your supervisors when you plan your paper(s) and thesis*
- *Discuss with other PhDs and researchers inside or outside your research group*
- *Contact SoDoC*

Search for information, make up your own mind:

- <https://www.sciencemag.org/author/s/science-journals-editorial-policies>
- <https://www.elsevier.com/connect/co-authors-gone-bad-how-to-avoid-publishing-conflicts>
- <https://www.quora.com/What-is-the-difference-between-the-corresponding-author-and-the-first-author-in-a-research-paper>

Open Science

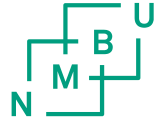


A culture of openness in respect of data and publications - has many benefits, e.g. research fraud prevention

- “Fake,” “Predatory,” and “Pseudo” Journals: how to identify them?
 - Publish anything for a fee
 - Watch out for a warning signs, e.g. lack of peer-review process, no address or contact information other than an email address listed, no mention of basic submission requirements
 - Often it's not black or white – investigate

[Directory of Open Access Journals \(DOAJ\)](#) a community-curated online directory that indexes and provides access to high quality, open access, peer-reviewed journals" that can be considered a "white list" for identifying legitimate journals

Research Fraud and Misconduct



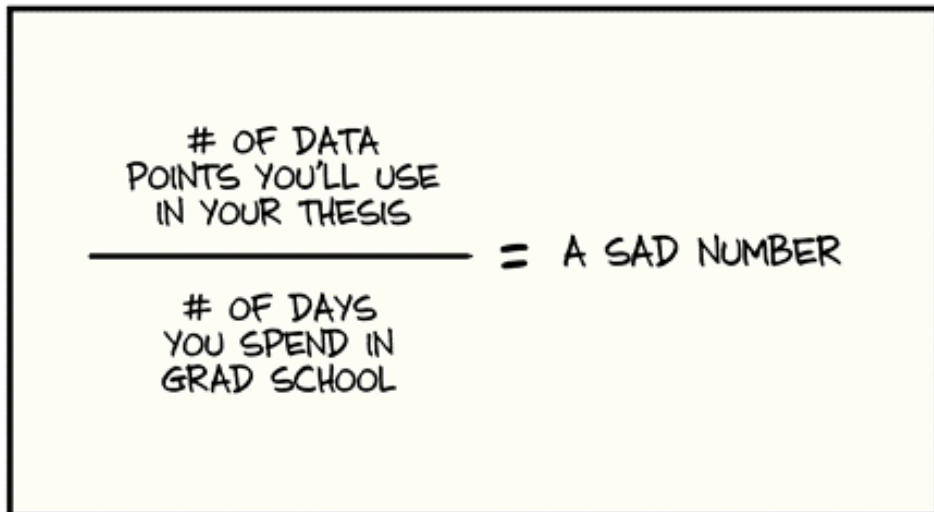
- **What is research fraud?**

An average of 1.97% of scientists admitted to having "fabricated, falsified or modified data or results at least once – a serious form of misconduct by any standard – and up to 33.7% admitted other questionable research practices *Fanelli, Plos ONE, 2009*

- **Why does it happen?**

Financial aspects, to advance one's career, etc.

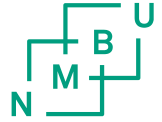
Culture of neophilia: difficult to publish negative results and results that confirm previously published studies



r-review process,

vertreatment, dramatic

Plagiarism



What is plagiarism?

- Turning in someone else's work/ideas as your own
- Copying words or ideas from someone else without giving credit
- Failing to put a quotation in quotation marks

How to avoid it?

- Understand the context
- Important to cite and refer
- Quote
- Identify what does and does not need to be cited
- Use plagiarism checkers/detection tools

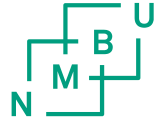


shu.lu

Write & Cite - Understanding Plagiarism- video series

<https://www.nmbu.no/ansatt/laringssenteret/verktoy/plagiering>

Research Ethics Boards and Guidelines



Local level:

- The Ethical Committee at NMBU <https://www.nmbu.no/om/utvalg/etikk/om>
- Questions on research ethics incl. projects involving personal data: jan.olav.aarflot@nmbu.no

National level:

- National Research Ethics Committees (www.etikkom.no)
 - Science and Technology (NENT)
 - Social Sciences and the Humanities (NESH)
 - Medicine and Health Science (NEM)
- NSD Data Protection Services (<https://nsd.no/personvernombud/en/>)
- The Norwegian Biotechnology Advisory Board (www.bion.no)
- The Norwegian Board of Technology (www.teknologiradet.no)
- The National Commission for the Investigations of Research Misconduct (Nasjonal Granskingsutvalget) www.etikkom.no
- **The International Committee of Medical Journal Editors (ICMJE)** -
Recommendations for the Conduct, Reporting, Editing and Publication of Scholarly Work in Medical Journals – the Vancouver Convention; “Fake,” “Predatory,” and “Pseudo” Journals
www.icmje.org

Thank You!

