GROUP 5

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Research, technology and ethics
THE ROLE OF THE RESEARCHER

Gain new knowledge and share it with the public

DIFFERENCE BETWEEN LAW AND ETHICS

What is lawfully right is not always morally right

THREE KINDS OF RESEARCH

Basic, Applied and Commissioned
TWO DIFFERENT TYPES OF FUNDERS

Without direct interest of results

Interested in results for commercial purposes
- Can create conflicts over results

RESEARCH FUNDERS WANT TO SEE RESULTS

WHO BENEFITS FROM RESEARCH

Researcher
Funding organization
Commercial interests
HANDLING OF RESEARCH MATERIAL

Source data is owned by the organization where the research is conducted

The collected material is not the private property of the researcher or research group
HANDLING OF RESEARCH MATERIAL

In the case of experiments with live subjects, there are four concepts to keep apart: Secrecy, professional secrecy, anonymity and confidentiality.

A researcher can never promise that no one outside the research group will ever have access to the material.
Factors for successful and ethical collaborative research:

- Clear expectations on contributions
- Honesty (e.g. persons involved)
- Openness (e.g. towards funders)
- Clear responsibilities
- Documentation
- Timetable
- Authorship
- Discuss changes
- Data ownership
WHY WE PUBLISH SCIENTIFIC PAPERS?

For yourself:

• Scientific papers is most common, rigorous and formal way to express your scientific research achievements and progress
• Share your research results, discuss scientific point of view, and seek cooperation
• Make yourself known (by peers)
• Promotion and grants?

For peers:

• Evaluate the importance and validity of your work
• Verify your results, learn and draw lessons from you

For relevant research institutions, publishers and government:

• Invite you to do counseling, peer review, comments and other decision-making
RESEARCH ETHICS AND RESPONSIBILITY

For Authors:

- You are responsible for the contents of a book or article presenting your research. That includes everything related to the actual project - methods, validity and reliability of the results etc. - but also the quality of the manuscript.
- Not allowed plagiarism, data fraud and simultaneously submitted to or published in several different Journals.
- Author contributions.

For publisher and the editor:

- Ensure that existing rules in the area of research ethics and current legislation relating to research have been followed.
- Editor: overall responsibility for its scientific quality.
- Editor: should provide space in the journal for debate about published manuscripts.
RESEARCH MISCONDUCT

Potentially harmful for:

Health, society, environment…
Confidence in scientific results
The academic merit system (plagiarism)
• Also fabrication and falsification of results
• Central Ethical Review Board (CEPN)
• A definition work, draw the limits:
  • Conscious misconduct / carelessness
  • Unethical behavior non-inherent to science (sexual harassment)
  • Establish plagiarism is difficult (self-plagiarism)
• ”For doctoral students, the supervisor’s contributions can be supplemented with classes in research ethics” (Good research practice, Vetenskapsrådet, p. 113)
OPEN ACCESS?

Gimmick called ”impact factor”
Eye-catching, provocative
Bubbles in fashionable fields

62 % accepted bogus paper
36 of 304 with relevant review comments
Often hidden location