




# Research Ethics in Everyday Life

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Henriikka Clarkeburn, PhD  
University of Sydney


Henriikka Clarkeburn, PhD 1



## Practicalities

- § Coffee break
- § Finish by 15.45
- § Collaborative program with focus on
  - § Research funding
  - § Dealing with research subjects
  - § Publishing research findings
  - § The role of researcher in society

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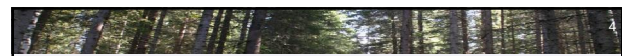
**Day 1, 2nd June**

- § **Morning 9-11.30**  
Introduction to research ethics  
Ethics legislation and regulations in Finland and internationally
- Afternoon 12.45-16** (including a break)  
Ethical questions in research activity  
Ethical questions in one's own research

**Day 2, 3rd June 2008**

- § **Morning 9-11.30**  
Ethical questions in research publication  
Ethical questions in conference attendance/publications
- Afternoon 12.15-16** (including a break)  
Ethical questions in research supervision  
Ethical questions in research funding  
Ethical questions in external collaborations  
Ethical questions and the personal life of researchers


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## E1 – Researcher in a problematic situation

- § Researcher S has been invited as an expert into a politically topical research project. When S receives the research questionnaire (s)he concludes that results of the survey are pre-determined and thus independent of how (s)he replies to the questions.


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## What are ethical questions?

- § **Genuine ethical questions**
  - § No empirical data can be constructed to answer the question.
  - § Answers reflect values
- § **Pseudoethical questions**
  - § It is possible to find empirical evidence or data to answer the question, though it may not be available or feasible.
- § **Legal questions**
  - § Legal answer exists to the question
- § **Moral questions**
  - § Widely shared agreement on the right answer to the question

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## Three question types

- § Internal to research
- § Between research and subjects/clients (Intra)
- § External research activity

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## Standards of ethical research

- § Honesty
- § Credit
- § Carefulness
- § Freedom
- § Openness
- § Social responsibility
- § Respect
- § Social utility/efficiency

Resnik 1998

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## Responsibilities in research

**Fundamental Principles in EU**

- human life,
- human dignity, integrity of the person,
- democracy, the rule of law,
- prohibition of inhuman or degrading treatment,
- cultural, religious and linguistic diversity,
- equality and no discrimination,
- freedom of expression and of information,
- the freedom of arts and research,
- property and intellectual property,
- health care,
- consumer protection,
- the right of the child, the elderly and the handicapped,
- environment,
- privacy, protection of personal data, also genetic data,
- liberty and security.

- Nuremberg Code
- World Medical Association Declaration of Helsinki
- CIOMS
- EU legislation on human and animal research, GM
- EU fundamental principles
- EU excludes research in reproductive cloning and hereditary changes to human genome

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## Ethical analysis

- § Understanding the question
- § Identifying stakeholders
- § Recognising rights and responsibilities
- § Identifying possible solutions
- § Appreciation of personal bias

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## Approaching ethical questions


```

    graph TD
      Utility[Utility] --> Individual[Individual]
      Utility --> Community[Community]
      Individual --> One[One]
      Individual --> All[All]
      Community --> CommonGood[Common good]
      Community --> Harmony[Harmony]
      Principles[Principles] --> Logical[Acceptable logical rules]
      Principles --> Freedom[Maximisation of freedom]
      Virtue[Virtue]
    
```

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## Day 2

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## Purpose of scientific publishing?

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## Ethical questions in research publication

- § Plagiarism
- § Unethical authorship
- § Citation bias
- § Divided and Repetitive publication
- § Falsification/fabrication
- § Undeclared conflict of interest

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From: Babor, Thomas F & Thomas McGovern (2004)  
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## Plagiarism

**Plagiarism** is using other people's words and ideas in your work as if they were your own.

**Which ones you think describe plagiarism:**

1. Quoting a paragraph by placing it in block format with the source cited in text and list of references.
2. Composing a paragraph by taking short phrases of 10-15 words from a number of different sources and putting them together by adding your own words to make a coherent whole and including all sources in your reference list.
3. Copying a sentence or two and making small changes (e.g. replacing words or order of the sentence) without including the source in your reference list.
4. Copying a piece of text word to word from a journal without including the origin in the reference list.
5. Using a paper from an external source and changing the order of the paragraphs and handing the work in as your own.

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## Unethical authorship

- § Why does it matter who is the author?
- § Who should be the author?


Authorship credit should be based on

- 1) substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data;
- 2) drafting the article or revising it critically for important intellectual content; and
- 3) final approval of the version to be published.

Authors should meet conditions 1, 2, and 3. All authors meeting the criteria should be listed.  
(ICMJE guidelines aka Vancouver guidelines)

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## Citation Bias

Dishonesty


Deliberately presenting a distorted review of the known research results

Carelessness

Failure to read, understand, and cite relevant research knowledge

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## Divided/Repetitive publication

- § Divided: Results from one study are artificially divided for publication in two or more papers.
- § Repetitive: Publishing the same information two or more times (e.g., in journal articles and book chapters).

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## Falsification/fabrication

- § Falsifying results: Modify, omit or present one's own research findings or methods in a way that it distorts the original findings in a way that distorts the result
- § Fabricate results: Present results or methods that have never been produced or used

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## Undeclared conflict of interest

- § Authors should always disclose all financial (funding) and personal relationships which may have distorted their work.

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## Peer review process

- § Author, reviewer and editor share responsibility for scientific quality
- § Bias in the peer review process
  - § Open, single or double blind processes
- § Effect of dysfunctional review process

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## The purpose of conferences?

- § Why are they organised?
- § What are the benefits?

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## Conference attendance

- § Should I go or should I stay?
  - § Use of time
  - § Timing
  - § Funding
  - § Opportunity costs
  - § Match with own research
  - § Who would benefit most
  - § Previous experience

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## Preparing for the presentation

- § Focus – narrow or broad?
- § My research – state of the field?
- § What can we assume of the audience?
- § How much do I wish to reveal?
- § Style
- § Time available?


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## Lunch break

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## Supervision

- § Selecting PhD students
  - § Whose benefit?
  - § Informal pre-selection
  - § Formal selection criteria
    - § Academic ability
    - § Social abilities?
    - § Team fit?
      - § Age/gender/language

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## Supervision in practice

- § Allocation of time between students
  - § Need, benefit, merit?
- § Atmosphere / spirit
  - § Consideration for personal life
  - § Personality clashes
  - § Other tasks

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## Graduation

- § Duty to complete?
- § Criteria
- § Decision to submit

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## Funding – Society level

- § Commercial / public funding?
- § Project / people based?
- § Program / unrestricted funding opportunities?
- § Cutting edge / everyday research?

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## Funding - Researcher level

- § Topic – fit for funding?
- § Forming a research group
- § Writing the application

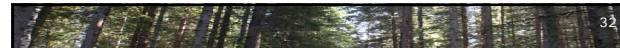
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## Funding - selection

- § Providing expert review/assessment
- § Interpreting expert reviews/assessments
- § Non-research based criteria
- § Social impact

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## Managing Funding

- § Reporting results
- § Selecting/Supervising students

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## Dealing with research subjects

- § Research on animals
  - § CBA, RRR
- § Research on humans
  - § Informed consent
  - § Intervention / observation
  - § Research on human materials
    - § Tissue / artefacts

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## Researcher in the media

Researcher in the media – responsibility or privilege?

- § Differences between research and media:
  - § Time-span, style, author/producer, measures, generality, reliability, motivation


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## Other social functions

- § Researcher as a servant for the society?
  - § Duty to make science/research accessible?
  - § Duty to contribute to committees?
  - § Duty to contribute to economy?

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## Misunderstanding science

- § Lack of information about science
- § Lack of understanding of complex concepts or theories
- § Misunderstanding scientific process of confirmation and disconfirmation
- § Lack of understanding of statistical arguments and information
- § Acceptance of poor/junk science
- § Rejecting genuine science
- § Misinterpretation of scientific findings

(Source: Nelkin 1995 in Resnik 1998)

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## Research and personal life

- § Is research different from other jobs?
- § Work / life balance
- § Decision-making opportunities

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## Good argumentation

- § Based on (all) true facts
- § Concepts are clear and explicitly defined
- § Presenting all reasonable alternatives
- § Focus on the arguments not on the one who makes them
- § Causal links clearly presented
- § Logical argument which is possible and clear
- § Conclusions are true

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- § Ethical claims cannot be constructed from empirical claims
  - § All that is natural is good
  - § We should be allowed to continue our male-biased recruitment practice as we have used it for many years.
  - § Why should we stop cutting down old-growth forests because someone else will do it anyway.
- § Ethical conclusion will require at least one ethical claim/assumption
  - § Cutting down rainforests contributes to climate change
  - § If the climate change continues at the current rate sea level will rise 5m in the next 50 years
  - § **Humans SHOULD act in order to protect natural balance.**
  - § We should not cut down rainforests

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## Value-rich statements

- § SO<sub>2</sub> filters are **inefficient** on how exhaust stacks
- § Those are **weeds**
- § Profit incentives are **inappropriate** tools for management
- § The rural communities receive **too much** public support

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## Responding to claims and conclusions

- § Identify the core question within the given claim or conclusion
- § Investigate what facts/values are used to support the conclusion or claim
- § Determine whether claims and conclusions are logically related
- § Focus on the essential

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## How to promote ethical standards?

- § Awareness
- § Structural traps and encouragement
- § Consequences
- § Transparency

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## Summa summarum

- § Science and ethics are interlinked
- § Ethics can be seen as a skill to analyse and present solutions to difficult questions

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## References

- § Babor, Thomas F & Thomas McGovern (2004). Dante's Inferno: Seven Deadly Sins in Scientific Publishing and How to Avoid Them. [http://www.who.int/substance\\_abuse/publications/publishing\\_addiction\\_science\\_chapter7.pdf](http://www.who.int/substance_abuse/publications/publishing_addiction_science_chapter7.pdf)
- § Beauchamp and Childress (1994). Principles of Biomedical Ethics, 4<sup>th</sup> Ed. Oxford University Press, New York
- § Resnik, David B. (1998). The Ethics of Science – an introduction. Routledge, London.

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