




# Ethical decision-making for responsible researchers

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## Objectives

- 
- Provide a common-sense ethics framework for researchers
    - Frameworks are not foundations or formulas
    - Usable in real time
    - That is, “good enough” for decision-making
    - That links to ethical values generally shared by researchers & research stakeholders

# Overview

- A. Being a responsible scientist
- B. Reflections on ethics
- C. Decision-making framework
- D. Discussion

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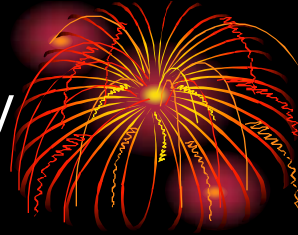
## A. What is it to be a responsible scientist?

- To answer this important question, we need to ask about
  1. Role of science in society
  2. Conduct of science
  3. Ethical pressure points & mitigating strategies

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# Science in society



## Scientific method

- Putting nature to the test
  - Testing hypotheses; search for verification
- Requires rigour, honesty, candour, transparency

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# Science in society



- A science-based economy
  - Recognition of interests - both \$ and non-\$ driven
- Stakeholders
  - Within the scientific community
  - In the larger society

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# Conduct of science



- Science requires
  - Ideas
  - Materials
  - People
  - Resources
  - Social institutions
  - Public tolerance & approbation

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# Ethical pressure points



- Competition for scarce resources
  - Good ideas, materials, people, & resources
  - Institutional & public support
  - Reputation
- Puts pressure on individuals & institutions

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## Mitigating strategies

- External controls
  - Codes, enforcers, oversight
- Internal controls a.k.a. "ethics"
  - "Responsibilizing" people and institutions
  - Building ethical cultures
  - Creating virtuous scientists

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## Responsibilities to

- The public
- Scientific community
- Sponsors
- Colleagues
- Oneself

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# Multiple roles

- Scientist as
  - Researcher
  - Colleague
  - Mentor
  - Team leader
  - Clinician
  - Entrepreneur
  - Citizen

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# Science code of ethics

1. Act with skill and care, keep skills up to date
2. Prevent corrupt practice and declare conflicts of interest
3. Respect and acknowledge the work of other scientists
4. Ensure that research is justified and lawful
5. Minimise impacts on people, animals and the environment
6. Discuss issues science raises for society
7. Do not mislead; present evidence honestly

See David King, UK Chief Scientist  
<http://news.bbc.co.uk/1/hi/sci/tech/6990868.stm>

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# Two comments



- **"It's important to look at the relationship between science and the public. If we have a breakthrough, and society is not accepting of that, then we have a problem; so what we need is for scientists to accept the code and follow it."** Dr. King
- **"The seven points in this code are part of what separates researchers from charlatans, medicine from quackery and science from supposition"**  
Dr Evan Harris, MP

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# B. Reflections on ethics



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## Part I. What is ethics?



- Ethics as the systematic study of human conduct and moral judgement, including
  - good/bad,
  - right/wrong
  - virtue/vice
- Critical reflection on moral beliefs and practices
  - What are people's moral beliefs?
  - What choices should we make?

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## 4 Components of Moral Behaviour



1. Ability to recognize a situation as having a moral component
2. Ability to make a judgement as to which action is right, fair, just, appropriate
3. Commitment to morally appropriate action
4. Possession of appropriate personal qualities (perseverance, courage) to carry out morally appropriate actions
  - James Rest

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## Acquisition of moral values



- Many values are “caught” rather than “taught”
  - Importance of peers and workplace
  - Socialisation and acculturation
  - Life experiences
- Reflective engagement

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## Ethical judgements



- Centre on important values
- Based on reason, not authority
- Override self-interest to assure mutual benefit
- Based on impartial considerations
- Special words and emotions
- “All things considered judgements”
  - Not optional add-on judgements
  - Integrative or holistic

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# Ethics reinforcement



- Internalised –
  - Conscience, moral beliefs
  - Emotions – natural and learned
- Externalised
  - Informal - family, peers, & social groups; “doing the done thing”, “shunning”, in groups and out, moral climate
  - Formal – codes of ethics, authorities, sanctions
- Risk of overemphasising formal over others (Consent forms?)

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# Ethical judgements & principles



- Ethical judgements involve a dual test:
  - “Are the means acceptable?” AND
  - “Are the ends worthwhile?”
- Consensus principles in bioethics
  - ❖ Treat people with respect
  - ❖ Do no harm
  - ❖ Do good
  - ❖ Act fairly
  - ❖ Be caring

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## What ethics ...

- Can do
  - Illuminate key issues, values, options
  - Indicate relevant evidence
  - Rule out some options
  - Offer a basis for agreement on substance/process
- Cannot do
  - Guarantee total agreement
  - Rule out arguments about evidence
  - Always provide ideal solutions
  - Eliminate tough, even tragic, choices

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## Framework for Ethical Decision-Making : Value Focused Thinking

1. Clarify objectives (means/ends)
2. Discussion of objectives
3. Ranking objectives
4. Identifying tradeoffs

See Ralph Keeney's Value Focussed Thinking  
<http://www.hup.harvard.edu/catalog/KEEVAL.html>

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## Another Framework: thinking through Noah's Dilemma

1. Identify the problem
2. Specify feasible alternatives
3. Identify morally significant factors
  - ❖ Using your ethical resources
4. Propose & test options
  - ❖ Golden (Do unto..) & copper (Do not do..) rules
  - ❖ Does this enhance or erode trust?
  - ❖ Would a good person/institution do this?
5. Make your choice; live with it; & learn from it

See McDonald, 2001

<http://www.ethics.ubc.ca/upload/A%20Framework%20for%20Ethical%20Decision-Making.pdf>

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## An ethical resource

1. Act with skill and care, keep skills up to date
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## Additional resources



- Moral models: mentor, trusted other
- Docs and bodies
  - Tri-council Policy Statement: Ethical Conduct for Research Involving Humans  
<http://pre.ethics.gc.ca/english/policystatement/policystatement.cfm>
  - UBC Research Ethics at ORS  
<http://www.ors.ubc.ca/ethics/index.htm>

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## Take home messages



- Think globally
  - Science conducted ethically
  - Science serving the public good
- Act locally
  - What is my lab's ethical culture?
  - What are my responsibilities?

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## Questions for discussion



- Examples of externalised formal ethics at your lab?
- How did you learn about your lab's ethical norms?
  - Would you do it differently when you are the PI?
- Science code of ethics-useful?
- Have you ever sought ethical resources? If so, were they useful? How could they be improved?

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## Questions for discussion



1. What are the ethical dimensions of your work (if any)?
2. What can you do about them? (if anything)
  - feasible alternatives?
  - tradeoffs?
3. How could you test options?

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