

Governance & Compliance





Grow your
**Leadership
Capacity**



Research Integrity & Codes of Conduct

How to add scenery to the roadmap?

The Most Recent Roadmap

A screenshot of the National Health and Medical Research Council (NHMRC) website. The page title is "Australian Code for the Responsible Conduct of Research". The main content area includes a summary table with the following information:

Published year: 2007	Reference No: R39
Available in print: Yes	Further information: nhmrc.publications@nhmrc.gov.au
Status: Current	

Below the table, there are links for "Letter of Introduction from CEO" and "Summary of Code Content". At the bottom, there is a "Download publication:" section with a link to "Download: Australian Code for the Responsible Conduct of Research (PDF, 508kb)". The left sidebar contains navigation links such as "Publications", "Publications by Category", and "Quick Links: Publications". The right sidebar has a search box and a list of "RESOURCES: NHMRC" including "About the NHMRC", "Contact the NHMRC", "NHMRC Committees", "News & Events", "Public Consultation", and "Publications".

<http://www.nhmrc.gov.au/publications/synopses/r39syn.htm>



Part A advocates and describes best practice for both institutions and researchers.

For example, how to manage research data and materials, how to publish and disseminate research findings, including proper attribution of authorship, how to conduct effective peer-review and how to manage conflicts of interest

Part B is designed to ensure there are agreed, fair and effective processes in place in the event of an allegation of misconduct

The Scenery

But sharing the responsibility for research integrity and good governance takes more than guidelines

It needs day-by-day participation and a conversation

What does a responsible researcher look like?



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What does a responsible researcher look like?



- Honest, having integrity
- Respect for people, animals and environment
- A good steward of public resources used in research
- Appropriate acknowledgement of the role of others in research
- Responsible dissemination of results

What kind of researcher should I be?

A researcher with commitment to:

- Honesty
- Integrity
- Beneficence
- Justice
- Generosity
- Persistence
- Independence
- Reflection



Research Misconduct: some definitions (from the Code)

10.1

“Research misconduct includes fabrication, falsification, plagiarism or deception in proposing, carrying out or reporting the results of research , and failure to declare or manage a serious conflict of interest It includes avoidable failure to follow research proposals as approved by a research ethics committee, particularly where this failure may result in unreasonable risk or harm to humans, animals or the environment. It also includes the willful concealment or facilitation of research misconduct by others”

Some definitions (from the Code)

10.1

“.....relates to misconduct if it involves all of the following:

- an alleged breach of the Code
- intent and deliberation, recklessness or gross and persistent negligence
- serious consequences, such as false information on the public record, or adverse effects on research participants, animals or the environment”

Repeated or continuing breaches of the Code may also constitute misconduct

Honest differences in judgment or honest errors that are minor and unintentional do not constitute misconduct.

What sort of 'activities' might constitute misconduct?

1. Falsifying or 'cooking' research data
2. Ignoring major aspects of human-subject requirements
3. Not properly disclosing involvement in firms whose products are based on one's own research
4. Minor errors in data collection, later corrected
5. Relationships with students, research subjects or clients that may be interpreted as questionable
6. Using another's ideas without obtaining permission or giving due credit
7. Unexpected adverse events in human subjects
8. Unauthorized use of confidential information in connection with one's own research
9. Failing to present data that contradict one's own previous research
10. Circumventing certain minor aspects of human-subject requirements

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Or these?

11. Overlooking others' use of flawed data or questionable interpretation of data
12. Changing the design, methodology or results of a study in response to pressure from a funding source
13. Publishing the same data or results in two or more publications
14. Including as authors research assistants who collect and help analyse data
15. Inappropriately assigning authorship credit
16. Withholding details of methodology or results in papers or proposals
17. Using inadequate or inappropriate research designs
18. Providing research participants with summaries of research findings
19. Dropping observations or data points from analyses based on a gut feeling that they were inaccurate
20. Inadequate record keeping related to research projects

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20. Inadequate record keeping related to research projects

Does a problem exist?

“Our findings suggest that US scientists engage in a range of behaviours extending far beyond falsification, fabrication or plagiarism”

... Martinson, Anderson & de Vries *Nature* 2005 435:737-738

3,247 NIH-funded US researchers

- 0.3 – 1.4% Fabrication, falsification, plagiarism (FFP)
- 4.7% same data or results in two or more publications
- 10.0% inappropriate assigning of authorship
- 15.3% dropping observations or data points from analyses on “gut feeling”
- 15.5% changing the design, methodology or results of a study in response to pressure from a funding source
- 27.5% inadequate record keeping related to research projects

Integrity means

The concept of integrity in research cannot ... be reduced to a one-line definition ...

- For a [researcher], integrity embodies above all the individual's commitment to intellectual honesty and personal responsibility. It is an aspect of moral character and experience.
- For an institution, it is a commitment to creating an environment that promotes responsible conduct by embracing standards of excellence, trustworthiness, and lawfulness ...

From Integrity in Scientific Research: Creating an Environment That Promotes Responsible Conduct (2002) a Report of the US National Academies (p.5) (<http://www.nap.edu/books/0309084792/html/>)

Is there a framework for research integrity & research good practice?

How do we learn good research practice?
(How did you learn good research practice?)

- *Ad hoc*
- Apprenticeship
- Mentoring
- “Osmosis”
- Guidelines



What can we learn from high-profile cases?

- **Jon Sudbø**
Many collaborators - created 900 fictitious patients
- **Luk Van Parijs**
Incredible potential - falsified data, unpublished manuscripts and grant applications
- **Geoffrey Chang**
Incredible drive and work ethic – faulty software threw everything off
- **Woo Suk Hwang**
Ethical misrepresentation and fraud



What can we learn from high-profile cases?

- What went wrong?
- Why?
- Who gets hurt?
- Ways forward?



What can be learned overall?

- Hyping research can lead to fraudulent research
- Peer review can't replace good governance
- Research integrity involves individuals, groups & institutions (networked)

What can we do to promote research integrity?

- ✓ Treat research integrity, ethics and compliance as central components of research education and training, indeed of your own research
- ✓ Be a “role model”
- ✓ Encourage discussion of research ethics
- ✓ Foster an intellectual climate in which discovery, the pursuit of truth, ethical conduct and professionalism are highly valued
- ✓ Anticipate, negotiate and discuss issues and problems

What can we do to promote research integrity?

- ✓ Promote 'best practice' in the management of research records and data
- ✓ Agree 'up front' on publication strategies and recognising contributions
- ✓ Respect and respond appropriately to people with concerns
- ✓ Be aware of the potential "barrier" problem areas

The Barriers



Funding Pressure



Publishing Pressures



Feeling “under-the-hammer”

The Barriers

- Competition
- Rewards
 - Institutional
 - System
 - Personal
- Workload
- Peer pressure
- Censorship
- Commercialisation
- Patents



"Surely you were aware when you accepted the position, Professor,
that it was publish or perish."

<http://th.physik.uni-frankfurt.de/~jr/gif/cartoon/cart0395.jpg>

The Elephant in the Room



Data Management !!





Feedback

Research Statistics

DVC&VP(R)

ARI Pty Ltd

» Research Branch Home

Applying for Funding

ARC

NH&MRC

Funding Opportunities

Reporting & Forms

Publications Collection

Ethics & Compliance

Policies & Committees

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Resources for Researchers

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Information -

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Research Branch

The Research Branch assists the University in achieving its goal of international distinction by providing quality advice and support to University researchers and their sponsors and contributing to the development of a University environment that facilitates and recognises high quality research.

The Research Branch forms part of the Division of the Deputy Vice-Chancellor & Vice-President (Research).

Key Contributions:

- Assistance with research funding opportunities
- Grant administration
- Research policy
- Research ethics and compliance administration
- The provision of general and strategic advice to researchers and research leaders

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<http://www.adelaide.edu.au/rb/>



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Welcome to the Research Ethics and Compliance Unit

▶ Animal Ethics Committee

- [About](#)
- [Guidelines and Forms](#)
- [Submission Deadlines](#)
- [Reporting Requirements](#)
- [Policies](#)
- [Animal Welfare Officer](#)
- [Training](#)
- [Links](#)

▶ Human Research Ethics Committee

- [About](#)
- [Guidelines and Forms](#)
- [Submission Deadlines](#)
- [HREC](#)
- [Training](#)
- [Links](#)

▶ Gene Technology Compliance

- [About](#)
- [GMO Dealings](#)
- [Facilities](#)
- [Working with GMOs](#)
- [General Information](#)

▶ Quarantine Compliance

- [About](#)
- [Applications and Approvals](#)
- [Quarantine Approved Premises](#)
- [Training](#)
- [Collaborative Structure at Waite Precinct](#)

▶ RECU Contacts

Research Ethics and Compliance Unit (RECU)
Research Branch
Level 7, 115 Grenfell Street
THE UNIVERSITY OF ADELAIDE SA 5005
Facsimile: 8303 7325

Ms Deanna Gross
Ethics / Administrative Officer
T: 8303 4417
E: deanna.gross@adelaide.edu.au

Dr Antony Hansen
Research Compliance Officer (Quarantine)
T: 8303 6231
E: antony.hansen@adelaide.edu.au

Mrs Helen Malby
Secretary, Animal Ethics Committee
T: 8303 4014
E: helen.malby@adelaide.edu.au

Ms Sabine Schreiber
Secretary, Human Research Ethics Committee
T: 8303 6028
E: sabine.schreiber@adelaide.edu.au

Ms Michelle White
Manager, Ethics and Compliance
Secretary, Institutional Biosafety Committee
T: 8303 3239
E: michelle.white@adelaide.edu.au

US Office of Research Integrity



A screenshot of the US Office of Research Integrity website as viewed in Microsoft Internet Explorer. The browser's address bar shows 'http://ori.dhhs.gov/'. The website header includes the ORI logo and the text 'Office of Research Integrity, U.S. Department of Health and Human Services'. A navigation menu contains links for HOME, ABOUT ORI, PRIVACY, FOIA, SITE MAP, and CONTACT ORI. The main content area features a 'WELCOME TO THE OFFICE OF RESEARCH INTEGRITY' message, a 'Featured Video' player, and a 'New' section with a headline 'New Submission Deadlines for Research on Research Integrity (RRI) Program'. A sidebar on the left contains a search bar, a list of sections (Assurance, Conferences, Handling Misconduct, etc.), Assurance Links, and a Newsletter section. The bottom of the browser window shows the Windows taskbar with various open applications and the system clock at 10:25 AM.

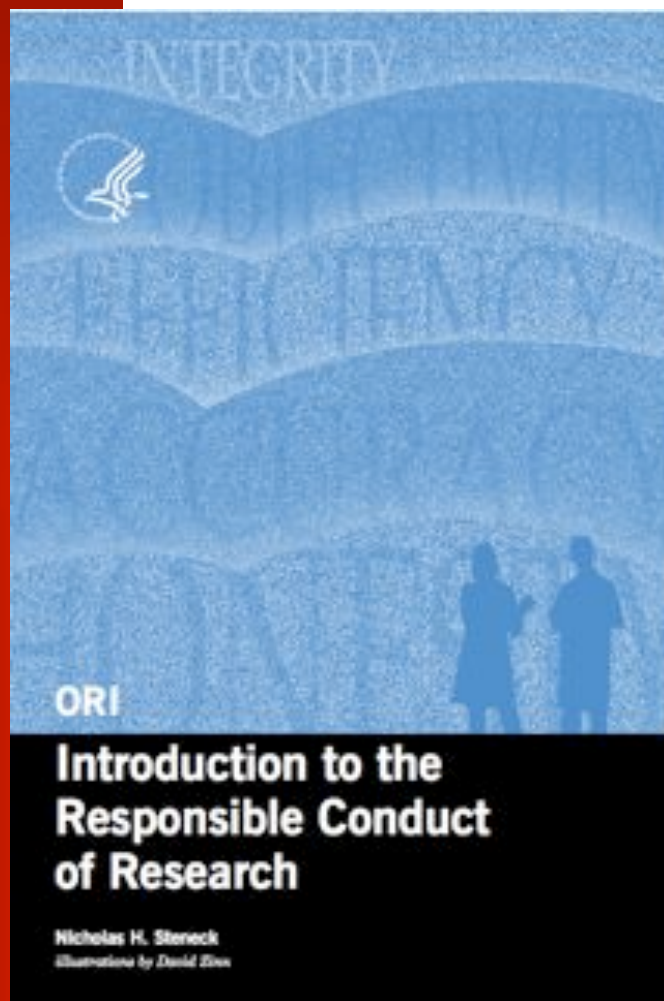
<http://ori.dhhs.gov/>



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http://ori.dhhs.gov/publications/ori_intro_text.shtml



Part I: Shared Values

Chapter 1. Rules of the Road

Chapter 2. Research Misconduct

Part II: Planning Research

Chapter 3. The Protection of Human Subjects

Chapter 4. The Welfare of Laboratory Animals

Chapter 5. Conflicts of Interest

Part III: Conducting Research

Chapter 6. Data Management Practices

Chapter 7. Mentor and Trainee Responsibilities

Chapter 8. Collaborative Research

Part IV: Reporting and Reviewing Research

Chapter 9. Authorship and Publication

Chapter 10. Peer Review

Part V: Safe Driving and Responsible Research

Some further resources

- *Integrity in Research - A Rationale for Community Action*, Final Report of Expert Group meeting Brussels (BE), 22-23 March 2007
http://ec.europa.eu/research/science-society/document_library/pdf_06/integrity-in-research-ec-expert-group-final-report_en.pdf
- *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans*, Government of Canada, revised 2005)
<http://pre.ethics.gc.ca/english/policystatement/policystatement.cfm>
- *Ethics Centre of South Australia*
<http://www.ecsa.edu.au/Services.aspx>



<http://www.adelaide.edu.au/graduatecentre/rep/staff/frlp/>



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Researcher Education & Development
Programs for Career Researchers