HDR Student Induction
Research Integrity - Ethics and Hazardous Materials
Research Office at Curtin
Dr Bernadette Bradley, Biosafety Advisor  July 2019
Research Integrity Team

Australian Code for the Responsible Conduct of Research 2018

Hazard Identification Tool (HIT)
Research Integrity

The Research Integrity Team is here to provide assistance to help facilitate high quality research that is conducted with integrity and within the legislative framework.

We provide training and specialised advice, promote and monitor compliance, and process applications for permits and approvals.

Research Integrity Office Staff

- **Responsible Conduct of Research**
  Manager Research Integrity: Dr Catherine Gangell (Parental leave) / Gail Dixon

- **Human Research Ethics**
  Team Leader Ethics: Amy Bowater
  Clinical Trials Advisor: Anneli Robbshaw
  Senior Research Services Officer: Alina Dmitrieva
  Research Services Officers: Diana Della Costa, Heather Johnson, Pam Lee, Stephanie Holmquest

- **Animal Research Ethics**
  Team Leader Ethics: Amy Bowater
  Senior Research Services Officer: Alina Dmitrieva

- **Animal Welfare**
  Animal Welfare Officers: Dr Tara Pike, Dr Emily Barrick

- **Animal Facility**
  Manager Animal Facility: Dr Beng Chua
  Animal Technicians: Kodee King, Carolyn Doyle

- **Hazardous Materials**
  Biosafety and Defence Trade Controls: Dr Bernadette Bradley
  Radiation Safety: Ketesse Hansen
RESPONSIBILITIES OF RESEARCHERS – you and your Supervisor

Australian Code for the Responsible Conduct of Research 2018

R14 Support a culture of responsible research conduct at their institution and in their field of practice.

R15 Provide guidance and mentorship on responsible research conduct to other researchers or research trainees under their supervision and, where appropriate, monitor their conduct.

R16 Undertake and promote education and training in responsible research conduct.

R17 Comply with the relevant laws, regulations, disciplinary standards, ethics guidelines and institutional policies related to responsible research conduct. Ensure that appropriate approvals are obtained prior to the commencement of research, and that conditions of any approvals are adhered to during the course of research.

R18 Ensure that the ethics principles of research merit and integrity, justice, beneficence and respect are applied to human research.

R19 Engage with Aboriginal and Torres Strait Islander peoples and respect their legal rights and local laws, customs and protocols.

R20 Ensure that the 3Rs (Replacement, Reduction and Refinement) are considered at all stages of research involving animals and minimise the impacts on animals used in research and in so doing support the welfare and wellbeing of these animals.

R21 Adopt methods appropriate to the aims of the research and ensure that conclusions are justified by the results.

R22 Retain clear, accurate, secure and complete records of all research including research data and primary materials. Where possible and appropriate, allow access and reference to these by interested parties.

R23 Disseminate research findings responsibly, accurately and broadly. Where necessary, take action to correct the record in a timely manner.

R24 Disclose and manage actual, potential or perceived conflicts of interest.

R25 Ensure that authors of research outputs are all those, and only those, who have made a significant intellectual or scholarly contribution to the research and its output, and that they agree to be listed as an author.

R26 Acknowledge those who have contributed to the research.

R27 Cite and acknowledge other relevant work appropriately and accurately.

R28 Participate in peer review in a way that is fair, rigorous and timely and maintains the confidentiality of the content.

R29 Report suspected breaches of the Code to the relevant institution and/or authority.
# Research Integrity Advisers

Can advise you about breaches of the Code or potential research misconduct.

### Health Sciences
- **Dr Delia Nelson** 9266 9785  delia.nelson@curtin.edu.au
- **Dr Katrina Spilsbury** 9266 1850  katrina.spilsbury@curtin.edu.au
- **Dr Lauren Breen** 9266 7943  lauren.breen@curtin.edu.au

### Humanities
- **Dr Eva Dobozy** 9266 3253  eva.dobozy@curtin.edu.au

### Business and Law
- **Dr Grantley Taylor** 9266 3377  grantley.taylor@curtin.edu.au
- **Dr Shirlee-ann Knight** 9266 7075  s.knight@curtin.edu.au

### Science and Engineering
- **A/Prof Kate Trinajstic** 9266 2492  k.trinajstic@curtin.edu.au
Research Integrity Training Course (Blackboard)

- Australian Code for the Responsible Conduct of Research

- Curtin University
  - Research Management Policy
  - Responsible Conduct of Research Policy and Procedure
  - Authorship, Peer Review and Publication of Research Findings Policy and Procedure
  - Conflict of Interest Procedures
  - Research Data and Primary Materials Policy
Hazard Identification Tool (HIT)

https://hit.curtin.edu.au/home

In the early planning stage of your project, before Candidacy milestone 1, fill in a HIT.

It will tell you what approvals you need to get from Curtin or the Australian Government before you can start your project.

Then do a risk assessment.

Then apply for Candidacy.
Legislation

- **Federal legislation**
- **State legislation**
- **Standards**
- **Codes of Practice**

- Occupational Safety and Health Act 1984
- Occupational Safety and Health Regulations 1996
- Gene Technology Act 2000
- Gene Technology Regulations 2001
- Biosecurity Act 2015
- Biosecurity and Agriculture Management Act 2007
- Biosecurity and Agriculture Management Regulations (2013)
- National Health Security Act 2007 (Part 3 – Regulation of security-sensitive biological agents)
- National Health Security Regulations 2008
- National Health and Medical Research Council Act (1992)
- Wildlife Conservation Act (1950)
- Fish Resources Management Act (1994)
- Dangerous Goods Safety Act 2004
- Dangerous Goods Safety (General) Regulations 2007
- Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007
- Dangerous Goods Safety (Security Risk Substances) Regulations 2007
- Poisons Act 1964
- Poisons Regulations 1965
- Agricultural and Veterinary Chemicals Act 1995
- Environmental Protection Act 1986
- Environmental Protection (Controlled Waste) Regulations 2004
- Health (Drugs and Allied Substances) Regulations 1961
- Misuse of Drugs Act 1981
- Misuse of Drugs Regulations 1982
- Chemical Weapons (Prohibition) Act 1994
- Chemical Weapons (Prohibition) Regulations 1997
- Industrial Chemical (Notification and Assessment) Act 1989
- Agricultural and Veterinary Chemicals Code Act 1994
- Agricultural and Veterinary Chemicals Code Regulations 1995
- Customs Act 1901
- Defence Trade Controls Act 2012
- Excise Act 1901
- Excise Regulations 1925
- Therapeutic Goods Act 1989
- Radiation Safety Act 1975
- Radiation Safety (General) Regulations 1983
- Radiation Safety (Qualifications) Regulations 1980
Question B5:
Are you planning to conduct research activities involving any poisons, medicines and/or drugs? (i.e. pharmaceutical products, antibiotics, toxic chemicals)
- Yes
- No
- Unsure

Question B6:
Are you planning to conduct work involving nanomaterials?
- Yes
- No
- Unsure

Question B7:
Are you planning to conduct work activities with or where any gases, fumes and/or dust from solid chemicals may be generated?
- Yes
- No
- Unsure
Read and action the HIT Feedback

Section B: Radiation Safety

Question B5:

Are you planning to conduct research involving Ultraviolet Sources? (Examples: Transilluminators, penray lamps, UV tubes, lamps, bulbs, germicidal cabinets, biohazard cabinets, analytic equipment (such as spectrometers) that use accessible UV sources, etc)

Answer: Yes

You mentioned UV was to be used in the work. If using transilluminators you will need to ensure that your supervisor has a current transilluminators project approval number to cover your work. If so, please provide me with the approval number. If not, please download the application from http://research.curtin.edu.au/research-integrity-ethics/radiation-safety/ and submit the completed application to the University RSO, Office of Research and Development, building 100, or email to radsafety@curtin.edu.au. Feel free to contact me if you think it would resolve the issue more efficiently or you are having trouble completing the form.

You may need to attend a safety training course. If you are working relatively independently with these transilluminators you may need to obtain a radiation license from the Radiological Council – the WA Radiation Regulator. For many transilluminators your supervisor or another staff member will have a license and you will be working under their license and supervision for radiation safety.

For other UV sources it may be sufficient to ensure students have read the safe working procedures and risk assessments for the apparatus and undergo inductions and training on its use (records must be kept). Could you please provide some brief information about the apparatus, its make and model, its wavelength and power outputs, its location (building number, room number) and whether it will be used in any way that is not consistent with its intended use.

Radiation Safety Advisor at Curtin University, Matt Carroll, 9266 1708, radsafety@curtin.edu.au
Human Research Ethics

- Human research is conducted with or about people, or their data or tissue.
  - Taking part in surveys, interviews or focus groups
  - Undergoing psychological, physiological or medical testing or treatment
  - Being observed by researchers
  - The collection and use of participants’ body organs, tissues, fluids or exhaled breath
  - Researchers having access to the participants’ personal documents or other materials
  - Access to participants’ information as part of an existing published or unpublished source or database

- All human research ethics enquiries ROC-ethics@curtin.edu.au
Human Research Ethics Application Workflow

Application submitted

- Negligible risk
  - 1-2 days
  - Review by Research Services Officers (Ethics)

- Low risk
  - Review within the School/Faculty
  - 2 weeks
  - Review by Team Lead (Ethics)
  - 1 week

- Non-Low risk
  - Advisory Committee (unless Candidacy has been approved)
  - 4 weeks

Respect for human beings
Research merit and integrity
Justice
Beneficence
Animal Ethics

- An animal is defined as “any live non-human vertebrate (that is, fish, amphibians, reptiles, birds and mammals, encompassing domestic animals, purpose-bred animals, livestock, wildlife) and cephalopods”

- Animal work requiring ethics is divided into three categories:
  - Teaching studies
  - Research studies
  - Observational studies
Animal Ethics Application Workflow

- **Application submitted**
  - Up to 6 weeks

- **Animal Ethics Committee**
  - 1 week

- **Approval**

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### 3 R’s

- **Replacement** of animals with other methods
- **Reduction** in the number of animals used by good experimental design and use of statistics.
- **Refinement** of techniques used to reduce adverse impact.
Biological Hazards

Chicken pox virus
- Genetically Modified Organisms (GMO)
- Quarantined biological material imported from overseas or interstate
- Security Sensitive Biological Agents (SSBA)
- Microorganisms cultured from the environment
- Microorganisms in Risk Groups 2, 3 or 4
- Samples taken from humans or animals
- Australian native animals and plants
- Plants that are weedy or poisonous/toxic
- Insects that are dangerous or able to act as vectors for disease
- Human and animal research subjects

Yellow Spot fungus

Chemical Hazards – Health and Safety

Sodium Hydroxide Burn

Classifications

- Hazardous Chemicals
- Dangerous Goods
- Poisons (permit required)
- Nanomaterials
- Chemicals of Security Concern
- Agricultural and Veterinary Chemicals

Types encountered

- Laboratory Chemicals
- Medicines & Drugs
- Gardening chemicals
- Paints
- Fuels
- Gases
Radiation Hazards

Classifications

- Radioactive materials - e.g. Sealed or Unsealed Sources, Ores, NORM, Gauges
- X-ray or neutron equipment - e.g. Medical, Analysis, Dental, DEXA, Portable, Neutron generator
- Class 3B or 4 lasers - e.g. Research, Mapping, Medical, Surveying, Entertainment
- UV equipment - transilluminators
Radiation and Biosafety Application Workflow

Radiation Application submitted → Assessment of compliance requirements → Regulator Approval → Radiation Safety Officer/Committee

Biosafety Application submitted → Assessment of compliance requirements → Institutional Biosafety Committee → Regulator Approval

1 week → Up to 1 year → 4 weeks
Applying for project approval - InfoEd

- Apply for and manage your approvals from Curtin’s:
  Animal Ethics Committee, Human Research Ethics Committee,
  Institutional Biosafety Committee, Radiation Safety Committee

- Students can submit the application but cannot be Chief Investigators
  - When a Student creates an application, they must assign a Staff member as the Chief Investigator.
  - They must add themselves as an investigator on the form to see the application.
  - They can find the application by searching for the record number in ‘quick find’.

InfoEd: [https://infoed.curtin.edu.au/](https://infoed.curtin.edu.au/)
Questions?