#8 The Responsible HDR Candidate

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While this Resource Sheet refers only to higher degree by research (HDR) candidates, its commentary is largely relevant to all Griffith University students who conduct research.

Contents

1) What is research integrity and why is it important to you?

The term research integrity relates collectively to the responsible design, conduct and reporting of research.

Griffith University considers research integrity to be a core component of quality research. The University considers HDR candidates to be early career researchers and is committed to ensuring you have a firm understanding of what constitutes responsible research practice.

2) National Guidelines

The Australian Code for the Responsible Conduct of Research (2018) is the Australian standard for research integrity/the responsible conduct of research. All researchers are expected to follow the principles and responsibilities set out in the Code.

Candidates must be aware and understand all eight principles as they apply to research and adhere to them in the responsible conduct of their research activities and any other projects (e.g. as co-researchers, research assistants and other collaborators). The eight principles are listed in Appendix One of this document.

In addition to the eight principles, the Code also sets out a number of responsibilities that apply to institutions (Griffith University) and researchers. Both institutions and researchers have responsibilities that apply to the supervision of HDR candidates, with institutions to 'Ensure supervisors of research trainees have the appropriate skills, qualifications and resources' (Responsibility 5) and researchers to 'Provide guidance and mentorship on responsible research conduct to other researchers or research trainees under their supervision and, where appropriate, monitor their conduct' (Responsibility 15).

The responsibilities of institutions and researchers are listed in Appendix Two of this document.

All of the researcher responsibilities set out in the Code apply to HDR candidates so it important that you are aware of, and abide by these responsibilities, including the responsibility to undertake education and training in responsible research conduct (Responsibility 16).

Griffith University's implementation of the Australian Code (2018) is described in the Griffith University Responsible Conduct of Research policy. Griffith University's series of Research Integrity Resource Sheets (RIRS) provide guidance to assist you to successfully adhere to the Australian Code.

All the current RIRS series and other research integrity resources are available from Griffith's research integrity page.

3) Griffith University's approach

The responsible design, conduct and reporting of Griffith University research are defining characteristics of our work. As such, research integrity is approached as a research culture concern, not merely a compliance matter. Training in research integrity is a compulsory part of orientation into your HDR program and you are able to access guidance and advice within the University on research integrity issues throughout your candidature (Item 8 sets out where to go for advice).

Griffith University also recognises the integral role that HDR supervisors play in providing guidance and mentorship on responsible research conduct to HDR candidates under their supervision. There are standards with regard to skills, professional development and qualifications that must be met in order for an academic staff member to become an HDR supervisor. Completion of the 'Research Integrity for Supervisors' training workshop coordinated by GGRS is a compulsory component of training to become an HDR supervisor.

4) Risks and consequences

Failing to adhere to the principles and responsibilities set out in the Australian Code (2018) is likely to be considered a breach of the Code

(and, as such, a breach of the Griffith University Responsible Conduct of Research policy). Serious breaches may be classified as research misconduct, which can have disciplinary and other significant consequences.

Every effort should be made to avoid such breaches.

Items 6-9 of this sheet suggests strategies that can be helpful to avoid some of the more common missteps and costly problems. A commentary in Nature discussed nine apparently small lapses in judgment that can very easily culminate into a ruined research career:

Gunsalus, C. K. & Robinson. A.D. (2018 May) Nine pitfalls of research misconduct. *Nature*. Access 18 June 2019): https://www.nature.com/articles/d41586-018-05145-6

5) Early conversation with supervisors and good ongoing communication

Experience suggests an early discussion about responsible conduct between you and your supervisors can help avoid costly missteps/problems (see 4 above pp2-3).

This conversation should occur early in your candidature and cover the below:

(i) Advice from the supervisory team about the approach to the Australian Code (2018) that Griffith University takes;

(ii) The establishment of a publication plan (see Section 9 for topics that should be considered in the development of this plan)

(iii) The establishment of a data plan (see Section 8 or what this data plan should address);

(iv) Clarification of:

    a. The roles of the collaborators (including the supervisory team) and expectations of both supervisors and the candidate regarding responsibilities and approach to supervision;

    b. Correct referencing and citing the work of others;

    c. The approach that is to be taken regarding:

        i. Authorship of research outputs;

        ii. Research ethics (including allowing sufficient time for research ethics approval); and

        iii. Conflicts of interest.

If your work will be part of a wider project (especially if that wider work is externally funded), discuss what impact that will have on intellectual property, data access/control, research outputs and what will happen after your involvement ends.

This conversation should be friendly, courteous and professional but soon after the meeting, you should exchange emails with your collaborators to confirm what was discussed and agreed as part of the discussion. This is to establish a positive foundation for the supervisory relationship and to serve as a record of what was agreed.

COPE

Committee on Publication Ethics (COPE)

"COPE is committed to educate and support editors, publishers and those involved in publication ethics with the aim of moving the culture of publishing..."

<u>Website</u> | <u>Resources</u>

Retraction Watch

"Tracking retractions as a window into the scientific process"

<u>Website</u> | <u>Database of retractions</u>

Scholarly Kitchen

"The mission of the Society for Scholarly Publishing is "[t]o advance scholarly publishing and communication, and the professional development of its..."

<u>Website</u>

US ORI

Office of Research Integrity

"The Office of Research Integrity (ORI) oversees and directs Public Health Service (PHS) research integrity activities on behalf of the Secretary of Health and Human Services with the exception of the..."

<u>Website</u> | <u>Case studies</u>

UKRIO

UK Research Integrity Office

"The UK Research Integrity Office (UKRIO) is an independent charity, offering support to the public, researchers and organisations to further good practice in academic, scientific and medical..."

<u>Website</u> | <u>Resources</u>

6) Data plan

Ensuring you have a plan in place for the responsible management and use of the data from your research project can help reduce the possibility for disputes between researchers and breaches of the <u>Australian Code (2018)</u>.

The resources and tools website of <u>eResearch</u> Services can be extremely helpful and all candidates should consult it.

You are urged to formulate a data plan early in your program and to work with your supervisor to maintain its currency.

The data plan should specifically discuss the Principal Supervisor/supervisory team having access the data/primary materials so they are able to able to confidently confirm progress of the research and respond when they are asked if your thesis is ready to submit.

The plan should discuss who can publish based upon the data (which is a separate matter from the analysis you may be involved in), metadata for the work and where the data will be stored during candidature and after you complete your program or leave the University. Ideally a copy of the data/primary materials will remain with the University, but only to respond to any challenge made about published claims.

If you commence your studies with data you collected previously, your supervisor will want to discuss how the data was collected, to ensure it was in accordance with the Australian Code (2018). If it relates to human research, your supervisor will ask if you have ethics approval and what consent was obtained for the use of the data/information. Your supervisor will also ask if the data and/or primary materials were obtained under contract, and if so enquire about the terms of the contract.

Depending upon your answers, your supervisor will discuss whether the data can be used for research purposes.

8) Publishing your research

Publication of research findings is an important part of your research process, and doing this not only benefits other researchers, practitioners and the wider community, but also builds your reputation and profile as a researcher.

In the process of developing your publication plan and working towards a publication, you and your Principal Supervisor/supervisory team should discuss:

(i) publication ethics;

(ii) authorship roles and criteria;

(iii) approaches to communicating appropriately with potential contributors;

(iv) approaches to communicating appropriately with co-authors;

(v) knowing where to publish (or at least where not to publish);

(vi) the peer review process; and

(vii) fulfilling Griffith University reporting requirements.

All candidates are encouraged to read the HDR candidate authorship resource paper.

9) Intellectual property

As an HDR candidate, you own the intellectual property (IP) generated from your research, unless you have formally assigned this interest to another party.

An important matter to discuss early with your supervisory team, and then revisit as your work progresses, is intellectual property - especially if there are matters that alter Griffith University's normal approach to students and intellectual property (see 5.8 of the Griffith University intellectual property policy).

Two such scenarios are where your work may be a subset of wider work (e.g. being undertaken by other Griffith University researchers) and/or the work is externally funded. There must be a signed agreement for any such arrangement to assign the IP with another party.

Contact Griffith Enterprise for advice on these matters.

10) Sources of Research Integrity Advice and Guidance

If you do not understand an Australian Code (2018) direction/prompt/item related to your research, or are unsure whether a provision is relevant to your work, you should confer with your Principal Supervisor or supervisory team.

If you and your supervisory team have further questions or concerns you might wish to contact a Research Integrity Adviser[1], who have been appointed by your Group to provide expert

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Tel: (07) 373 54375
research-ethics@griffith.edu.au

Animal Ethics Coordinator

Tel: (07) 373 56618
animal-ethics@griffith.edu.au

Research Ethics Systems and Support Officer

Tel: (07) 373 5 2069
research-ethics@griffith.edu.au

independent advice to researchers in their area. Click here to view a list of the current RIAs and their contact details.

[1] That person is likely to insist both you and your supervisor meet with them, so the supervisor will be able to answer similar questions in future.'

You are also encouraged to access available professional development offerings in research integrity and consult the other Research Integrity Resource Sheets in this series.

Appendix One

T h e   p r i n c i p l e s   o f   r e s p o n s i b l e   c o n d u c t

P1 Honesty in the development, undertaking and reporting of research

- Present information truthfully and accurately in proposing, conducting and reporting research.

P2 Rigour in the development, undertaking and reporting of research

- Underpin research by attention to detail and robust methodology, avoiding or acknowledging biases.

P3 Transparency in declaring interests and reporting research methodology, data and findings

- Share and communicate research methodology, data and findings openly, responsibly and accurately.

- Disclose and manage conflicts of interest.

P4 Fairness in the treatment of others

- Treat fellow researchers and others involved in the research fairly and with respect.

- Appropriately reference and cite the work of others.

- Give credit, including authorship where appropriate, to those who have contributed to

- the research.

P5 Respect for research participants, the wider community, animals and the environment

- Treat human participants and communities that are affected by the research with care and respect, giving appropriate consideration to the needs of minority groups or vulnerable people.

- Ensure that respect underpins all decisions and actions related to the care and use of animals in research.

- Minimise adverse effects of the research on the environment.

P6 Recognition of the right of Aboriginal and Torres Strait Islander peoples to be engaged in research that affects or is of particular significance to them

- Recognise, value and respect the diversity, heritage, knowledge, cultural property and connection to land of Aboriginal and Torres Strait Islander peoples.

- Engage with Aboriginal and Torres Strait Islander peoples prior to research being undertaken, so that they freely make decisions about their involvement.

- Report to Aboriginal and Torres Strait Islander peoples the outcomes of research in which they have engaged.

P7 Accountability for the development, undertaking and reporting of research

- Comply with relevant legislation, policies and guidelines.

- Ensure good stewardship of public resources used to conduct research.

- Consider the consequences and outcomes of research prior to its communication.

P8 Promotion of responsible research practices

- • Promote and foster a research culture and environment that supports the responsible conduct of research.

Appendix Two

Responsibilities as per Australian Code (2018)

INSTITUTIONAL RESPONSIBILITIES

Responsible research conduct is fostered and underpinned by the research culture of the institution. Institutions have an obligation to encourage and support responsible research conduct. They are accountable to funding organisations and the Australian community for how research is conducted. To foster responsible research conduct, institutions will:

R1 Establish and maintain good governance and management practices for responsible research conduct.

R2 Identify and comply with relevant laws, regulations, guidelines and policies related to the conduct of research.

R3 Develop and maintain the currency and ready availability of a suite of policies and procedures which ensure that institutional practices are consistent with the principles and responsibilities of the Code.

R4 Provide ongoing training and education that promotes and supports responsible research conduct for all researchers and those in other relevant roles.

R5 Ensure supervisors of research trainees have the appropriate skills, qualifications and resources.

R6 Identify and train Research Integrity Advisors who assist in the promotion and fostering of responsible research conduct and provide advice to those with concerns about potential breaches of the Code.

R7 Support the responsible dissemination of research findings. Where necessary, take action to correct the record in a timely manner.

R8 Provide access to facilities for the safe and secure storage and management of research data, records and primary materials and, where possible and appropriate, allow access and reference.

R9 Facilitate the prevention and detection of potential breaches of the Code.

R10 Provide mechanisms to receive concerns or complaints about potential breaches of the Code. Investigate and resolve potential breaches of the Code.

R11 Ensure that the process for managing and investigating concerns or complaints about potential breaches of the Code is timely, effective and in accord with procedural fairness.

R12 Support the welfare of all parties involved in an investigation of a potential breach of the Code.

R13 Base findings of investigations on the balance of probabilities and ensure any actions are commensurate with the seriousness of the breach.

RESEARCHER RESPONSIBILITIES

Researchers will uphold the principles of responsible research conduct in all aspects of their research. To this end, researchers will:

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.