

Reducing the risk of research fraud

Lessons from an audit of governance, internal controls and corruption prevention measures at three Queensland universities

Summary audit report

July 2020



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Abbreviations and definitions

Abbreviations

ARC	Australian Research Council	
Australian Code	Australian Code for the Responsible Conduct of Research	
ССС	Crime and Corruption Commission	
CC Act	Crime and Corruption Act 2001	
Corrupt Conduct	As defined at section 15 of the CC Act	
COI	Conflict of interest	
HDR	Higher degree(s) by research	
HR	Human Resources	
NHMRC	National Health and Medical Research Council	
PhD	Doctor of Philosophy	
Public Interest Disclosure	 a public interest disclosure is a disclosure about wrongdoing in the public sector that serves the public interest. For an allegation to be considered a public interest disclosure under the <i>Public Interest Disclosure Act 2010</i> (the PID Act) it must be: public interest information about serious wrongdoing or danger 	
	 made to a proper authority. 	
TEQSA	Tertiary Education Quality and Standards Agency	
Voluntary Code	Voluntary Code of Best Practice for the Governance of Australian Public Universities	



1 Introduction

The research environment

Each year Queensland public universities receive approximately \$814 million in research grants from Commonwealth, State and Local Government funding.¹ Researchers are awarded grants for work designed to create positive change across science, health, engineering and the humanities. Both the Australian Research Council (ARC) and the National Health and Medical Research Council (NHMRC) are providers of hundreds of millions of dollars in research grants each year in Australia.²

Universities and those who manage and supervise research within them have a responsibility to ensure not only the intellectual integrity of the work being undertaken within their institution, but also the financial and administrative probity related to its conduct and delivery. Responsible research conduct is critical to the success of, and maintaining public confidence in, universities' research efforts.

The Australian and international community expects research to be conducted responsibly, ethically and with integrity. The *Australian Code for the Responsible Conduct of Research* (the Australian Code) articulates the broad principles that characterise an honest, ethical and conscientious research culture. It establishes a framework for responsible research conduct that provides a foundation for high-quality research, credibility and community trust in the research endeavour. It outlines the expectations for the conduct of research in Australia or research conducted under the auspices of Australian institutions. Compliance with the Australian Code is a requirement for the receipt of funding by NHMRC and ARC.

Publications are a significant part of the research environment, with researchers expected to publish original articles about their work. Researchers publish in peer-reviewed journals, which builds professional credibility and assists in substantiating their position and status within the university and research community. This is linked to ongoing employment, promotion and salary increments. The ability to attract grants also demonstrates expertise and research leadership in a given field.

Competition exists amongst researchers, particularly junior researchers, to regularly publish in order to increase the likelihood of continuing employment and promotion. Junior researchers may feel pushed to produce results that will gain the attention of their university's leading researchers, which can generate opportunities to work on higher-profile projects. Accordingly, the issues of authorship ranking, number of articles published, impact factor (the frequency with which the article has been cited in a particular year) and ability to attract grant funds are closely interlinked.

Unfortunately, the "publish or perish" culture can be a double-edged sword. It can encourage performance in a competitive environment, but may also lead some researchers to make a deliberate choice to engage in research fraud. Fraudulent research activities not only jeopardise individual projects but impact on the lives of research participants and others awaiting the outcome of research trials.

² The Australian Research Council is a Commonwealth entity and advises the Australian Government on research matters, administers the National Competitive Grants Program, a significant component of Australia's investment in research and development, and has responsibility for Excellence in Research for Australia. The National Health and Medical Research Council is Australia's peak body for supporting health and medical research; for developing health advice for the Australian community, health professionals and governments; and for providing advice on ethical behaviour in health care and in the conduct of health and medical research.



¹ Research grants includes: a) education research, b) ARC, c) other Australian Government financial assistance (non-capital and include NHMRC), and State and Local Government research funds (non-capital). The approximate figure was obtained from each of the six Queensland public university's Annual Report 2018.

What is research fraud?

As a general definition, fraud could be described as deliberately and dishonestly giving or telling something to another person with the intention of misleading them in order to gain some advantage or cause some detriment.

Within the university (and wider public sector), the term "research fraud" includes:

- misuse of research funds (that is, misuse of public monies)
- fabrication or falsification of research data or source material
- falsification and/or misrepresentation to obtain funding
- concealment or facilitation of breaches (or potential breaches) by others
- failure to provide adequate supervision on responsible research conduct
- failure to disclose and manage conflicts of interest.

Research suggests corrupt activity is usually motivated by a combination of the three factors as shown in the "The Fraud Triangle" ³ below.



Pressure refers to the reason or need of the person engaged in research fraud. It can be driven by a financial need, or personal factors such as status or a desire to outperform other researchers.

Opportunity refers to any situation that enables fraud to occur (e.g. poor control design, lack of controls, a level of trust, inadequate supervision or training). It can be driven by an individual that recognises a weakness in the processes and takes advantage of the opportunity.

Attitude refers to the mindset of the person and how they may try to justify the fraud (e.g. feelings of entitlement). It can be driven by an individual believing that their behaviour is justified.

Source: Modified from The Fraud Triangle

A serious breach of the Australian Code which is intentional, reckless or negligent is considered research misconduct and may well constitute research fraud as defined in this audit.

Research fraud may involve criminal conduct or conduct serious enough to bring it within the jurisdiction of the Crime and Corruption Commission (CCC).



Why do a corruption audit on research fraud?

In 2016, two former researchers from the University of Queensland (UQ) were convicted of fraud and attempted fraud – a total of 22 charges. The frauds involved publication of an article detailing research which in fact had never been conducted – the article's contents were fabricated. The prosecution was the result of an internal investigation for research misconduct by UQ and a subsequent criminal investigation by the CCC. The CCC published an investigation report about the matter, which identified vulnerabilities and recommended remedial strategies.⁴

As part of its role to prevent corruption in the public sector, the CCC audits how effectively public sector agencies have responded to particular types of complaints about corruption and how robust their complaints management and prevention frameworks are. Based on the 2016 investigation report, the CCC's Corruption Audit Plan for 2019–21 scheduled an audit to evaluate the measures that Queensland universities had put in place since that time to mitigate research fraud.

This report is a summary of the detailed audit report provided to the participating universities. It is intended to highlight the lessons to be learned from the experiences of the three participating universities, build the capacity of agencies that conduct research to deal with similar issues, and above all to increase transparency about the operation of the public sector.

Australia's first criminal prosecution for research fraud: A case study from the University of Queensland, CCC, December 2017.



2 About the audit

Scope and objective

The CCC's audit involved three Queensland universities, chosen on the basis of their having researchers across different disciplines, and the amount of research grant funding they received.

The audit focused on researchers and staff involved in funded research. It excluded any technical review of research data, results and outputs; the work of teachers, students or others engaged in any form of scholarly activity; and any questions of academic integrity related to teaching and learning.

The objective of the audit was to evaluate the adequacy and effectiveness of the measures put in place by the universities to prevent or deal with research fraud, summarised by three key questions (see below).

Method

The audit used the following methods to answer the questions set out below.

1. Do universities adequately support research integrity and prevent corrupt conduct?

To answer this question, the CCC assessed each university's:

- responses (with additional supporting documentation) to a questionnaire focused on governance, risk management and internal control processes to support research integrity (see Appendix A)
- research governance framework against the general principles of responsible research outlined in NHMRC's *Research Governance Handbook: Guidance for the national approach to single ethical review*
- research governance policies and procedures against the Australian Code, which requires universities to "establish and maintain good governance and management practices for responsible research conduct".⁵
- compliance with the Voluntary Code of Best Practice for the Governance of Australian Public Universities, which is intended to provide support and guidance to Council and to leadership more broadly.

Audit of research projects

The CCC also obtained from each university a listing of funded research projects completed between 1 July 2017 and 30 June 2019. The audit selected random samples of three projects per university to assess the effectiveness of the controls relating to:

- conflicts of interest processes
- peer review processes
- review by head of faculty/institute of project budget against expenditure
- certification of the final project grant against expenditure
- the chief investigator's final acquittal report, including endorsement by the Head
- the Research Committee's approval and monitoring of research activities.



Responsibility 1 of the Australian Code, p.3.

2. Had universities appropriately dealt with allegations of corrupt conduct relating to research activities?

To answer this question, the CCC examined two classes of complaints⁶ concerning corrupt conduct.

The first class involved matters that were referred to the CCC, had been assessed as corrupt conduct and were determined appropriate for universities to deal with on a "no further advice" basis – that is, the universities were not required to update the CCC on how the matters were dealt with or any associated outcomes.

The audit reviewed all four complaints of corrupt conduct relating to research activities made between 1 July 2016 and 30 June 2019.

For each of the four matters audited, the CCC examined:

- What happened and when?
- Why were internal controls to prevent research fraud not effective?
- Was the prevention response sufficient to address the failures?
- If the allegations were capable of substantiation, why would the person involved risk their career in such a way?
- Was the outcome/sanction appropriate to the seriousness of the allegations? Would it promote public confidence in the university?

The second class of complaints were those matters the university was empowered to deal with without having to report them to the CCC (i.e. non-reportable matters).⁷

Of the three universities, only one had an agreed section 40 direction with the CCC, but advised it had no such matters relating to research fraud.

3. Did universities appropriately assess allegations of serious research misconduct as not amounting to corrupt conduct?

The CCC obtained from each of the three universities a list of allegations of serious research misconduct that had been made between 1 July 2016 and 30 June 2019, and which had not previously been reported to the CCC as corrupt conduct.

The CCC examined all 21 allegations from the lists provided by the universities in order to assess if any allegation met the definition of corrupt conduct and should therefore have been notified to the CCC under sections 38 or 40 of the CC Act.

⁶ A complaint can comprise multiple allegations.

Under Category 3 of the section 40 directions (section 40 of the *Crime and Corruption Act 2001*)

3 Summary of audit

Overall assessment

The CCC found that the three universities had in place **satisfactory** complaints management and prevention systems, in relation to:

- Preventing corruption in research activities and supporting research integrity.
- Dealings with complaints or allegations of corrupt conduct relating to research activities.
- Assessing allegations of serious research misconduct for potential corrupt conduct.

Observations

The CCC makes the following observations about the three universities.

- All universities had a governance framework at the institutional level that established the principles, behaviours and processes to guide the Senate's/Council's work and drive continuous improvement. The framework also established the higher-level oversight of policies, processes, operational committees, and the value delivered to stakeholders by Council/Senate.
- All universities had a Research Committee (a sub-committee of Academic Board) and a number of Research Ethics Committees to oversee excellent and ethical research practices.
- Research fraud or research integrity risks were identified in institutional risk registers. Risk of research partnerships had also been considered. These risks have been assessed in detail by the universities to develop an understanding of business impact and consequences through the development and implementation of prevention strategies.
- There are comprehensive training programs and some supporting resources that cover research integrity, human ethics, research grants, code of conduct and risk management, commensurate to the individual university's particular risk profile and research grants funding received.
- There are processes are in place that encourage early identification of serious research misconduct matters that may involve potentially corrupt conduct.

Areas for improvement

The CCC identified the following areas for improvement.

Research integrity and governance

- 1. The framework for research governance
- 2. Compliance with the Voluntary Code of Best Practice for the Governance of Australian Public Universities
- 3. Conflicts of interest management
- 4. Peer review

Dealing with corrupt conduct

- 1. Understanding of what constitutes corrupt conduct
- 2. Investigative capabilities
- 3. Deterrent measures



4 Research integrity and governance – results and recommendations

The following chapter expands on those areas of research integrity and governance that could be strengthened, with lessons and recommendations for the sector.

The framework for research governance

Research governance is a framework of policies, practices and procedures which:

- sets the university's governance framework at the institutional level
- establishes roles and responsibilities for all those involved in research activities
- sets out research governance principles for the university's research activities
- defines the mechanisms needed to deliver those principles
- describes the monitoring, assessment and auditing arrangements to ensure compliance with those principles.

The general principles of responsible research outlined in NHMRC's guidance to support the Australian Code, "Research Governance Handbook: Guidance for the national approach to single ethical review" covered areas, such as:

- Compliance with laws, regulations, guidelines and codes of practice governing the conduct of research in Australia.
- Research is assessed for quality, safety, privacy, risk management, financial management and ethical acceptability.

While all three universities had a research governance framework policy, they showed considerable variation in the adequacy of the frameworks currently in place:

- One university had a comprehensive research governance framework and standards, further supported by its Code for the responsible conduct of research.
- One university had adopted the Australian Code⁸ but had not clearly defined or described how its Responsible Conduct of Research policy is supported by a suite of sub-policies and procedures.
- The other university had also adopted the Australian Code but would require further work to integrate the governance principles into its institution's context.

For example:

• The university's Research Code of Conduct policy and related procedures translated the Australian Code to its specific context, but had not covered all of the key principles for effective research governance within the institution (for example, specifying roles and responsibilities).

Although all three universities have appropriate training and educational programs, the CCC noted that, in one case, its research training (delivered as an online module) was not mandatory.

⁸ Australian Code for the Responsible Conduct of Research, 2018.

Lessons

- While universities recognise that quality research needs to be underpinned by the highest standards of practice, confidence in the integrity of its researchers and the institutional systems for ensuring these occur, they also need to ensure that these principles are adequately documented.
- Policies, practices and procedures that do not cover the key governance principles, research integrity processes and controls for managing research activities, may not effectively reduce fraud risks.

Recommendations

The CCC recommends that universities:

- 1. Enhance the context in research governance framework to cover the general principles of responsible research outlined in NHMRC's guidance to support the Australian Code, "Research Governance Handbook: Guidance for the national approach to single ethical review".
- 2. Communicate the updated research governance framework to all researchers and senior leaders.
- 3. Mandate the completion of research training for all researchers and staff involved in research activities, and schedule refresher training at least every two years.

Compliance with the Voluntary Code of Best Practice

The Voluntary Code of Best Practice for the Governance of Australian Public Universities (the Voluntary Code)⁹ is intended to operate in conjunction with each university's establishing Act, and does not seek to replace or overrule existing legislation. It seeks to provide support and guidance to Council and to leadership more broadly. It outlines:

- roles and responsibilities of governing body (i.e. Council/Senate)
- duties of members of the Council/Senate
- composition of Council/Senate and appointment of members
- risk management
- compliance with this Voluntary Code.

The CCC identified that one of the three universities did not note its compliance with the Voluntary Code in its Annual Report. The university advised the CCC that it does follow the Voluntary Code and should have been noted in its Annual Report.

As its name makes clear, the Voluntary Code is voluntary, and not all items in it may be relevant to every university. However, the Voluntary Code requires that all Australian universities will report in their annual reports on their alignment with it, providing reasons for any areas of non-compliance. As part of our audit we checked each university's latest Annual Report on its website for a statement of compliance with the Voluntary Code.

Adopting the Voluntary Code, including disclosure of compliance with it, is an opportunity to demonstrate understanding of and involvement with proper governance procedures, and to enhance organisational reputation.

Voluntary Code of Best Practice for the Governance of Australian Public Universities, Universities Australia, 15 May 2018.

Lessons

- Lack of disclosure regarding compliance with the Voluntary Code diminishes the perception that a university is committed to the highest ethical standards.
- Lack of transparency about compliance may result in a "disconnect" from key stakeholders (e.g. TEQSA, ARC, NHMRC, Universities Australia and other funding bodies), which could hinder future research funding and increase research misconduct by researchers.

Recommendations

The CCC recommends that universities:

- 1. Adopt the Voluntary Code of Best Practice for the Governance of Australian Public Universities.
- 2. Undertake an annual review of their compliance with the Voluntary Code.
- 3. Disclose in their annual reports compliance with the Voluntary Code and provide reasons for any areas of non-compliance.

Management of conflicts of interest (COIs)

The *Public Sector Ethics Act 1994* and universities' code of conduct establish that the primary obligation of a public officer is to always act in the public interest. Moreover, the Australian Code requires researchers to disclose to their university all interests that are relevant, or could appear to be relevant, to proposed or ongoing research:

Principle 3: Transparency in declaring interests...which includes the responsibility to disclose interests and manage conflicts of interest (p.2).

Managing conflicts of interest (COIs) is important because the public and funding bodies rightly expect that researchers should never obtain an **undue** personal benefit from their work.

The CCC's audit identified that:

- none of the three universities had any documented control for due diligence checks of researchers
- there were cases in which researchers had not disclosed whether they had any COIs in relation to grant applications, thus lessening the transparency for supervisors and grant approvers.

Declaring conflicts of interest

For high-risk processes¹⁰, it is best practice for researchers to declare, in writing, when they have no COIs (that is, a "nil" disclosure).¹¹ A "nil" disclosure is an important positive confirmation to supervisor, grant approvers and other stakeholders. It requires researchers to think about and disclose their personal interests, rather than just detailing obvious COIs.

The requirement for a "nil" disclosure should be in addition to, and separate from, any general COI policy requirement to declare COI.

The CCC audit of research projects identified that:

• For two of the three projects audited at one university, there was no evidence of COI declarations by researchers. It was not clear whether researchers had considered whether they had any interests in, or COIs with, grant applications, because the university's policy only

¹¹ Managing conflicts of interest in the NSW public sector, Independent Commission Against Corruption, April 2019.



¹⁰ The Research Division is considered a high-risk process because of: 1) a high degree of subjectivity, 2) significant advantages or disadvantages for researchers and external parties, and 3) a public expectation of high levels of accountability and transparency.

required them to disclose <u>any</u> COIs, rather than mandating a "nil" disclosure on applications. The university's grant applications also do not have certification for COI declaration.

This university was in the process of implementing a new research management system whereby the applicant can disclose a COI at the time of application. This information will be shared to their direct supervisor to ensure appropriate management can be initiated prior to project commencement. Academic staff are required to disclose real or perceived COIs as they become apparent. The university will need to ensure the system mandates "nil" declaration for each grant application.

• At the second university, we found no evidence of COI declarations by researchers in two of the three projects audited. Researchers signed the certification on the funding applications, stating that they would "conduct activities under the grant in compliance with [university] policies and procedures". However, this does not provide stakeholders with any assurance that researchers have considered if they have, or do not have, COIs with applications. It should be noted that the university had however implemented an updated version of the application (i.e. third project), which requires researchers to confirm, by ticking "yes" or "no", whether they have COIs with an application. The audit noted this process was not documented in the COI policy (or the Grants Financial Management policy).

The CCC acknowledges that the university implemented a new online COI disclosure tool in November 2019, which requires staff members to complete their annual disclosure, as well requiring all staff to register if they work on sensitive areas of research. Researchers should also be required to declare whether or not they have COIs with applications as an additional control.

Identifying failure to declare COIs

Universities expect their researchers and staff to identify, disclose and manage COIs, including complying with policies and procedures. While universities' COI policies and procedures align with the NHMRC's better practice guide¹², there is a gap in the understanding of the application of this requirement to enhance controls.

We identified that:

- Policies and processes did not make it clear whether the supervisor/approver is required to cross-check the researcher's declaration against a centralised COI register, and perform due diligence checks on potential researchers. Such checks would enable the supervisor to identify any possible "red flags", such as failure by the researcher (whether intentional or unintentional) to disclose a relevant interest.
- At one university, researchers are declaring whether or not they have any COIs on applications, which is a positive control.

Lessons

- Researchers may fail to disclose their COIs, whether intentionally or unintentionally. Undisclosed COIs have the potential to compromise the credibility of research outputs, severely damage reputations, invalidate a promising line of enquiry and undermine public confidence in research.
- The perception of a COI or of improper behaviour can be as damaging as the reality if not quickly corrected. The critical factor is that researchers must not only behave ethically, they must also be seen to behave ethically.
- Corrupt conduct can arise when a COI is concealed, understated or mismanaged.
- Without appropriate mechanisms for accountability and transparency, public funds may be wasted through mismanagement, fraud and corruption.

¹² Disclosure of interests and management of conflicts of interest: A guide supporting the Australian Code for the Responsible Conduct of Research, NHMRC, 2019.s

Recommendations

The CCC recommends that the following controls be implemented.

- 1. Grant application forms to require researchers to declare whether or not they have COIs. "Nil" disclosure is important.
- 2. Supervisors/approvers are to cross-check declaration of COIs in applications against a centralised COI register and do due diligence checks on potential researchers, to identify any failure to declare a COI.
- 3. The relevant COI policy for researchers is to be updated to incorporate the additional controls described above.

Peer review

As defined in the Australian Code, peer review is the impartial and independent assessment of research by others working in the same or a related field.¹³ It provides expert scrutiny of proposed research or research outputs and helps to maintain high standards in research, including by ensuring that accepted disciplinary standards are met. At its best, peer review contributes to accurate, thorough and credible reporting of research.¹⁴

Peer review may also draw attention to departures from the principles in the Australian Code, including by identifying plagiarism, duplicative publication, errors and misleading statements.¹⁵ Under the Australian Code researchers have a responsibility to engage in peer review and conduct peer review responsibly. This stated responsibility is:

Responsibility 28: Participate in peer review in a way that is fair, rigorous and timely and maintains the confidentiality of the content (p.4).

The *Higher Education Standards Framework* (2015) requires that institution establishes a policy framework for the conduct of research under the institution's auspices:

Section 4.1.2: Research is conducted, or overseen, by staff with qualifications, research experience and skills relevant to the type of research undertaken and their role (p.9).

Section 4.1.3: A system for accurate and up-to-date recording of the research outputs of staff and research students is maintained (p.9).

The CCC's audit identified that:

- Universities did not have an effective policy for peer review, and not all research projects were
 peer-reviewed to achieve the accurate and credibility of research findings and promote fraud
 detection.
- Universities should recognise the importance of setting policy requirements and guidance for peer reviews throughout the institution.

¹⁵ Ibid, p.1.



¹³ The Australian Code, p.5.

¹⁴ Peer Review: A guide supporting the Australian Code for the Responsible Conduct of Research, 2019, p.1.

Peer review policy, program and process

All three universities have the researcher's responsibility of peer review stated in their research policy. However, the audit identified that:

• At one university, only one of the two ARC projects had been peer-reviewed. Peer reviews of source data and research information are not required if peer review of funding applications is conducted at the faculty/institute or discipline level. The university provided eligibility and technical compliance checking as well as feedback on the alignment of the application to stated selection criteria. The latter, in the CCC's view, does not provide assurance that the research findings are accurate, thorough and credible, as the grant application is the initial stage of the research project.

Its Research Code supports peer review of research findings and encourages its researchers to participate in peer review activities, and stated that researchers who receive public funding are expected to participate in peer review. Each faculty/institute is responsible for their own peer review support processes in support of application development.

 At another university, the audit identified that neither of the projects audited had been peerreviewed. In one project, peer review was done by NHMRC panels as part of application process for grants; in relation to the other project, peer review processes were set by the Editorial Boards of the respective journals and would have been undertaken in line with the peer-review requirements of each journal.

In neither case had the research findings and outputs been peer-reviewed to obtain assurances that research data/outputs were accurate, thorough and credible.

This university advised the CCC that it does not have a system of internal peer review that reviews all research work prior to submission for publication. Individual authors are responsible for the quality of their work, and will often have colleagues review or comment on a manuscript before submission, but this process is not mandated. Third-party verification for research work is obtained from the peer review process of the journal to which an article is submitted.

• At the third of the universities we audited, we found that one of the two projects had not been peer-reviewed. The university encourages submission of research outputs to well regarded and highly cited journals, a strategy to recognise and rewards authors who target better quality journals. But, it was not clear to the CCC if the research data/output had been peer-reviewed given it was an ARC grant funding.

This university does not currently require internal peer review of source data and associated research information. While it acknowledges that there may be a risk involved with not reviewing all research information associated with a project, the collaborative nature of research teams, the size of the university and its supporting governance structures do assist with managing the risk.

While it told the CCC that the resourcing required to implement third-party verification would be onerous for a university of its size, its Peer Review Statement none the less states:

[The university] recognises the importance of peer review and is committed to encouraging and supporting [its] Research Workers to participate in the process. That encouragement extends to participation as an expert or generalist reviewer both within the University and to Australian and international peer review processes. [It] expects researchers to engage with the process by having their work peer reviewed. This includes ensuring that all applications submitted for research ethics approval, funding and publication [are] to have undergone a peer review process prior to submission.



The NHMRC, ARC and Universities Australia have jointly developed a peer review guide supporting the Australian Code.¹⁶ This guide aims to assist those involved in research to understand and apply best practice in conducting and participating in peer review.

Section 3.1 of the *Peer Review: A guide supporting the Australian Code for the Responsible Conduct of Research, 2019* (the Peer Review guide) states, "Institutions should recognise the importance of peer review processes to academic and scientific endeavour by encouraging and supporting the participation of its researchers. Institutions should appropriately recognise that peer review is an important activity that has an impact on the researcher's workload and status."

For example, research data and outputs can be inaccurate, falsified or fabricated, causing reputational damage to an institution and those who truly believe in science and academia's good procedures. At its best, peer review contributes to accurate, thorough and credible reporting of research.¹⁷ Universities have a shared obligation with the CCC and grants providers to prevent, detect and deter research fraud.

Lessons

- Peer review has a number of important roles throughout the lifecycle of the research, and research fraud can occur at any time throughout this lifecycle.
- In order to foster a culture of responsible research conduct across a university, the importance of peer review to academic and scientific endeavour, as well as its role in supporting an institution's governance framework, must be recognised.
- Without clear policy requirements, strategy and guidelines on when to complete peer reviews, fraud, inaccurate and incredible research data may not be identified, impacting on the university's reputation and potential for future funding.

Recommendations

The CCC recommends that universities:

- Develop a university-wide peer review policy which recognises the importance of peer review practices to draw attention to departures from the principles in the Australian Code, and prevent or minimise the risk of research fraud (such as the fabrication or falsification of research data). The policy should clearly outline the principles and strategies of peer review to maintain research governance at the institutional level:
 - a. What types of research grant should be peer reviewed (consider the risk, amount, funding provider, and the nature and type of research work)?
 - b. When should peer review occur; at what stages throughout the lifecycle of the research?
 - c. How peer review is to be performed and to what level of quality?
 - d. What are the institution's peer review strategies in terms of publications?
- 2. Subject to the peer review policy outcomes in recommendation 1) above, develop specific faculty/institute peer review procedures to support the university-wide policy.
- 3. Subject to the peer review policy outcomes in recommendation 1) above, develop a work allocation plan in each faculty/institute to perform the role of peer review.

¹⁶ Peer Review: A guide supporting the Australian Code for the Responsible Conduct of Research, 2019.

¹⁷ Ibid, p.1.

5 Dealing with corrupt conduct – results and recommendations

The following chapter details with specific aspects of dealing with corrupt conduct which the CCC feels could be better understood across the university sector.

Definition of corrupt conduct

One university showed us a presentation that it had prepared on legal obligations in relation to employee relations and that had been delivered to senior leaders to emphasise responsible conduct and business/professional ethics.¹⁸

However, the CCC noted that a summary definition of corrupt conduct had been used.

Without a clear definition and understanding of corrupt conduct, research misconduct may not be reported, impacting on the university's anti-fraud and anti-corruption culture.

It is therefore best practice to either show the full legal definition to avoid any misconstruction and misapplication of the definition against complaints received or ensure that the summary does not omit any important information.

The definition of corrupt conduct is contained in section 15 of the CC Act.

Recommendations

The CCC recommends that universities:

 Ensure that their training material includes the full legal definition of corrupt conduct, specifying the requirements that must be met for a complaint or allegation to come within the CCC's jurisdiction. Refer to chapter 1 of the CCC's Corruption in focus guide for help on this area.¹⁹ Also, refer to the CCC's Factsheet "Changes to the Crime and Corruption Act 2001", February 2019.

Conduct of an investigation

The CCC's audit found that one university's investigation into research fraud did not adequately deal with one of the most serious allegations of corrupt conduct made as a public interest disclosure (the complaint). The complaint related to a grant application by a researcher who was alleged to have:

- misrepresented her academic achievements that she "led a research grant project", which resulted in her obtaining a new appointment/promotion; and
- misrepresented her work experience in order to obtain a research grant.

The public interest discloser (the complainant) provided a number of detailed submissions supporting the suspected corrupt conduct.

¹⁸ The presentation was delivered by an external agency on behalf of the institution.

¹⁹ Further information about the definition of corrupt conduct can be found on the CCC website ccc.qld.gov.au

Initial investigations and outcomes

In response to these allegations the university conducted an investigation into whether the employee misrepresented her academic achievements and work experience.

Following the investigation, the decision-maker substantiated the allegation and requested the subject officer make corrections to her academic biography and PhD thesis.

Having found that the researcher had misrepresented her achievements and work experience, the university investigated if the subject officer had inappropriately benefited from false statements such as those in her online biography and thesis by obtaining a new appointment/promotion in the workplace, and research grants.

The investigation was limited to where documentation was available at the institution relating to the subject officer. Two grant applications of relevance were examined as well as the subject officer's job applications and promotions within the university. The investigator concluded that as the subject officer was not the lead researcher in either grant application and, as several other parties were also named, there was no substance that she had inappropriately benefited from such statements. Nor was there sufficient evidence to conclude that the subject officer obtained some benefit via appointment or promotion.

The outcomes of the investigations were communicated to the complainant. The complainant was dissatisfied with the outcomes of the matter and provided further information about a particular grant application. The complainant had flagged this grant application in the original complaint.

Further investigation

An investigator then reviewed the complainant's submissions in addition to the named grant application. The investigator concluded that misstatement of the complainant's name twice in the named application documentation might have been "sloppy editing" or an oversight and that it would be difficult to conclude that this would constitute research misconduct as a deliberate action on the part of the subject officer, in light of there being two earlier correct citations. In any case, the university will correct the public record.

Notification to the Australian Research Council (ARC)

The university was also obliged to report the matter to the ARC. The university advised ARC that allegations made by the complainant were investigated as a public interest disclosure, and not as potential research misconduct.

The ARC responded, advising that there appeared to be a potential breach of the Australian Code in relation to the "over-representations" that were included by the subject officer in a successful ARC grant application on which she is named the lead Chief Investigator. The ARC also noted the university's response to the complainant and that one of the grants highlighted by the complainant had not been investigated. The ARC requested the university to carry out a preliminary assessment.

Final investigation and outcomes

The university conducted a fourth investigation concerning potential breach of the Australian Code in the nominated grant application. The university advised ARC that:

- The subject officer had made two misrepresentations of her work experience in the named grant application.
- When viewed in isolation, the misrepresentations fail to achieve the high standards of responsible research as required under section 1.6 of the Australian Code (2007).



- However, this finding was mitigated by evidence that demonstrated that the subject officer had made a number of other statements in ARC grant application that accurately represented her role and career status as an Early Career Researcher.
- The university concluded that there was no evidence to demonstrate that the subject officer made the two misrepresentations with deliberate intent, recklessness or gross and persistent negligence to warrant any prima facie finding of "misrepresentation to obtain funding" to constitute research misconduct.

The ARC was not satisfied with the outcomes of the preliminary assessment. The ARC considered that accurate statements made in one part of a grant application do not cancel the misleading statements made elsewhere in the application. The ARC determined to take the following actions:

- Should the subject officer be named on any ARC grant application before the end of June 2021, the ARC will require a letter from the university providing additional certification that the subject officer's research record and experience is accurately reflected in the application.
- The subject officer should be advised that any future breaches of the Australian Code will result in the ARC taking harsher consequential actions.

CCC's review of investigation and outcomes

The CCC formed the view that the original complaint had not been appropriately dealt with (see below). The audit also identified that the outcome would not have promoted public confidence in the integrity of the institution's research activities.

Overall, the university failed to take action in relation to the most serious allegations of the matter – that is, the misrepresentations made in the grant application to ARC relating to the subject officer's role in previous research work.

Recommendations

The CCC made a number of recommendations to the university including that it should:

- 1. Ensure that all current projects, including details, are recorded in the research project management system.
- 2. In future investigations, prepare detailed investigation plans to ensure the investigation is carried out methodically and in a professional manner, and sources of evidence are not overlooked. (see chapter 6 of the CCC's *Corruption in focus* guide, p.6.4)
- 3. Conduct reference checks/verify key previous work experiences before endorsing research grant applications. This process should be documented in research governance standards.
- 4. Cross-check information provided by chief investigators with research project records. This process be documented in research governance standards.
- 5. Consider whether there is a valid reason for dismissal based on the nature/extent of the misrepresentations, whether it was deliberate, how the misrepresentations relate to the role, and the consequences of providing inaccurate information were clear.

Note: The CCC has raised an allegation of corrupt conduct against the university's decision-maker. This was because when questioned about the outcome of the investigation, the decision-maker has proceeded to attempt to cover-up the incompetence in their investigation into a researcher by stating that the researcher's misrepresentation was "not very serious", when it was in fact serious. This is considered corrupt conduct because the decision-maker is allegedly covering their own incompetence by lying about the seriousness of the conduct they were tasked to investigate. This allegation has been referred to the University to deal with.



Appropriate discipline outcomes

The CCC's audit examined a university's handling of a complex investigation that resulted in a subject officer being given a formal warning by the university. It is not our intention to set out all the details involved in the investigation – the main purpose was to review the appropriateness of the disciplinary sanction imposed for the conduct. In this case, in the CCC's view, the discipline outcome imposed would not promote public confidence in the capacity of the university and its staff to act in the public interest.

The university's investigation and outcome

The matter related to the ownership and storage of genetic material, which constituted both intellectual property and a physical asset (the Property). The subject officer had earlier started a company as a vehicle for developing and commercialising the Property. When the subject officer commenced employment with the university, the university purchased an interest in the company in which the subject officer also maintained a financial interest.

The subject officer was alleged to have failed to declare to the university:

- the steps he was taking to effect a transfer of ownership of the Property from the University to the company
- the COI that existed in relation to his professorial position with the university and his shareholding in the company.

The university's investigator concluded that the allegation was capable of being substantiated. The decision maker considered that the subject officer may have engaged in misconduct or serious misconduct.

The decision maker determined a formal warning against the subject officer for directly and indirectly breaching the university's code and conduct and COI policies, and his failure to inform senior management of his activities in circumstances where he ought reasonably to have known of his obligation to do so. The decision maker also required that the subject officer:

- Act at all times in accordance with the requirements and intent of the university's policies and procedures.
- Have ongoing discussions with his direct supervisor, so that the latter could support him to meet the appropriate ethical standards expected of a researcher.
- Be committed to, and act in accordance with, the highest ethical standards and refrain from any actions that demonstrate lack of transparency and/or due diligence.



CCC's review of investigation and outcomes

The CCC's audit reviewed this matter to assess whether the allegations had been effectively investigated and if the outcomes were appropriate.

The CCC is of the view that in this matter consideration of further disciplinary action would have been appropriate to promote public confidence in the integrity of the university. In reaching this conclusion, the audit considered the following matters:

- a. The seniority of the subject officer.
- b. The subject officer's conduct, views and his downplaying of the allegation, which suggested that he was a potential risk for further misconduct.
- c. Certain statements to the investigator which indicated that he put the company's commercial interests above his responsibilities as a public officer at the university, and that he could not identify the existence of a COI, suggesting a potential risk of further corrupt conduct.

For all of the above reasons, it is the CCC's view that further disciplinary action would have been more appropriate, in order to maintain confidence in the university. Further, disciplinary actions should be broadly consistent across the university, so that staff receive a consistent message about how various types of conduct are perceived and responded to.

Lessons

- A failure to discipline an officer found to have engaged in serious misconduct may result in a perception, by staff and the public, that inappropriate conduct by a senior officer is "acceptable" or not serious.
- An inadequate deterrent effect when dealing with the matter may also result in the behaviour continuing. This is because an officer may consider the benefits of engaging in the conduct outweigh the risks associated with detection in circumstances where management has signalled that the consequences are likely to be minor.
- Failure to properly disclose, declare and manage COIs diminishes the university's probity, accountability and governance it erodes the institutional values and ethical principles.
- Public confidence in the university to act in the public interest is eroded.

Recommendations

The CCC recommends that universities:

- 1. Identify and develop appropriate frameworks (from both a legal and a corruption prevention perspective) around the commercialisation and handling of university intellectual property or commercial property and assets.
- 2. Ensure that the requirements for managing COIs are clearly understood by all staff, especially those engaged in research with high commercial value.



6 Conclusion: Minimising the risk of research fraud

Our audit of three Queensland universities found that they had in place satisfactory complaints management and prevention systems, in terms of:

- preventing corruption in research activities and supporting research integrity
- dealings with complaints or allegations of corrupt conduct relating to research activities, and
- assessing allegations of serious research misconduct for potential corrupt conduct.

Our recommendations have been designed to strengthen the universities' integrity systems and, by extension, build public confidence in the way in which they oversee and carry out publicly funded research. We believe that implementing the recommendations made in this report can bring significant benefits such as:

- Maintaining high standards in research and contributing to accurate, thorough and credible reporting of research
- Reducing corruption risks in research activities
- Removing any corruption enablers as well as behaviours that could potentially mask corruption
- Enhancing the effectiveness of research monitoring activities from the top
- Enhancing investigative and disciplinary decision-making capabilities.

We hope that our recommendations will be given serious consideration, not just by the universities we audited, but also by other agencies and universities within the broader sector, for the benefit of the community.



Appendix A – CCC questionnaire on governance, risk management and internal control processes

The following questionnaire was sent to each of the participating universities to assess the governance, risk management and internal control processes put in place to support research integrity.

Governance

- Does the university have a code of conduct promoting appropriate ethics and values?
- Does the university have a sound policy frameworks in place that:
 - promotes research integrity and how to respond to research misconduct if it is identified, and articulate clear principles and responsibilities for the conduct of research
 - supports research grant administration and management (recipients)
 - ensures accountable reporting on expenditure of funds and resources which includes statements about the purpose for which the grants are to be applied and the source(s) of the grants
 - explains how to apply for and manage grants
 - requires compliance with relevant legislative frameworks including the CC Act.
- Does the university's Senate/Council (or its governance committees) fulfils its governance and oversight responsibilities for the internal control systems, the research process, the code of conduct and its policies, procedures and operational committees?
- Does senior management convey to research staff the importance of research integrity (highlights the importance of research culture and engages all staff through internal media channels)?
- Has the university established an office responsible for promoting research integrity and responding to breaches is established? Does the office also have research integrity advisors for advice and support on processes and practices?
- Does the research integrity committee include different stakeholders who can provide insight into the quality and completeness of the grant application and research output? Is a representative from grant administration, risk management, integrity or internal audit able to help provide more comprehensive information about the control framework used to prevent fraud?

Risk assessment

- Are research integrity risks identified and assessed, and risk responses developed to mitigate these foreseeable risks?
- Are records of complaints about research maintained and used to inform risk management strategies?

Control – training and resources

- Does the university have sound training programs that cover research integrity, human ethics, research grants (recipients), code of conduct, risk management and good practices to maintain research integrity?
- Does the university have sufficient information resources about responsible practice in specific areas of research (ethics, conflicts of interest, authorship, peer review, supervision, communication and data management)?



Control – research processes including supervision

- Did research staff including others involved in research projects declared and managed conflicts of interest appropriately?
- Are regular research projects reports reviewed by the committee?
- Does the university maintains a Register of Accredited Supervisors which is a listing of persons who meet the requirement for appointment as a "higher degree(s) by research" (HDR) supervisor?
- Do staff in supervisory positions ensure that staff engaged on research projects have the appropriate skills, experience, training, advice and support to conduct quality research?
- Do senior management and supervisors regularly remind research staff of their obligations in relation to research integrity and to comply with mandatory policies?
- Are peer reviews of source data and research information, including due diligence of research partners and third-party verification, conducted by the university?

Control – research grants administration and management (recipients)

- Is there an ability to track grant applications and publication submissions via a unique identifier?
- Are research grant applications reviewed internally before submission by a research integrity evaluation committee?
- Is grant expenditure reviewed, verified and approved (separate and independently verified)?
- Is record keeping of all resources kept to maintain good accountability and transparency?

Control – compliance and auditing activities

• Does the university oversights proper research and accounting procedures to ensure research integrity is maintained and resources used appropriately?

Does the university periodically audited the key internal controls, grant expenditure, research processes, use of labs, machines and other technology and ethics documentation?





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