

PREVENTION in focus

Corruption risks involving publicly funded research

What you should know

In 2014-15, Australian governments spent more than \$3,000 million on R&D.

- The Queensland public sector conducts research in diverse sectors including medical and health sciences, agriculture, engineering and the biological sciences. In 2014-15, Australian governments spent more than \$3,000 million on research and development.¹
- Queensland has set the precedent for researchers to be prosecuted and convicted of fraud and attempted fraud in relation to fabrication of research results and fraudulent grant applications.
- Units of public administrations (UPAs) 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 agency, but also the financial and administrative probity related to its conduct and delivery.
- UPAs and researchers must understand the full implications of any suspicion of research misconduct — that it is potentially a criminal offence within the jurisdiction of the CCC.



¹ Australian Bureau of Statistics 2016, Research and Experimental Development, Government and Private Non-Profit Organisations, Australia, 2014-15, Government expenditure on R&D (GOVERD), cat. no. 8109.0, viewed 29 November 2017.

INVESTIGATION CASE STUDY

Research misconduct at UQ results in criminal convictions

In 2016 Dr Bruce Murdoch and Dr Caroline Barwood, both former employees of the University of Queensland, were convicted of fraud and attempted fraud. Their prosecution was the result of an internal investigation for research misconduct by UQ and a subsequent criminal investigation by the CCC. The investigations arose from publication of an article purporting to discuss the outcomes of research involving patients suffering from Parkinson's disease. In fact, the research had never been conducted and the article's contents were fabricated. The researchers used the article as supporting evidence for their attempts to obtain further grant funding and professional advancement.

Once the fraud was discovered, UQ was obliged to take extensive remedial and preventative action. They had to retrospectively review and retract articles authored by Murdoch and Barwood, repay grant funds, cancel funding applications already approved, withdraw other applications already submitted, and conduct a major review of their research and financial operations and processes.



The “publish or perish” culture may encourage performance in a competitive environment, but may also lead some staff to make a deliberate choice to act corruptly.

Lessons learned

The relationship between research authorship, publication history, the ability to attract grant funds and career advancement has been colloquially described as creating a “publish or perish” mentality in research organisations. While such a culture may encourage high performance in a competitive environment, over time it may also result in unintended consequences such as a deliberate choice by some staff to act corruptly in order to improve perceptions of their performance and achieve professional success.

As recipients of taxpayer funding, UPAs that manage an internal research function need to ensure that their staff are strictly accountable in relation to:

- grant fund applications
- ethics applications
- project reporting
- grant funds expenditure and reporting
- data retention and publication of research results
- tracking of research projects from inception to publication
- declaration and management of conflicts of interest.

Vulnerabilities and prevention measures

Research staff employed within UPAs are public servants. Research is a particular specialisation within the public service, with its own professional norms, but this does not exempt such staff from scrutiny, nor does it prevent weaknesses in internal controls and systems being exploited for corrupt purposes. The table below sets out some cultural and organisational vulnerabilities and preventative measures UPAs with a research function may wish to consider.

Issue	Potential systemic vulnerabilities	Prevention measures
Quality and integrity of research	Research organisations reluctant to identify research misconduct as potential corruption matter or criminal offence	<p>Conduct training to improve understanding of the legal obligations regarding research misconduct and fraud/corruption</p> <p>Broaden scope of integrity and ethics training beyond research-specific matters</p>
	<p>Reputation or seniority of researchers may discourage questions about their activities</p> <p>It may be difficult to verify whether research occurred</p>	<p>Ensure research and funding reports are not the sole responsibility of one individual, no matter how senior</p> <p>Increase transparency of source data and research information</p> <p>Audit research processes, use of labs, machines and other technology and ethics documentation</p> <p>Obtain third-party verification of research output</p>
Administering institution management and oversight	<p>Administering institutions are large and complex, with autonomous research centres having individual cultures and practices</p> <p>Need to balance academic independence with obligations of administering organisation</p>	<p>Develop an ability to track grant applications and publication submissions (via a unique identifier)</p> <p>Organisational endorsement of all grant applications</p> <p>Audit grant expenditure</p> <p>Ensure approval processes are separate and independently verified</p> <p>Rotate key positions in key processes</p> <p>Create dedicated positions to monitor research integrity</p>

Further information

The CCC report entitled [Australia's first criminal prosecution for research fraud: A case study from the University of Queensland](#) provides a detailed exploration of this investigation.

Stay up to date



Subscribe for news and announcements:
www.ccc.qld.gov.au/subscribe



Follow us on Twitter:
[@CCC QLD](https://twitter.com/CCC QLD)



[Follow us on Facebook](#)