



**Australian Government**  
**Department of Industry, Science,  
Energy and Resources**

## Submission

For information  
PDMS Ref. Number MB22-000312  
Date sent to MO: 25 March 2022

**To** Minister for Defence Industry and Minister for Science and Technology

**Subject** Overview of research misconduct arrangements in Australia

**Timing** At your convenience

### Recommendations

That you:

1. **note** the Australian Academy of Science's proposal for an Australian system for investigating research misconduct

Noted / Please discuss

**Minister for Science and Technology**

Signature.....

Date:...../...../2022

Comments:

### Key Issues

1. On 22 February 2022, the Australian Academy of Science (AAS) provided you its proposal for a system to investigate research misconduct allegations (**MC22-000783** refers). Your office has asked the department to provide an information brief on this issue.
  - a. AAS's proposal is at Attachment A with accompanying Questions and Answer's document at Attachment B.

2. The proposal asserts that improvements to the current system could be achieved by establishing a new body (either within the Department of the Prime Minister and Cabinet or the Attorney-General's Department) to oversee research integrity investigations. The purview of this new body would cover all public and private research that receives public funds (direct or indirect).
3. AAS argues that the current system of self-regulation by the research sector has weaknesses, including:
  - a. Issues of research integrity extend beyond the research sector and into many areas of public life. The proposal seeks to reinforce self-regulation with independent oversight of serious allegations of misconduct.
  - b. The existing oversight body, the Australian Research Integrity Committee (ARIC), which was jointly established by the National Health and Medical Research Council (NHMRC) and Australian Research Council (ARC), can only investigate the adequacy of an institution's investigation process rather than the substance of the allegation.
  - c. There is concern regarding conflicts of interest with institutions managing their own misconduct matters.
  - d. There is with insufficient and inconsistent expertise within institutions to conduct investigations.
  - e. There is vulnerability for whistle-blowers and a lack of transparency about investigations and their outcomes.

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## Background

6. Management of research integrity and research misconduct in Australia relies on a system of self-regulation by the research sector, within a framework of national guidelines and standards.
7. The Code, first released in 2007, co-authored by the NHMRC, the ARC and Universities Australia, sets out principles and responsibilities that both researchers and institutions are expected to follow when conducting research.
8. A significant strengthening in the sector occurred with the release of the updated 2018 Code and the accompanying *Investigation Guide to Managing and Investigating Potential Breaches of the Code*, which provides detailed guidance about conducting an institutional investigation and has led to more consistency across the sector.
9. After an institutional investigation, any of the parties can request a review by the ARIC. The ARIC contributes to research quality assurance and ensures public confidence in research integrity.
10. In October 2020, the Senate Standing Committee on Rural and Regional Affairs and Transport tabled its report *Identification of leading practices in ensuring evidence-based regulation of farm practices that impact water quality outcomes in the Great Barrier Reef*. Chapter 4 of the Report raised concerns on research integrity; however, the report did not make any specific recommendations on this matter. In the Report submissions and after the release of the Report, calls for a centralised oversight of research integrity were raised by agricultural interest groups and political figures in Queensland, including AgForce, cane growers, the Green Shirts Movement and Farmers United, as well as federal MP George Christensen and physicist Dr Peter Ridd.

## Consultation – internal/external

11. DESE, the ARC, the NHMRC, Dr Foley and the Office of the Chief Scientist were consulted in the development of this brief.

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**Consultation – Secretary**

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**Sensitivities**

15. Nil

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**Attachments**

**Attachment A** The Australian Academy of Science's proposal for an Australian System for investigating research misconduct

**Attachment B** Proposal – Questions and Answers

**Authorising Officer**

Cleared by:

Shanan Gillies  
General Manager  
Science Policy and Governance Branch

Date: 24 March 2022

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**Contact Officer** s 22

Manager, Science Policy Section, s 22



# AN AUSTRALIAN SYSTEM FOR INVESTIGATING RESEARCH MISCONDUCT

FEBRUARY 2022

## PROPOSAL

It is the Australian Academy of Science's contention that there should be an oversight body to work with researching organisations that use public funds (direct or indirect) to investigate allegations of serious research misconduct. Acceptance of this process for the management of allegations of misconduct should be a condition of any grant or subsidy from public sources provided to support the conduct of research.

### Introduction

Australian research is a significant and valuable asset that benefits the country. The lives of many Australians are enhanced by the outcomes of Australian research, not least by the deeper understanding of the very nature of the world in which we live – using the expertise in many disciplines in the sciences, social sciences and the humanities.

There could be no better contemporary illustration of the benefits of research than the management of the Covid-19 pandemic. Local expertise in a range of disciplines, developed over many years of dedicated study, has led to advice offering political leaders various options for managing the pandemic in Australia. Some of that research is local, and some is interpretation of global work by local experts for Australian benefit.

Traditionally, research appears in public after a peer review prior to publication: a manuscript is sent to peers who review the results, data, interpretations and conclusions drawn by the authors. Peer review continues post-publication by researchers working in the same or related fields. Their expertise is used to critique or criticise the original work; robust discussion is common, new work is done, knowledge is improved and expanded, and we develop better options.

Underpinning confidence in research is the broader peer review. When outcomes withstand the scrutiny of multiple peers, numbering thousands in some fields, the public can have confidence that the research is competently conducted and the conclusions reasonable.

Robust but civil discussion is healthy; it does not in itself suggest the research is flawed, but rather is an important part of the research process. However, there are times when serious misconduct is exposed after publication, most commonly by the peer community. The traditional response is to leave it to the researcher's organisation to investigate any complaint and to take responsibility for resolving the issue. This 'self-regulation' does not always inspire confidence, fairly or unfairly.

There has been a marked shift in public attitudes to self-regulation. Where once it was left to organisations to deal with complaints, it is increasingly common for there to be independent oversight and scrutiny of actions and outcomes. Where public funds or subsidies are provided to organisations for research, independent oversight would also serve to reassure the public that funds are used to support the integrity of research.

## Background

Integrity in research is essential for maintaining excellence and sustaining the public's trust. For researchers, integrity includes their personal standards, intellectual honesty, and responsibility to their field of study, organisation and society. For institutions or organisations, it is a commitment to creating an environment that promotes the responsible conduct of research – and includes initial and ongoing training in the proper conduct of research for students and staff.

Assuring the integrity of research is complex and intersects with peer review, robust debate, open science, research commercialisation, reproducibility, funding structures, the public reputation of researchers and international collaboration, and willingness to correct errors in the record, either innocent or deliberate.

Researchers understand that critique and debate are integral to a well-functioning research system. However, the expert knowledge needed to understand the nuance of such debate is usually within the domain of research discipline experts, and it can be misrepresented to people outside the discipline as more binary and straightforward than it is.

This very complexity means that we need more than traditional self-regulation should legitimate questions be raised about the conduct of research. Indeed, the growth in the numbers of 'inspectors-general' and 'ombudsmen' in civil society indicates that this issue extends way beyond research and into many areas of life. There is less tolerance of 'self-regulation' and more support for independent oversight.

Australian research needs a system that embraces this complexity, respects academic freedom and intellectual inquiry, and is not open to misuse.

## Where does Australia stand?

The Academy has assessed the research integrity landscape in Australia: the Australian Code for the Responsible Conduct of Research, the Australian Research Integrity Committee (ARIC), Australian research governance more broadly, and factors influencing the conduct of research.

Although Australia's current system attempts to be all-encompassing, there are deficiencies in several areas such as coverage, accountability and transparency. ARIC, Australia's assurance mechanism, also has deficiencies owing primarily to the narrow scope of its remit. In addition, any recommendations it makes are confidential and not binding on organisations or funding agencies.

## What have other countries done?

There is a general shift towards more robust policies relating to research integrity, with a move to nationally coordinated bodies providing a coherent and independent system of assurance. The countries with the strongest stance are generally moved by research misconduct scandals. In response to public scandals about the failure of Swedish universities to deal adequately with serious cases of misconduct, a law was passed defining research misconduct as fabrication, falsification or plagiarism. All cases of alleged serious research misconduct at publicly funded research institutes are now referred to a Research Misconduct Board for investigation. Findings are made public and are legally binding for universities, which determine the consequences for the researcher(s). Sweden is not alone; several other countries are also seeking to reinforce confidence in the research enterprise.

No one country epitomises the gold standard for the governance of research misconduct, and Australia can and should learn from the experience of other countries. There is an opportunity for Australia to become a leader in the investigation of alleged misconduct on the global stage.

## Conclusion

Adopting the proposed process will position Australia well in the evolving international movement to establish a fair and robust framework to assure management and investigation of research misconduct. It will protect researchers from allegations based on hunches and prejudice, but not from thorough investigation should there be evidence to suspect allegations of research misconduct have substance. In turn, the people who pay for it, the Australian taxpayers, can be reassured that their money is invested in individuals and organisations committed to the highest standards of research conduct.

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## PROPOSAL FOR MANAGING RESEARCH MISCONDUCT

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For these purposes, a major breach means that there is evidence to suggest that there is a falsification of research outcomes, or misrepresentation or fabrication of material or plagiarism – a deliberate, reckless or negligent serious breach of the Australian Code for the Responsible Conduct of Research (the code). It does not cover research that is simply of poor quality, where innocent mistakes are made, or where interpretations differ between experts. These are matters for the peer community, publishers, funders, and the organisations concerned.

The investigation of research misconduct, and its management, is considered in two parts.

**Part 1** – Organisations will be responsible for managing issues that are not defined as serious misconduct (see Part 2). Such issues would include the order of authors on a publication or mistakes in how research is conducted or data are handled.

It is expected that these matters will be handled in a fair manner within an organisation. There should be an annual reporting mechanism to the oversight body, described below, that summarises complaints and actions.

Any of the parties (the complainant or the person accused) can appeal to the oversight body if it is believed, with evidence, that the organisation did not handle the matter fairly or in a timely manner. Having evaluated the evidence, the oversight body can initiate further action through the relevant organisation.

**Part 2** – A national oversight body will be responsible for issues defined as serious breaches of good research practices in the form of fabrication, falsification or plagiarism that are committed intentionally or with gross negligence in the planning, performing or reporting of research outcomes.

Potentially serious matters will be referred to the oversight body, either by the complainant or the relevant organisation, and the evidence supporting the allegation will be evaluated. If this triage shows there is cause to investigate, the case cannot be dismissed; it will be investigated as outlined below.

### MANAGING ALLEGATIONS OF RESEARCH MISCONDUCT

#### Purpose

To establish a robust and fair national process for assuring the integrity of Australian research that is funded or subsidised by any public source, wherever conducted.

#### Principles

Principles underpinning the process and structure should include that:

- minor infractions of the code be handled in a fair and timely manner within the organisation concerned
- a triage system first considers the evidence-base of any allegation of serious misconduct as defined in Part 2
- there be oversight of investigative processes, and this oversight is independent
- whistleblowers will be protected
- all research (including privately funded research subsidised directly or indirectly from public resources) is included – wherever the research is conducted, in whatever discipline.

#### Goals of an inquiry

Determine whether research misconduct has occurred.

If so,

- correct the public record
- apply sanctions for misconduct – through the organisational processes applying to staff; or to the organisation if it does not take recommended actions.

## Process

The process will allow well-founded allegations of a major breach to be investigated with independent oversight.

There should be three parts:

1. An assessment of the evidence on which any allegation of serious misconduct is based (a triage system).
2. The organisation conducts a timely investigation by approved, independent investigators when the evidence warrants, as agreed with the oversight body.
3. Formal, independent oversight of investigations.

Summary reports should be made public.

## THE PROPOSED STRUCTURE

### An oversight body

There should be an oversight body with the brief to engage with organisations when allegations are made. It will be involved in the 'triage', during which there will be an evaluation of any evidence brought to substantiate an allegation of a major breach. It will have oversight of any subsequent investigation, and it will receive reports following an investigation. In any response to an investigation, it will be able to consider the merit of outcomes as well as the process.

The ideal oversight body is a revised and strengthened Australian Research Integrity Committee.

### Funding

The funding of the oversight body should be sufficient for it to operate effectively and for it to be at arm's length from agencies that conduct research. As it is a whole-of-government matter, the Australian Government should provide funding. Based on similar bodies, a budget of around \$5 million per annum should be adequate.

Where the oversight body is housed, either free-standing or within an existing whole-of-government agency such as Attorney-General's or Prime Minister and Cabinet, is open to discussion. This is a whole-of-government matter, which should be reflected in that discussion.

### Researching organisations

Researching organisations will be responsible for managing infractions that are not about fabrication, falsification or plagiarism. Any of the parties (the complainant, the accused or the organisation) can appeal to the oversight body should there be a demonstrated cause – for example, evidence of unfair treatment, actions contrary to described processes of the organisation, or unaccountable delays. The oversight body will assess the evidence before further action, and have discretion as to whether further action is needed.

Organisations conducting research should be responsible for any investigation of major misconduct after a case has been initially assessed and an investigation supported by the oversight body. The organisation will liaise with the oversight body in establishing the terms of reference of any investigation committee and its membership. It will be responsible for identifying suitable expert groups to conduct any investigation. Those conducting the investigation will be independent from, and not employees of, the organisation and will have no direct or perceived conflicts of interest. The organisation will fund the investigation and indemnify members of the investigating committee.

Required actions to be taken as a consequence of an investigation will be the responsibility of the organisation concerned consistent with its policies and conditions of employment. Funding bodies could also apply sanctions to an organisation that does not comply with the recommendations of a report produced by the oversight body into the research misconduct.

### Reporting and data

The oversight body will be responsible for collecting data on all cases of research misconduct and issuing an annual report to the relevant minister. The body should have the capacity to conduct or commission research on matters related to the oversight of misconduct.



# PROPOSAL FOR RESEARCH INTEGRITY AUSTRALIA— QUESTIONS AND ANSWERS

FEBRUARY 2022

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Australian researchers are expected to conform to the Australian Code for the Responsible Conduct of Research (the code) in whatever field they research, and in whichever organisation they conduct research that is directly or indirectly supported by public funds. Allegations of a breach of the code by researchers must be handled effectively, fairly and promptly.

## WHAT DOES THE ACADEMY PROPOSE?

We propose a new national body to provide oversight of the management of allegations of research misconduct – Research Integrity Australia (RIA).

## WHAT WOULD RESEARCH INTEGRITY AUSTRALIA DO?

RIA would work alongside organisations to provide oversight of research misconduct investigations, and make recommendations to its responsible Australian Government minister, from time to time, on matters relating to the code.

It would issue reports to its responsible minister: shortly after an investigation of a serious breach of the code, and annually to report breaches other than major.

RIA would have three major roles:

1. When allegations of deliberate, reckless or serious breaches of the code are made, RIA would be involved alongside the organisation concerned, initially in the 'triage' stage during which there would be an evaluation of the evidence brought to substantiate an allegation that a serious breach had occurred.

If an investigation defined as major (fabrication, falsification or plagiarism) proceeded, RIA would be involved in agreeing the terms of reference for the investigation, the membership of the investigating committee, and timing. It would have oversight of any investigation. It would receive reports following an investigation and it would monitor consequences. RIA would be able to consider the merit of findings as well as the process. RIA would compile a report and advise the responsible minister.

2. For breaches not defined as major, RIA would receive an annual report from any organisation that had managed such matters. It would then compile a report annually and advise the responsible minister.

An individual who does not believe their complaint has been dealt with in a fair and timely manner may appeal to RIA. It would be referred to the organisation by RIA, with advice. RIA would be able to consider the merit of findings as well as the process.

3. RIA could only investigate if an allegation was made about the conduct of research in an organisation – for example an organisational culture inconsistent with the code.

## WHAT WOULD RIA NOT DO?

RIA will not resolve disputes or otherwise act as an ombudsman. It will not conduct investigations, except where sufficient evidence is brought to demonstrate cause that the conduct of research at an organisation was inconsistent with the code.

## WHO WOULD RIA REPORT TO?

Research integrity is a whole-of-government matter, and this should be reflected in its governance structures. It would be appropriate for the RIA to be a free-standing body or constituted within an existing whole-of-government agency such as the Attorney General's Department or the Department of the Prime Minister and Cabinet. RIA would then report to the appropriate minister.

## WHO WOULD FUND RIA?

The funding of RIA should be sufficient for it to operate effectively and for it to be at arm's length from agencies that conduct research. As a whole-of-government matter, the Australian Government should provide funding. Based on the funding of similar bodies, a budget of around \$5 million per annum should be adequate.

## WHAT WOULD BE THE MEMBERSHIP OF RIA?

RIA should comprise no more than seven members, one of whom should be appointed chair. All should be appointed by the responsible minister from a slate developed by the relevant department after consultation with stakeholders and following a nomination process. The minister should only be able to draw from the slate. To maintain confidence in RIA, an independent adviser group such as the learned academies could run a nomination process to maintain confidence in RIA.

## WHAT WOULD RIA COVER?

RIA's remit should be all organisations – public, private and not-for-profit – which receive direct and indirect public funding for the conduct of research.

All these organisations would, as a condition of grant or funding, be required to agree to adhere to the Australian Code for the Responsible Conduct of Research, to allow RIA to have oversight of investigations of major breaches and to report data of research misconduct activities to RIA.

## WHAT WOULD BE THE ROLE OF ORGANISATIONS CONDUCTING RESEARCH?

Organisations would be responsible for managing infractions of the code that are not defined as major misconduct.

Organisations conducting research would be responsible for any investigation of major misconduct after a case has been initially assessed and an investigation supported by RIA. The organisation would liaise with the oversight body in establishing the terms of reference of any investigation committee, and its membership. It would be responsible for identifying suitably expert groups to conduct any investigation. Those conducting the investigation should be independent from, and not employees of, the organisation and should have no direct or perceived conflicts of interest. The organisation would fund the investigation and indemnify members of the investigating committee to the extent that is possible.

Required actions to be taken because of an investigation would be the responsibility of the organisation concerned consistent with its legal basis, policies and conditions of employment. Funding bodies could also apply sanctions to an organisation that does not comply with the recommendations of a report by RIA into research misconduct.

## WHAT REPORTING AND DATA COLLECTION WOULD BE REQUIRED?

RIA will be responsible for collecting data on all cases of research misconduct and issuing a public annual report. It would also issue reports to the Australian Parliament on the conduct of investigations into serious breaches of the code.

The body should have the capacity to conduct or commission research on matters related to the oversight of misconduct.

## WHAT OTHER ISSUES SHOULD THE AUSTRALIAN GOVERNMENT CONSIDER?

- Legislative basis for RIA and its constitution
- Terms, conditions and procedures for appointment of members and Chair of RIA
- Governance structures, location within government and identifying the responsible Minister
- Nature of sanctions for non-compliance with the code for researchers and research organisations
- Relationship between RIA and funding bodies, including the research councils, and the nature of additional sanctions levied by funders
- Transparency provisions, including freedom of information coverage
- Policy and engagement functions
- Establishment of guidelines and operating procedures for RIA's functions





**Australian Government**  
**Office of the Chief Scientist**

**Australia's Chief Scientist, Dr Cathy Foley**

**Activity report**

**1 July to 31 December 2023**

## **Purpose of this report**

This report is provided in response to the letter of expectations that I received from Minister Husic on 23 December 2022, in which the Minister requested update reports on my activities. This report covers 1 July to 31 December 2023.

As identified in the letter of expectations, I have 3 main roles as Australia's Chief Scientist:

- to provide independent evidence-based advice to government,
- to champion Australian science here and overseas, and
- to support the research system to be as effective, efficient and impactful as possible.

This report is a record of my activities with respect to these 3 roles. The first section (Table 1) updates the status of each topic in my 2023 letter of expectations. The second section (pp 6-19) describes the work undertaken in more detail, including additional tasks requested by government.

**Table 1: Status of work outlined in Minster Husic’s Letter of Expectations to Australia’s Chief Scientist – January 2024**

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DISR - For release under the FOI Act

Document 2 - FOI 300470



#### 4. Champion science and the value of science communication

|                                                               |                                                                                                             |                                                                                                             |
|---------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| - Science communication, including promoting trust in science | <i>Trust in Science</i> paper on issues of research integrity and trust in science completed and published. | Addressed<br>The paper was downloaded from the Chief Scientist's website 492 times in the reporting period. |
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## National Science and Technology Council

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## Science and research system advice to government

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8. **Research integrity.** On 31 July 2023, I released the paper *Trust in Science* on my website. The paper aims to counter a tendency to conflate issues of integrity and quality, which risks reducing trust in science, especially for contentious and debated areas of research. The paper has been well received and is frequently raised positively during my engagements with the research community nationally and internationally.

News of the paper's release was circulated to stakeholders via a personal email from me, the supply of approved copy for use in stakeholder newsletters and magazines, and through

social media. This generated 976 views of the news item about the paper's release on the OCS website and 492 downloads of the paper over the reporting period. It also generated a request for a feature article from the Australian Academy of Technological Sciences and Engineering in *IMPACT Magazine*, to be published in February 2024.

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## Emerging and critical technologies advice

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## Other government department science and research advice

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## Science diplomacy

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*Delivered by Dr Cathy Foley AO PSM to Minister Husic on 25 January 2023.*

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**Australian Government**  
**Office of the Chief Scientist**

Australia's Chief Scientist, Dr Cathy Foley

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## Advice to government

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## Championing Australian science

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## Research system optimisation

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6. **Research integrity.** I am finalising a paper clarifying the distinction between research integrity and research quality, which will be published shortly. The aim is to counter a tendency to conflate issues of integrity and quality, which risks reducing trust in science, especially for contentious and debated areas of research.

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*Delivered by Dr Cathy Foley AO PSM to Minister Husic on 12 July 2023.*

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