



**UNSW**  
SYDNEY

# Research Integrity @UNSW

1 January – 31 December 2023

## About this Report

This report, collated by the Conduct and Integrity Office (CIO), provides an insight into research integrity activity and complaints across UNSW between 1 January and 31 December 2023.

### Limitations

Information in this report is based on information provided to the CIO and reports in the university's complaints management system on 1 March 2024.

The quality of data and information about activities depends on Schools, Faculties, Divisions and the CIO maintaining accurate and up-to-date records.

### Conduct and Integrity Office

Division of Transformation,  
Planning and Assurance  
UNSW Sydney

## Contents

<b>INTRODUCTION</b>	<b>4</b>
<b>COMPLAINTS AND ENQUIRIES RECEIVED</b>	<b>6</b>
What the complaints about	6
Which Faculties or Divisions the complaints related to	7
Who the complaints were from	7
How they were managed	8
<b>COMPLAINTS INVESTIGATED &amp; RESOLVED</b>	<b>9</b>
Preliminary assessment findings	9
Faculty	10
Researcher experience	11
Findings	11
Outcomes	12
Themes and issues identified	13
<b>DEVELOPMENTS, ACTIVITIES AND ACHIEVEMENTS IN 2023</b>	<b>15</b>
<b>KEY RISKS AND CONTROLS</b>	<b>19</b>
<b>APPENDIX: Process for handling complaints about research at UNSW in 2023</b>	<b>21</b>

## About the Conduct and Integrity Office (CIO)

The CIO investigates and resolves serious complaints and wrongdoing at UNSW, managing:

- Serious student conduct and academic integrity matters
- Research integrity matters
- Reports of serious wrongdoing
- Complex complaints
- UNSW's SpeakUp Strategy of promoting and fostering a culture of respect and integrity at the University
- UNSW's Complaints Management System

The CIO collaborates with Schools, Faculties and the Division of Research and Enterprise to promote, inform, educate and advise students, researchers and staff on research integrity, and to manage potential breaches of the University's Code of Conduct in the conduct of research.

# 2023 AT A GLANCE

## Complaints and enquiries received



**92 complaints, alerts and enquiries** about UNSW research and researchers. (page 6)



Majority were about **falsification and/or fabrication in research** (page 6)



Majority related to **medicine and health** disciplines (page 7)



Complaints made against **a very small proportion of the UNSW's 4,815 researchers** (page 7)



## Complaints investigated and resolved



**54 matters** involving **137 allegations** investigated in preliminary assessment (page 9)

35%

About a third related to current and former UNSW researchers in **Engineering** (page 10)



39%

About a third of matters involved the university's **most experienced researchers** (page 11)

## Investigation findings...



**Majority of matters involved no breach** of the Research Code



There were four findings of **major & serious breaches of the Research Code**



A **very small proportion** of UNSW researchers breached the Research Code

# INTRODUCTION

UNSW recognises the importance of research integrity and is strongly committed to promoting, supporting and maintaining a culture of responsible and ethical research practice across the university.

In 2023, the UNSW *Research Code of Conduct* (Research Code) represented the foundation for delivering high-quality research, credibility and community trust in research at UNSW, setting out the principles of a responsible research standards of behaviour expected of all researchers at UNSW. This was replaced in May 2024 by the *Code of Conduct and Values*, which applies to all staff, students and affiliates. The 2018 *Australian Code for the Responsible Conduct of Research* (Australian Code) forms the basis of both codes of conduct for UNSW researchers.

## Shared responsibility for research integrity

The university recognises that maintaining research integrity is a shared responsibility with its researchers and the broader research community. We deliberately focus on creating an entire culture of research integrity which means most UNSW researchers demonstrate responsible research practice and standards of behaviour which are consistent with the Research Code. UNSW researchers are supported by faculties, schools and divisions working in close collaboration to:

- continuously promote and raise awareness and understanding of the importance of research integrity
- provide mandatory research integrity training for all UNSW researchers.
- continuously improve research infrastructure to support responsible research practices.  
This includes providing facilities for safe and secure storage and management of research data, records and primary materials.
- ensure supervisors of HDR candidates have the appropriate skills, qualifications, experience and resources to supervise research

- continuously educate research students and career researchers on responsible research practice and research integrity.  
This includes providing a comprehensive induction program for Higher Degree Research (HDR) candidates, training for HDR supervisors
- develop, disseminate, implement and regularly review the university's processes that promote adherence to the Research Code; and
- ensure mechanisms and processes enable complainants and respondents to feel safe in the knowledge that concerns will be addressed confidentially, sensitively and managed according to the principles of procedural fairness
- manage complaints about alleged breaches of the Research Code; and
- ensure compliance with statutory and legal requirements, and regulations, set by a range of external authorities (Figure 2).

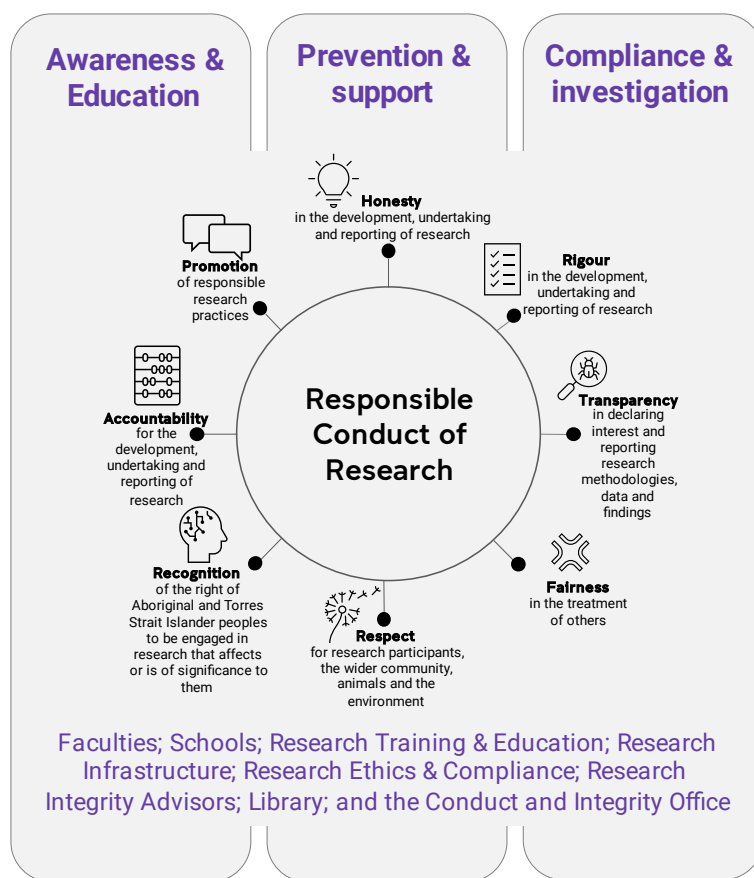


Figure 1: Principles of Responsible Conduct of Research at UNSW

## Supporting responsible research practice

The university provides a range of resources to support UNSW researchers with conducting their research responsibly. In addition to guidance on expected conduct provided by the code of conduct, and various research policies and procedures, resources include:

- guidance on the [university's position on the use of Generative AI in Research](#)
- discipline specific resources and subject guides on [copyright, open access, and ethical publishing](#)
- [researcher training](#) programs, courses and professional development
- [specialised researcher training](#) in human and animal research ethics, export controls, radiation safety, drone operations, poisons and therapeutic substances, gene technology, quarantine and biosecurity; and
- [research technology](#) and [data management](#) services and training to protect the integrity of researchers' work.

## Managing unacceptable research practice

In 2023, the Research Code was supported by the UNSW [Research Misconduct Procedure](#) (RMP)<sup>1</sup>, which set out the process for handling complaints about alleged breaches of the Research Code by UNSW researchers<sup>2</sup>. This was replaced in February 2024 by the [Complaints Management and Investigation Policy and Procedure](#). Both documents align with the [Guide to Managing and Investigating Potential Breaches of the Australian Code for the Responsible Conduct of Research](#)<sup>3</sup> (the Guide).

Complaints about potential breaches of research integrity are managed by the University's Conduct and Integrity Office (CIO) according to the applicable code of conduct at the time of the alleged conduct, and complaint management procedure applicable at the time the report or complaint was made. As part of the complaint management process the CIO also identifies:

- any individual or institutional failures which may have contributed to an individual's breach of the Research Code
- institutional gaps and systemic failures which may have contributed to the breach of research integrity; and
- recommends corrective actions to be undertaken to address them.

The university is required to comply with a range of statutory, legal, and regulations set by a range of external authorities, including reporting and responding to questions on its handling of complaints of breaches of research integrity. Figure 2 below sets out some of the key authorities.

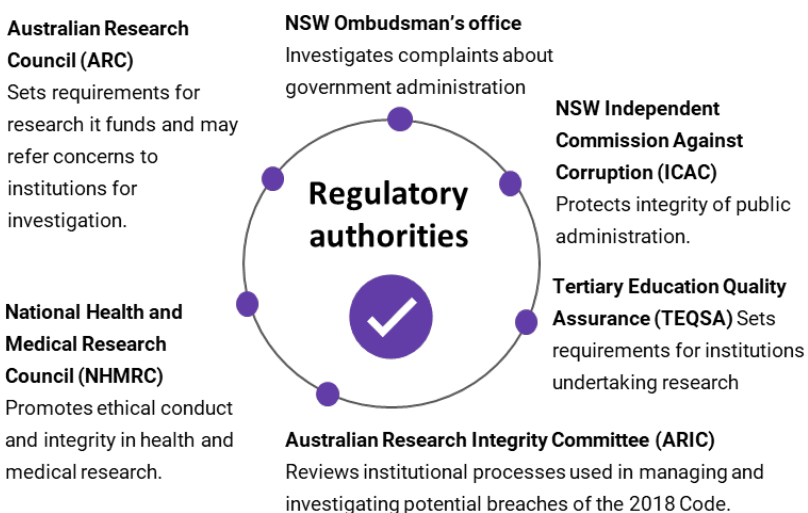


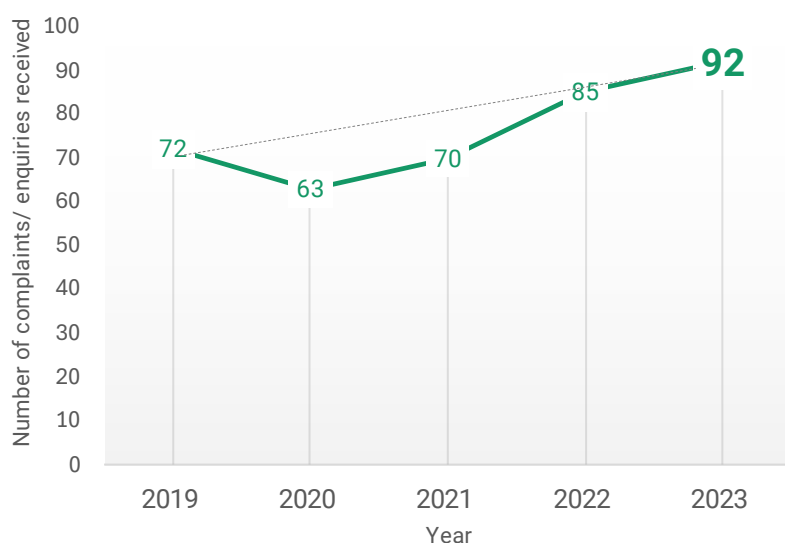
Figure 2: Key statutory authorities.

<sup>1</sup> Replaced by the [Complaints Management and Investigations Policy and Procedure](#) in February 2024.

<sup>2</sup> A UNSW researcher is a person, or persons engaged or affiliated with UNSW who conducts research.

<sup>3</sup> [Guide to Managing and Investigating Potential Breaches of the Australian Code for the Responsible Conduct of Research](#) 2018. National Health and Medical Research Council, Australian Research Council and Universities Australia. Commonwealth of Australia, Canberra

## COMPLAINTS AND ENQUIRIES RECEIVED



In 2023, the university received **92 complaints, alerts and enquiries** relating to UNSW research and researchers. Most of these (80% or 73), were complaints, or expressions of dissatisfaction or concern raised by individuals seeking a response from the university. This represents an 8% increase on the previous year and a continuing upward trend, while the number of researchers employed at UNSW has remained relatively static.

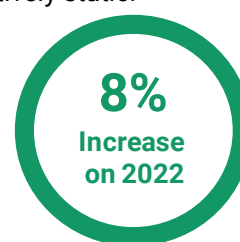


Figure 3: Annual comparison of cases raised 2019-2023

### What the complaints were about

Type of concern	Number of complaints and queries				
	2019	2020	2021	2022	2023
Falsification and/or fabrication	14	5	6	8	15
Plagiarism	7	6	6	12	10
Animal Research Ethics	10	10	8	2	8
Responsible research conduct <sup>a)</sup>	9	20	15		8
Supervision & Mentoring		1	4	2	8
Authorship	13	9	9	16	6
Human Research Ethics	7	3	6	6	6
Conflict of Interest	1	3	3	5	3
Grant related	4	1	2	1	3
Privacy (Research)			3		2
Publication/Dissemination				7	1
Copyright/IP	4	3		2	1
Recordkeeping/ Data Handling	1	1	4		1
Gene Technology	1				
Import/Export quarantine				2	
Other <sup>b)</sup>	1	1	4	22	20
<b>TOTAL</b>	<b>72</b>	<b>63</b>	<b>70</b>	<b>85</b>	<b>92</b>

Table 1: Types of concerns raised in complaints and queries received

Note:

- a) Refers to a failure by a researcher to support a culture of responsible conduct of research.
- b) In 2023, 'Other' included three student complaints about academic concerns. In 2022, 'Other' included 10 research student complaints/enquiries not related to the conduct of research or potential breach of the Research Code which were managed according to the UNSW Student Complaints Procedure.



## Which Faculties or Divisions the complaints related to

As indicated by Figure 4, about a third (30 of 92) of complaints and enquiries about research and the conduct of research at UNSW related to researchers in, or affiliated with, the Faculty of Medicine and Health.

As with previous years, a significant proportion of complaints and enquiries received by the university related to research and the conduct of research in the Faculty of Engineering (15% or 14 complaints). The Faculties of Science and Arts, Design and Architecture each received six complaints. The number of complaints received from each Faculty tended to reflect the number of researchers.

## Who the complaints were from

As indicated in Table 2 below, similar numbers of complaints about research and conduct of research at the university were received from members of the public; other UNSW business units; PubPeer alerts; or UNSW staff.

In late-2022, the university began a trial subscription to PubPeer<sup>4</sup> alerts, a service which alerts the university to concerns raised about published research papers based on the authors' identified institutional affiliation. In 2023, the university received over 18 alerts - half of which raised concerns about potential data fabrication or falsification.

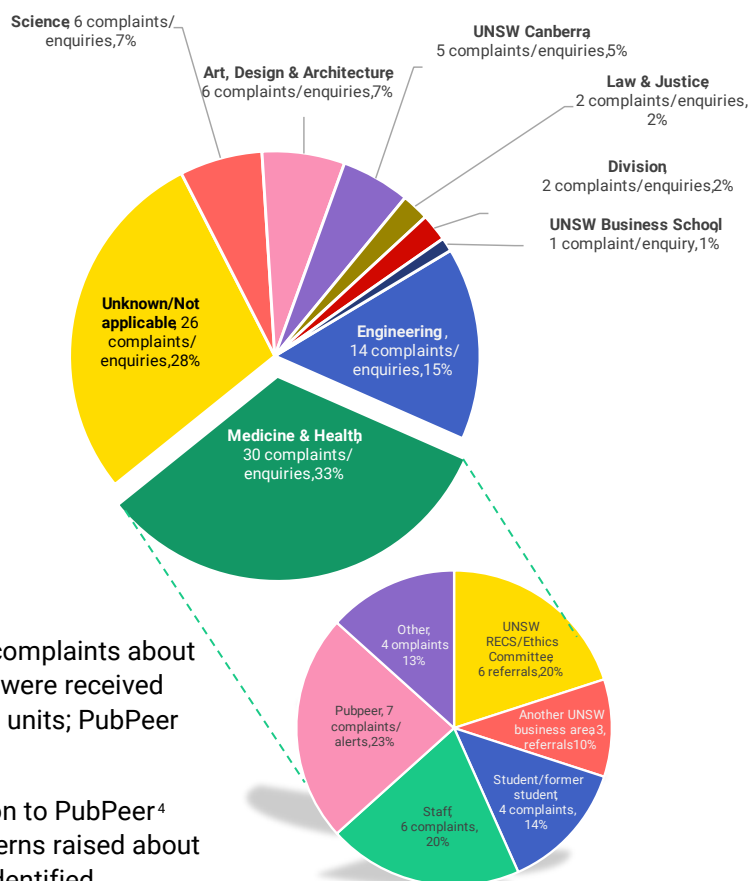


Figure 4: Breakdown of complaint and enquiries by Faculty – and breakdown of complaints received by the Faculty of Medicine and Health by complainant type.

Source	2022	2023
Member of the public	19	19
Other UNSW business unit	6	19
Anonymous	18	18 <sup>5</sup>
UNSW staff	30	17
Student	1	12
Research Integrity Advisor	5	3
CIO	4	4
UNSW affiliated institution	2	
<b>TOTAL</b>	<b>85</b>	<b>92</b>

Table 2: Source of complaints and enquiries in 2023 compared with 2022.



Complaints have only been made against a very small proportion UNSW's 4,815 researchers.

Of the 12 complaints and enquiries received from students in 2023, four (33%) represented complaints, with two of the complaints being managed according to another university process, and one complaint raised by a HDR candidate against their supervisor proceeded to a preliminary assessment.

In 2023, the university received about half the number of complaints from UNSW staff about the conduct of research compared to the number received in 2022.

<sup>4</sup> PubPeer is a website that enables users, usually researchers, to discuss and review published research.

<sup>5</sup> All PubPeer alerts were identified as being raised anonymously

## How they were managed

In 2023, all complaints received by the university related to research or the conduct of research at UNSW were managed according to the UNSW *Research Misconduct Procedure* by the Conduct and Integrity Office (CIO). An **initial assessment** is conducted to determine if the complaint involves:

- 1) the conduct of research
- 2) a UNSW researcher; and
- 3) a potential breach of the UNSW Research Code of Conduct.

The CIO then determines whether the complaint may be addressed by the School/Faculty or requires a preliminary assessment. Example of matters which may be addressed by a School or Faculty include matters related to research administration, such as unintentional administrative errors, clerical error or oversight.

As indicated by Figure 5, 13 (18%) of the 73 complaints proceeded to a preliminary assessment. The purpose of the **preliminary assessment** (further investigation) is to gather and assess whether the facts of the complaint, if substantiated, would constitute a breach of the Research Code. Additional allegations and/or respondents (current or former UNSW researchers) may be identified by the Assessment Officer during the initial assessment and/or preliminary assessment.

There were 10 self-reports by researchers to the university's ethics committee that their research deviated from approved ethics protocol. Generally, such reports do not require an investigation and proceed to a determination informed by advice from the respective ethics committee on the extent, impact and outcome of the deviation from approved protocol.

As indicated by Figure 5, over half (59%) of complaints did not proceed to investigation, with most being either resolved and/or not requiring any further action.

All 18 PubPeer alerts received were assessed, with most (89% or 16 of 18 concerns) being dismissed as they either did not relate to UNSW affiliated researchers; or did not provide sufficient information to enable the university to investigate the concerns. One alert, alleging falsification/fabrication of data, proceeded to a preliminary assessment.

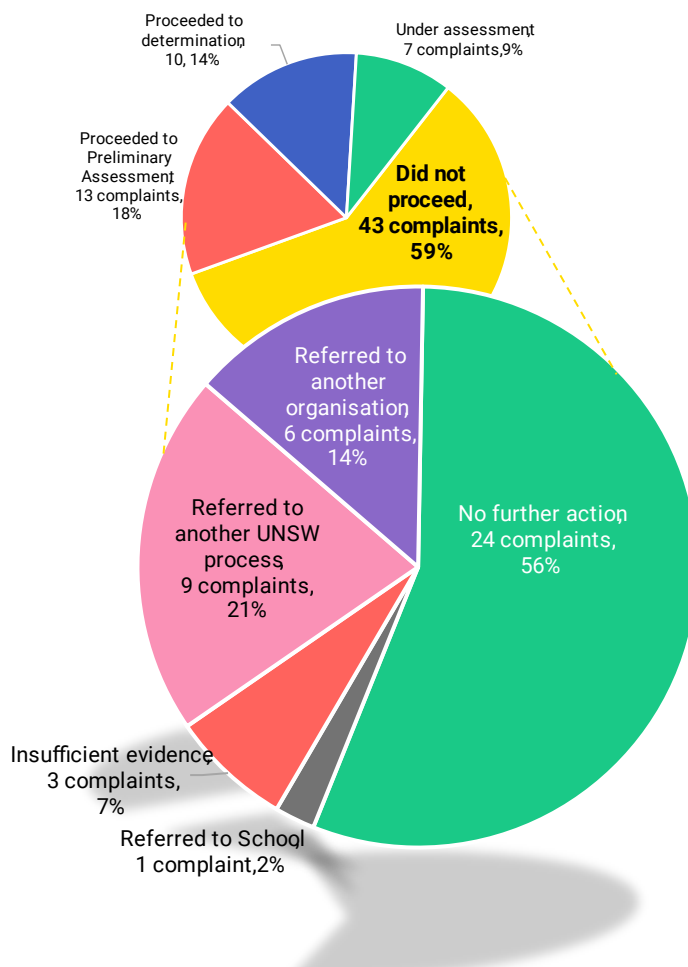


Figure 5: Outcomes of the 73 complaints - and breakdown of 43 complaints which did not proceed

### Preliminary Assessments at UNSW

Preliminary assessments at UNSW involve a full investigation of concerns raised in the complaint, including any further concerns raised during the investigation, according to the principles of procedural fairness. This adaptation of the *Guide to Managing and Investigating Potential Breaches of the Australian Code for the Responsible Conduct of Research, 2018* reflects feedback received from the Australian Research Integrity Committee (ARIC).



## COMPLAINTS INVESTIGATED & RESOLVED

In 2023, the university **resolved 55 complaints** (which were raised in 2023 and in previous years) which comprised **54 matters** against **51 current and former UNSW researchers** (NOTE: some researchers were involved in more than one matter).

This section of the report examines the outcomes of the **54 matters** and **137 allegations** investigated and resolved following preliminary assessment.

### Preliminary assessment findings

Row Labels	Not Substantiated	Partially Substantiated	Substantiated	No findings*	Total
<b>Plagiarism</b>	<b>9</b>	<b>1</b>	<b>23</b>	<b>3</b>	<b>36</b>
<i>Contract Cheating</i>	2	1	1		4
<i>Inappropriate referencing &amp; citation</i>	1			1	2
<i>Plagiarism general</i>	5		17	2	24
<i>Self-plagiarism</i>	1		5		6
<b>Dissemination of Research</b>	<b>11</b>	<b>2</b>	<b>7</b>		<b>20</b>
<b>Authorship</b>	<b>6</b>	<b>1</b>	<b>8</b>	<b>3</b>	<b>18</b>
<i>Author - Exclusion</i>	1				1
<i>Author - Inclusion</i>	5	1	7	3	16
<i>Failure to obtain co-author consent</i>			1		1
<b>Copyright/IP</b>	<b>3</b>		<b>7</b>		<b>10</b>
<b>Human Research Ethics</b>	<b>4</b>		<b>5</b>	<b>1</b>	<b>10</b>
<i>Deviation/Breach of protocol</i>	4		4		8
<i>Research without necessary approval</i>			1	1	2
<b>Responsible Peer Review</b>		<b>3</b>	<b>6</b>	<b>1</b>	<b>10</b>
<i>Conflicted peer review</i>		3	1	1	5
<i>Impersonation</i>			4		4
<i>Manipulated peer review</i>			1		1
<b>Responsible Research Conduct</b>	<b>3</b>		<b>4</b>		<b>7</b>
<i>Failed to report suspected breach</i>	1				1
<i>Lack of robust methodology</i>	2				2
<i>Manipulated/coerced citations</i>			1		1
<i>Misrepresented qualifications</i>			3		3
<b>Animal Research Ethics</b>			<b>8</b>		<b>8</b>
<b>Data falsification and/or fabrication</b>	<b>1</b>	<b>1</b>	<b>1</b>		<b>3</b>
<b>Conflict of Interest</b>	<b>2</b>				<b>2</b>
<b>Failed legal and other obligation</b>	<b>2</b>				<b>2</b>
<b>Recordkeeping</b>	<b>2</b>				<b>2</b>
<b>Research supervision</b>	<b>8</b>		<b>1</b>		<b>9</b>
<b>TOTAL</b>	<b>51</b>	<b>8</b>	<b>70</b>	<b>8</b>	<b>137</b>

Table 3: Breakdown of allegations and findings of preliminary assessments concluded in 2023

\*NOTE: 'No findings' were made in three matters where the researchers were former UNSW staff/students - but not at the time of the alleged conduct. No finding was also made where there was insufficient evidence to make a finding.

About a third (35%) of the 54 preliminary assessments completed in 2023 involved one allegation; 50% involved between two and five allegations; and two matters involved 13 and 23 allegations respectively.

Plagiarism was a primary allegation in many of the preliminary assessments conducted over 2023. This was the result of a complaint alleging plagiarism and copyright infringement in several PhD theses on UNSWorks, the university’s institutional repository, dating between 2013 to 2020. Preliminary assessments substantiated the allegations of minor plagiarism and failure to obtain copyright statements where text or images were replicated. Most of the researchers involved were unaware of, or had overlooked, this element of research administration.

Inappropriate or inadequate provisions for the dissemination of research was alleged in several complaints investigated, with just over half (55%) of the allegations raised relating inadequate data sharing statements or arrangements. About a third (30%) of allegations related to a failure to acknowledge funding sources or the contribution of others, and the remaining allegations related to researchers’ failure to include, or wrongfully including UNSW affiliation.

Gift authorship, receiving or awarding authorship when an individual may not qualify as author, was an allegation in about third of authorship matters – with three out of seven allegations substantiated or partially substantiated.

There were 10 self-reports by Chief Investigators that their research projects had deviated from approved animal or human ethics protocols. These reports generally proceed directly to a determination on whether the deviation from approved ethics protocol constituted a breach of the Research Code.

## Faculty

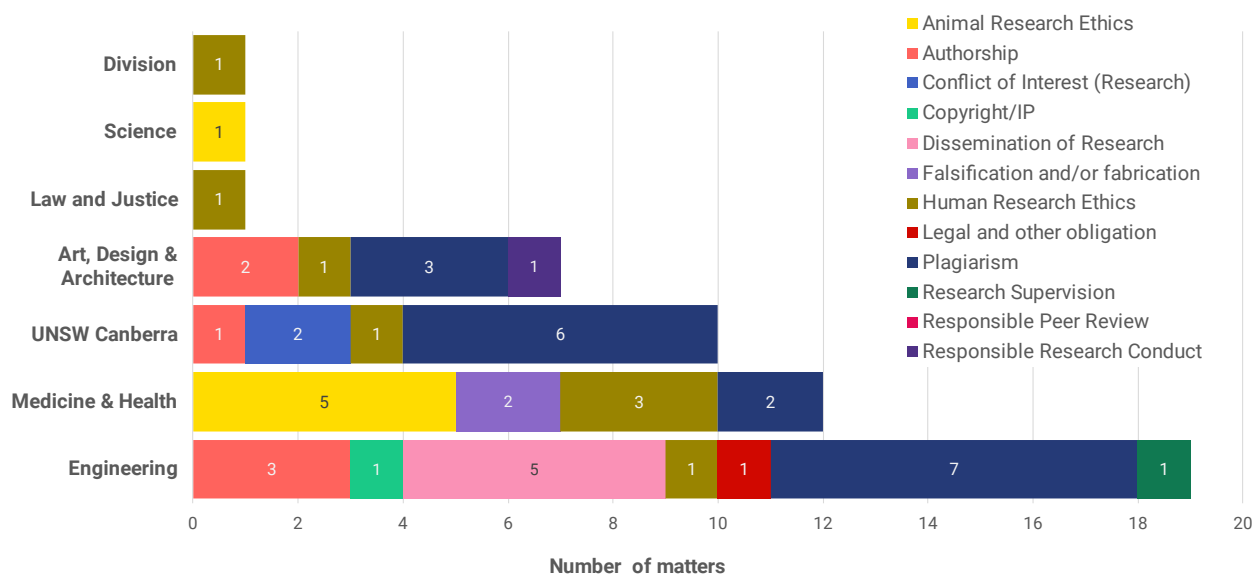


Figure 6: Breakdown of matters finalised in 2023 by discipline – excluding the three matters involving now non-UNSW researchers

As indicated by Figure 8 above, most (35% or 19 of 54) matters finalised in 2023 related to current or former UNSW researchers in the Faculty of Engineering.

Of note:

- several of the matters related to plagiarism in PhD theses submitted between 2013 and 2020 stemmed from one complaint
- all seven matters in the Faculty of Arts, Design and Architecture were related to current and former students and staff in the School of Built Environment
- two-thirds (67% or 8) of the 12 matters in Medicine and Health related to deviations from approved ethics protocols, with six of the eight matters (75%) involving unintentional research administration errors.

## Researcher experience

As indicated previously, plagiarism was a primary allegation in most matters investigated in 2023. Allegations of plagiarism were similarly likely to be made against experienced researchers (Levels D and E), mid-career researchers (Levels B and C), and HDR candidates (see Figure 7).

Across all matters investigated in 2023, Figure 7 shows experienced researchers (Levels D and E) were highly represented in matters investigated by the CIO. In most cases they were Chief Investigators on research projects which were self-reported as having deviated from approved ethics protocol (eight of the 14 matters investigated) or were co-authors on papers investigated for potential plagiarism.

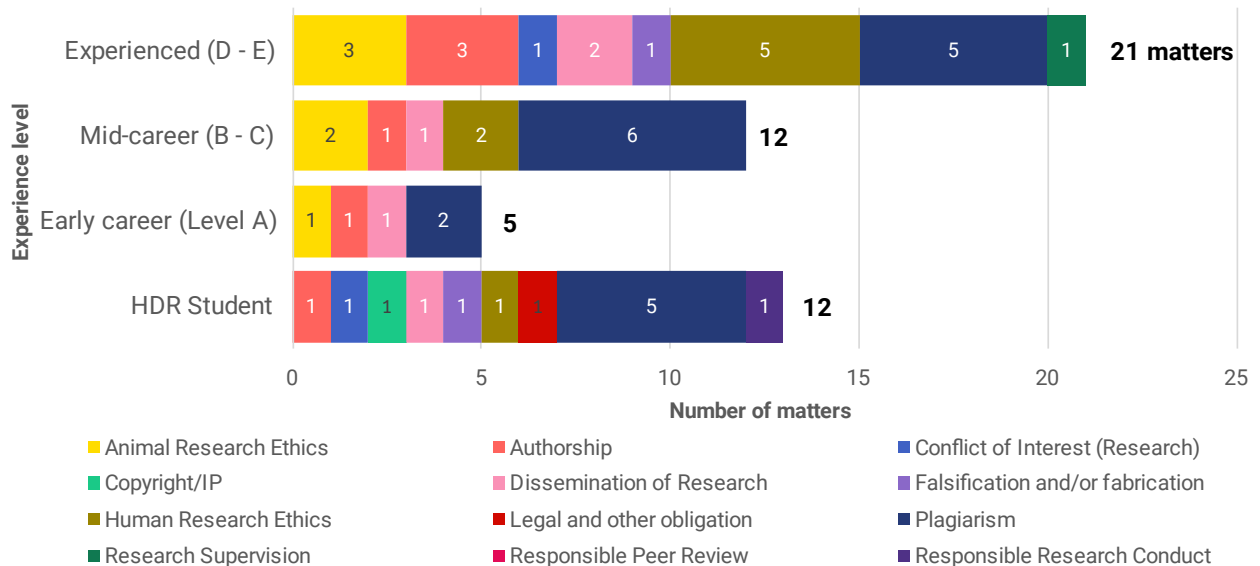


Figure 7: Breakdown by matter type and level of researcher experience, excluding three researchers who were not with UNSW at the time of the conduct.

## Findings

An examination of the specific allegations contained in the matters raised in 2023 shows that:

- there were more allegations raised against HDR candidates (56 allegations) than more experienced researchers (48 allegations); and
- most (60%) of allegations raised against experienced researchers were found to be unsubstantiated compared to HDR candidates (16%) (Figure 10).

Of note is that two matters involved Higher Degree Research (HDR) candidates with 13 and 23 allegations respectively found to be major and serious breaches of the Research Code. Both matters were referred to an Investigation Panel in 2024 to examine if the conduct, if substantiated, might constitute Research Misconduct.

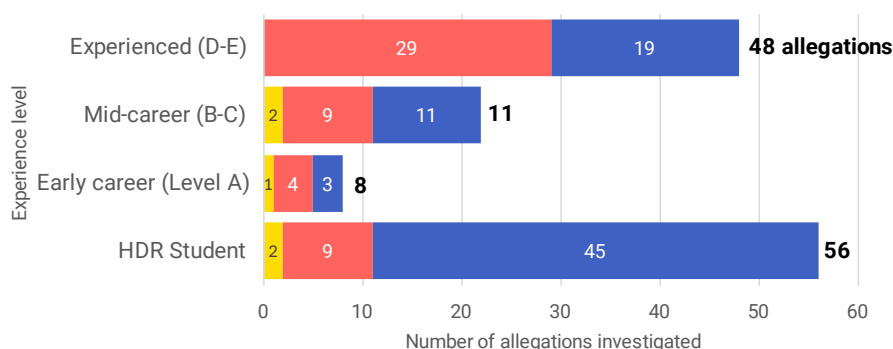


Figure 8: Breakdown of allegation findings by researcher experience level, excluding three researchers who were not with at the time of the conduct.

## Outcomes

According to the UNSW *Research Misconduct Procedure*, which was in effect in 2023, a breach of the Research Code occurs on a spectrum, from minor (less serious) to major (more serious) following consideration of a series of factors. They include the extent of departure from accepted research practice, extent to which a breach may have affected the community, animals and the environment and on the reliability of the research. A Major and Serious breach may constitute Research Misconduct, where the conduct is also intentional, reckless or negligent (Figure 6).



Figure 9: Spectrum of breaches of the Research Code

As illustrated in Figure 10, most (63% or 34 of 54) matters concluded in 2023 with a finding that the researcher did not breach the Research Code. Three of the seven matters where no finding could be made related to researchers who were not UNSW staff or students at the time of the conduct. No findings were made on another four matters due to insufficient evidence.

Of the 10 self-reports of deviation from approved ethics protocol, six were determined as the result of unintentional research administration error or oversight that did not constitute a breach of the Research Code. A determination of a 'minor breach' was made on the remaining four matters. In all instances researchers were proactive in identifying and applying corrective, and other, measures to mitigate the risk of the deviation re-occurring.

Minor breaches of the Research Code were also found against five other researchers, relating to plagiarism and copyright infringement, authorship and failure to obtain appropriate approval/permission according to the university's policy. In each instance, researchers were directed to undertake corrective actions to address the breach/es.

*A very small proportion of UNSW's 4,815 researchers breached the Research Code.*



Of the four matters determined to be major and serious breaches of the Research Code, three matters, all involving HDR candidates in the final stages of their PhD candidature, were referred to the Deputy Vice Chancellor, Research and Enterprise to consider convening an Investigation Panel to examine the conduct as potential Research Misconduct. The matters involved falsification of data, providing and receiving gift authorship, and misrepresentation and impersonation of senior academic staff in journal peer reviews. The fourth matter, related to undertaking research without obtaining necessary approvals, was referred to the School with recommendations of corrective action to be undertaken.

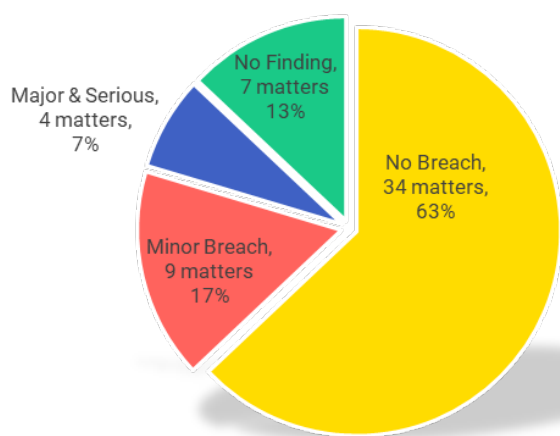


Figure 10: Breakdown of outcome of matters finalised in 2023



## Themes and issues identified

### Poor understanding of authorship and publication requirements

A poor understanding of authorship requirements continues to be an issue in several matters investigated by the university in 2023. As flagged in 2022, many UNSW researchers remain unaware of the authorship criteria set out in the university's [Research Authorship, Publication and Dissemination Policy](#). Allegations of 'gift authorship' continue to be raised in complaints and substantiated in preliminary investigations. Of note is that most of these allegations were raised against less experienced researchers for inclusion of authors who did not meet the criteria for inclusion as author on research publications.

Failure to obtain and include copyright permission and lack of data sharing provisions in published work were common administrative requirements overlooked by less experienced researchers.

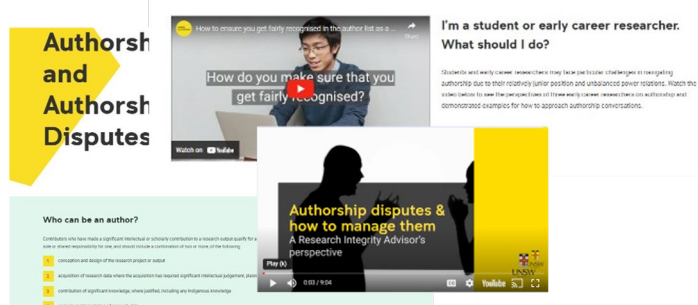
### Plagiarism

A failure to check for plagiarism in thesis and research manuscripts before submission and poor understanding of self-plagiarism was a common finding in investigations undertaken in 2023.

#### What UNSW has done about this

In addition to resources to support researchers on [using iThenticate](#), the text similarity checking tool used at UNSW for checking work submitted by HDR candidates and research papers for plagiarism prior to submission, the university released a [series of resources](#) in October 2023 to support researchers to:

- understand the requirements of authorship; and
- steps to take to resolve authorship disagreements and disputes.



### Drive to publish fuelling research integrity concerns and poor research practices

The CIO has observed an increase in matters involving serious research integrity concerns and poor publication practices which appear to have been driven by a focus on increasing publication output and citation. All the matters investigated to date have involved HDR candidates and early career researchers publishing dozens of articles in mostly low- quality journals. As the quote below illustrates, the early career researchers are following the conduct modelled by more experienced researchers.

*"We follow Australian Researcher ██████████ a pioneer of number [sic] of optimization models and algorithms. He published 159 papers in 1 year in his domain".*

*HDR student response to a matter*

An examination of BORIS, the university's research performance metrics system, shows some researchers producing between 50 and 80 journal articles a year, compared to the School average of 19 papers a year. The conduct also appears across a cross-section of research experience levels.

Of note is that a similar observation was made by [Australia's Chief Scientist, Dr Cathy Foley, in November 2023](#) that narrow research metrics were creating perverse incentives, leading researchers to chase citations, rather than focusing on quality research. The statement was issued to advocate for a new approach to evaluating research performance and careers, aiming to maintain a robust, diverse and effective research sector.

## Use of Generative AI in research

While ChatGPT and other Large Language Models (LLM) represent significant technological change, with many opportunities and benefits for research, UNSW's value around academic and research integrity remains unchanged. A student's assessable work or researcher's output must be substantially their own and where AI tools, like ChatGPT and the like are used, they must be appropriately credited.

While the university is not aware of unauthorised use of generative AI in published research it received its first suspected case in 2023. The matter was referred to the CIO by the Graduate Research School after an examiner raised concerns that the thesis included several inaccurate, incomplete and inappropriate citations – in that the citations did not bear much relevance to the substantive content. While the use of LLM was raised as a possibility by an expert engaged to inform the investigation process, their findings were inconclusive. The researcher denied using generative AI to produce the work and was able to provide draft versions of their work and documents containing relevant data and coding of qualitative data.

### What UNSW has done about this

The Pro Vice-Chancellor, Research and Pro Vice-Chancellor, Research Training and Dean of Graduate Research jointly developed [AI, Large Language Models, and the Responsible Conduct of Research at UNSW](#), which sets out the university's position on the ethical and responsible use of AI and Large Language Models in research.

Additional rigour has been applied to protect the integrity of HDR awards by requiring all candidates commencing an HDR award program from 2023 to undergo an oral examination. The examination will require candidates to have detailed knowledge of the thesis; be able to demonstrate the originality of their work and its place in the field; and to defend the methodology and conclusions of the work.

## ARIC Reviews

Australian Research Integrity Committee (ARIC), jointly established by the Australian Research Council (ARC) and National Health and Medical Research Council (NHMRC), undertakes reviews of institutional processes used to manage and investigate potential breaches of the Australian Code.

In 2023 the ARIC commenced a review into two matters, one which was finalised in 2022 and the other which was in the process of a preliminary assessment. Both reviews concluded in 2024.

In relation to the finalised matter the ARIC was satisfied with the university's handling of the complaint and acknowledged the thoroughness of the investigation and preliminary assessment report..

In relation to the matter in preliminary assessment, the ARIC acknowledged the complex factors of the matter and strongly recommended that the university review its process to ensure better alignment with the Guide to improve timeliness.

The ARIC also made two enquiries into two other matters but determined not to proceed with a review.



# DEVELOPMENTS, ACTIVITIES AND ACHIEVEMENTS IN 2023

## Priority

## Key achievements

Raise awareness and understanding of responsible research conduct and address current and emerging issues

### GRS-Faculty First-year HDR Candidate program

The Graduate Research School commenced collaboration with Faculties and Divisions on the development of a discipline-focused first-year HDR candidate course to supplement the on-line modules they are required to complete. The course, to be designed by each Faculty to meet their specific requirements, will provide first-year HDR candidates with the foundations of responsible research conduct with a UNSW context. Topics include:

- Authorship
- Ethics approval
- Avoiding fabricating/falsifying/misrepresenting data
- Data management
- Plagiarism
- Copyright.

### Support to resolve authorship disputes

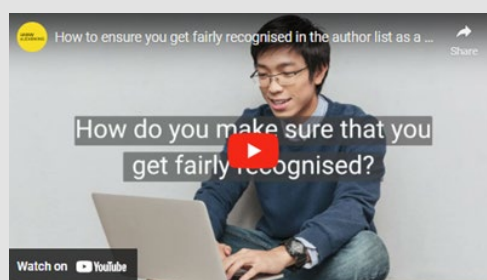
The university, led by the CIO in collaboration with alternate dispute resolution experts, Dr Rosemary Howell and Mr William Nicholls Faculty of Law and Justice, and Professor Paul Munroe, Research Integrity Advisor in the Faculty of Science, developed a series of resources to support researchers to resolve authorship disputes. **Resources** include:

- Online information
- Factsheets
- Information instructional and information videos
- Online seminar *Preventing and Managing Authorship Disputes: An Information Session for Academic Leaders*



### Authorship and Authorship Disputes

An authorship dispute arises when contributors disagree about who should be included as an author, the order in which they are listed, the content of the research output, who should be acknowledged or where the research output should be submitted or published.



Research Integrity Advisors have reported fewer authorship disputes and instances of 'gift' authorship following the launch of these resources.

## Priority

## Key achievements

### Research ethics compliance support

UNSW's Research Ethics and Compliance Support (RECS) unit continued to offer a range of training and support services for staff and students, aimed at promoting awareness and understanding of relevant Codes, Statements, Guidelines and Legislation, as well as ensuring compliance with the Australian Code for the Responsible Conduct of Research. These services included various courses and outreach training sessions, many of which are mandatory before commencing certain research projects:

- Human Research Ethical Principles and International Committee on Harmonization (ICH) of Good Clinical Practice
- Animal Care & Ethics courses, including refresher module
- Practical training on various laboratory animal bio-methodology
- Biosecurity
- Ionising Radiation & Laser Safety
- Poisons & Therapeutic Goods for research (S4D, S8 and S9)
- Research Export Controls

Additionally, RECS supported the Committees in overseeing research activities at UNSW and affiliated centres by conducting facility inspections and reviewing annual compliance reports.

### CIO outreach and proactive activities

The CIO presented Introduction to *Research Integrity* and *Research Integrity@UNSW* sessions to the following Schools over the year, targeting students in Honours years and early research years:

- Honours students in BEES (2x) and BABS (3x)
- Update on Research Integrity and the Faculty of Science
- HDR candidates in Law and Justice
- Preventing and Managing Authorship Disputes: An Information Session for Academic Leaders
- Authorship seminar for Department of Developmental Disability Neuropsychiatry
- Research Integrity Q&A for students in Engineering Postgraduate Research Essentials (3x)
- A researcher's survival guide for authorship disputes at UNSW
- Research Skills Workshop Series (2x)
- Science Faculty Board: Engaging Researchers About Changes to Authorship at UNSW.

## Network and collaborate to promote and share best practice

### Research Ethics and Integrity Forum

UNSW's RECS and CIO held quarterly meetings with Research Integrity Advisors to discuss emerging trends, issues and best practice. In 2023, Professor Michael Ostwald (Arts, Design and Architecture), Professor Frederik Anseel (Business) and Professor Sean Emery (Medicine and Health) concluded their tenure as Faculty Research Integrity Advisors (RIAs), with the university welcoming new RIAs, Professor Christy Newman, Professor Karin Sanders, and Professor David Simar respectively to the roles.

## Priority

## Key achievements

### **Group of Eight Research Ethics and Integrity Group (Go8 REIG) and NSW Research Integrity Group (NSW RIG) communities of good research conduct and practice**

RECS and CIO continued to represent UNSW on the Go8 REIG to discuss and share issues, challenges and developments in research ethics and integrity.

The CIO took over from Macquarie University as Chair of the NSW RIG, a network comprising 42 members from institutions across NSW, the Northern Territory and Tasmania, including Macquarie University, University of Sydney, University of Wollongong, University of Technology, Sydney, George Institute, University of Western Sydney, NeURA, Charles Sturt University, and University of Newcastle.

### **Research data management and infrastructure**

#### **ResTech** in 2023

- Completed the rollout of the new instrument data store to provide the UNSW Analytical Centre facilities with a safe, resilient and readily accessible data storage platform
- Continued to progress integration of tools and ethics into the ResToolkit.
- Business case and procurement process to develop an integrated research data management experience.

### **Best practice management of potential breaches of the Research Code**

#### **Go8 benchmarking: Deviation from ethics protocol outcomes**

In 2023, UNSW's REC and CIO engaged Deloitte to:

- obtain a better understanding of the processes followed by members of the Group of Eight (Go8) institutions in managing reported non-compliance of approved human and animal ethics protocol; and
- identify areas that UNSW might improve and align with better practice in the sector.

Structured interviews were held with representatives from each of the Go8 institutions as well as representatives from the Australian Research Council (ARC) and National Health and Medical Research Council (NHMRC).

As expected, the study found high-level alignment of processes across all institutions with minor variation in outcome; and with the ARC/NHMRC on the assessment of hypothetical scenarios, consistent with the Guide to Managing and Investigating Potential Breaches of the Australian Code for the Responsible Conduct of Research 2018.

In response to the recommendations arising from this benchmarking exercise, the CIO and RECS are currently collaborating to develop a protocol deviation decision matrix to assist in the management of research non-compliances.

#### **Go8 benchmarking of management and investigation of research integrity complaints**

In 2023 UNSW participated in the Go8 2018-2022 benchmarking exercise comparing the way in which potential breaches of the Australian Code are

**Priority****Key achievements**

	managed and investigated. The report is currently being finalised and is expected to be released shortly.
<b>Improving detection of research misconduct</b>	<b>Detecting inappropriate image manipulation</b> In 2023, the Division of Research and Enterprise endorsed a pilot to use ImageTwin alongside plagiarism software, iThenticate, to detect image integrity issues in Higher Degree Research theses prior to submission for examination. This follows CIO's successful use of the software in investigations to detect inappropriate manipulation and duplication of figures, such as western blots, microscopy images and light photography.

## KEY RISKS AND CONTROLS

UNSW's enterprise risk register in 2023 identified unethical behaviour, including admissions fraud, contract cheating, and lack of research integrity erode UNSW's reputation and academic integrity and devalues degrees (#08) as an institutional operational risk. Risk factors identified include:

Risk factor	Description	Controls
Increasing number of researchers involved in research integrity matters	<b>Poor awareness and understanding of research integrity</b> leads to questionable research practices, which impacts researcher and university credibility and trust in research.	<ul style="list-style-type: none"> <li>The principles and responsibilities of the Australian Code and Guides supporting its application have been adopted by the university and forms part of the university's new <b>Code of Conduct and Values</b>.</li> <li>Researcher training, including first-year HDR candidate program, Research Integrity training, supervisor training, and research data management training</li> <li>Research Integrity Advisors in each Faculty to promote research integrity and advise researchers on relevant Codes, guidelines and procedures on the responsible conduct of research.</li> </ul>
	<b>Poor research supervision</b> results in poor research practice, which impacts researcher and university credibility and trust in research	<ul style="list-style-type: none"> <li>Codes and procedures</li> <li>Supervision training</li> <li>Supervision register, including requirement for supervisors to have completed RI modules</li> </ul>
	<b>Unintended breach of ethics protocol results in poor research practice</b> , which impacts researcher ability to publish results	<ul style="list-style-type: none"> <li>Codes and procedures</li> <li>Ethics committees</li> </ul>
Increasing pressure on researchers to succeed	<b>Falsification and/or fabrication of research data/findings</b> leads to unreliable results, which impacts research and university credibility and public trust in research	<ul style="list-style-type: none"> <li>Policies and procedures on data management, open access and peer review</li> <li>Open and public scrutiny of published research through peer review platforms, such as PubPeer</li> <li>Strong supervision and mentorship</li> <li>Regular review of lab books</li> <li>Peer review</li> </ul>
	<b>Increasing number of research articles in low-quality journals by UNSW affiliated researchers impacts the quality and reputation of research at UNSW</b>	<ul style="list-style-type: none"> <li>Strong supervision and mentorship</li> <li>Emphasis on quality research and publication in reputable journals at School/Centre, Faculty and university levels</li> </ul>

Risk factor	Description	Controls
	<p>Technology advancements making <b>detection of breaches of research integrity more difficult and complex</b></p>	<ul style="list-style-type: none"> <li>• Promoting good supervision and mentoring</li> <li>• Oral examination and regular and annual progress reviews of thesis</li> <li>• Open access, data sharing and peer review</li> <li>• Introduction of tools to detect unacceptable use of generative AI</li> </ul>
	<p><b>Contract cheating and plagiarism</b> leads to work submitted not being the work and words of the researcher/s, which impacts researcher and university credibility and trust in research.</p>	<ul style="list-style-type: none"> <li>• Promoting good supervision and mentoring</li> <li>• Warning issued to students about contract cheating</li> <li>• Requirement that all supervisors use iThenticate before theses are submitted</li> </ul>
	<p><b>Breakdown in researcher relationships/communications leads to authorship and publication disputes</b>, which impacts on the dissemination of research.</p>	<ul style="list-style-type: none"> <li>• Code of conduct, policies and procedures</li> <li>• Onboarding, induction and training</li> </ul>
<p>Increasing pressure on resources</p>	<p><b>Under-reporting of breaches of research integrity</b> results in poor research practice, which impacts the quality and reputation of research at UNSW</p>	<ul style="list-style-type: none"> <li>• Streamlined complaint and investigation process that maintains procedural fairness</li> <li>• New complaint and case management system to make it easier for case management and reporting.</li> </ul>
<p>Increasing regulatory/stakeholder scrutiny of research integrity concerns</p>	<p>Pressure and expectations on UNSW handling and investigation of complaints increases, placing <b>greater pressure and demand on already constrained resources and impacts on timeliness of case resolution.</b></p>	<ul style="list-style-type: none"> <li>• Regular updates on regulatory body expectations through the Go8 Research Ethics and Integrity Group meeting</li> <li>• Open and transparent sharing of information with regulatory body on complaint management and investigations.</li> </ul>



# APPENDIX: Process for handling complaints about research at UNSW in 2023

