

# University of St Andrews

## Research Integrity statement for academic year 2020-21

The University of St Andrews fully supports the principles laid out in the UK Concordat to Support Research Integrity (Universities UK, updated 2019): this report summarises our approach to embedding research integrity in our activities, including ensuring compliance with the provisions of the Concordat, and relevant activities undertaken.

- This arrow symbol is used to emphasise developments that took place in this academic year, 2020-21.

This statement captures a period in which the global COVID-19 pandemic caused significant upheaval. In the context of research integrity at the University of St Andrews, this led to a focus on core and business critical activities in response to the constantly-evolving pandemic: as a result, some actions anticipated to be completed during this year were paused, and will progress during academic year 2021-22.

### The University's approach to research integrity

As a term and condition of funding from almost all research funders, the University has to operate in line with the provisions laid out in the [Concordat to Support Research Integrity](#).

[Oversight of research integrity activity at the University of St Andrews](#) is conducted at an institutional and operational level. At the institutional level this is led by the [Vice-Principal \(Research and Innovation\)](#), who chairs the University's Ethics and Research Integrity Assurance Group (EARIAG). At an operational level, oversight of research integrity activity is led by the head of research policy, integrity and governance, who convenes the Research Integrity Committee (RIC). The RIC comprises professional services staff from integrity, ethics, governance, and training/development, and 5 academics representing medical science, life sciences, physical sciences, social sciences, and arts and humanities.

- The representative from social sciences demitted this year. As part of ongoing research culture work, processes for appointing/replacing members on research-related committees are being reviewed, to ensure maximal openness, transparency and representation from diverse voices.

Due to the efforts of the RIC, and as articulated in this and previous annual statements, the University is already compliant with the core requirements of the Concordat. However, the University's approach, implemented via the RIC, is to focus on continuous improvement activities aimed at culture-building, taking an academic-led approach to ensure that we strategically focus on activities with a high likelihood of impact.

The RIC has continued to input into the [University's work on research culture](#): it is acknowledged that progress on building a culture of integrity will depend significantly upon developments in wider research culture.

### Supporting and strengthening research integrity

#### *Policy and guidance*

#### **Research integrity**

St Andrews has had in place policies and procedures relating to [good research conduct](#) and [research misconduct](#) since 2013. Updated policies and guidance were launched in January 2019 and are publicised via staff and postgraduate induction events, a [training module](#) that covers the policies and procedures, and any talks/workshops on research integrity.

- During this year, the policies were reviewed and updated (in June 2021) to account for feedback from non-conflicted persons involved in investigations, the Research Integrity Committee and the Research, Impact and Innovation Committee. The [Principles of Good Research Conduct \(Policy\)](#) had no adjustments. The [Research Misconduct Policy](#) and its [Annexe](#) were adjusted to:
  - Clarify that the conditions for undertaking a Preliminary Investigation include the provision of sufficient evidence, and, that in obtaining evidence to support their cases, Complainants and Respondents must exhaust all direct avenues they have at their disposal before requesting that the University assist in providing access to evidence. Regarding the latter, clarifying that the VPRI will determine the response to any such request, and if access will be assisted, the University will not undertake any activity beyond providing access (for example, the University will not participate in the searching and identification of evidence beyond simply providing access for the Complainant or Respondent to do so themselves).

- Adjust the process such that the default person to undertake a Preliminary Investigation is not the Respondent's own Head of School, but the Head of another School, selected based on the details of the allegation and the expertise required to properly appreciate those details, and selected to ensure the absence of any conflict of interest. The reason for this was to minimise the possibility for conflicts of interest, and personal discomfort, to arise when a Head of School undertakes a Preliminary Investigation of one of their own staff.
- Emphasise that authorship disputes will be handled through mediation first, and only the research misconduct investigation process if appropriate following the exhaustion of mediation options. The reason for this was to follow national level guidance, which states that the "resolution process does not have to be heavy-handed or legalistic; indeed, a proportionate approach based on arbitration will often be the most suitable method" and "When allegations are of a serious nature, or where mediation and/or arbitration has been refused or proved unsuccessful, then formal processes should be initiated"<sup>1</sup>.

Work in the coming year will include: reviewing the webpages; developing guidance around authorship, and acknowledgement of contributions, in writing research outputs; developing guidance around for those making, and responding to, allegations of research misconduct; and having direct conversations with all Directors of Research to explore what further policies/guidance could add value.

### Research involving humans, their samples or data

- [University Teaching and Research Ethics Committee \(UTREC\)](#) continued monitoring the impact of Covid on research involving humans, including regularly reviewing and updating the [webpages](#) and [guidance](#). As restrictions eased the temporary provisions (risk assessment as a prerequisite to ethics approval) put in place to mitigate risks were retired, as upon review, it was determined that there were sufficient safeguards out with the ethics process (i.e. risk assessments, Covid Code). The proportionate review checklist and process introduced due to the pandemic, and which was welcomed by stakeholders, was adopted into usual processes. Work on the Ethics Management Project, which had been impacted by Covid, resumed in the latter half of 2021-22, including a virtual Lean workshop and additional scoping of other Universities to determine value and issues with available systems and their implementation.

Work in the coming year will include: continuation of the project to source and implement an electronic ethics management system, including further evaluation of processes and structures against the [UK Research Integrity Office – Association of Research Managers and Administrators \(UKRIO-ARMA\) guidance on research ethics support and review](#) and with a view to enhancing the accessibility and inclusivity of research involving humans and the ethics processes and systems; review and evaluation of interrelated processes around research involving humans such as between ethics and governance processes for clinical research; continued monitoring of the impact of Covid on research involving humans, including liaising with colleague in EHSS and the Global Office; further supporting compliance with new data protection laws when undertaking research involving humans, especially on use of third-party services.

### Research involving animals, their samples or data

The University's guidance, processes and access to online training relating to research involving animals are provided through the [Research involving animals' webpage](#). This webpage includes links to: [public facing webpages](#) (which contain a video and information on what the animals experience and the numbers involved), and a new webpage on [what types of animals are involved in research](#). There is also guidance on how to apply for research involving animals. Our [animal welfare and ethics committee \(AWEC\)](#) (or institutional AWERB, animal welfare ethics review body) continuously reviews and develops processes relating to the oversight of research involving animals to ensure maximal clarity and thus compliance amongst researchers. Versions of process documents are available for researchers or members of the public.

This year, the new activities of the AWERB have included:

- Providing guidance and information on the Home Office Change Programme
- The development of guidance on the acquisition of animals
- The development of a streamlined process for reviewing projects that involve only secondary data
- Providing guidance on reporting research involving animals following an internal audit on the ARRIVE guidelines

Work in the coming year will include: a review and further revisions on the AWERB's terms of reference; reviewing the policies and SOPs related to colony management and aged animals; reviewing the induction material for new AWERB members and assessing if further training is required; a review of the new secondary data process; finalising the development of the existing ethics application (research involving humans) storage database to house applications for research involving animals.

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<sup>1</sup> UK Research Integrity Office, Guidance note on authorship, March 2017 <http://ukrio.org/wp-content/uploads/UKRIO-Guidance-Note-Authorship-v1.0.pdf>

## Research governance

- We put in place a policy on [Safeguarding of children, vulnerable adults and prevention of radicalisation](#), and determined this and other activities undertaken by the University as rendering us operating in [guidance on safeguarding in research](#) from the UK Collaborative on Development Research (UKCDR).

Work in the coming year will include: putting in place some minor adjustments to the guidance associated with the human participant ethical review process to better signpost elements related to safeguarding, including the new policy; evaluating using the [new UKRIO checklist for researchers](#) as the basis for a new research planning tool that could be advertised to all researchers; and developing enhanced policies/guidance on areas of research governance including export controls, due diligence, the Nagoya Protocol, and the Sponsorship of NHS research.

## Training and awareness-raising

### Research integrity

The University provides a range of training opportunities for staff and students. A number of postgraduate researcher (PGR) training opportunities refer to research integrity.

### Online training

[Seven online training modules](#) are available to all of those with University account access. The first of these focuses on St Andrews guidance, policies and contact points, and the other six modules cover the following topics: introduction to research integrity and the responsible conduct of research, ethical approval and practice, collaborative research and data management, authorship, peer review and publication ethics, plagiarism and recycling of text and research outputs. Starting with the intake of September 2019, postgraduate research students (PGRs) have been required to complete the first module as part of matriculation, and the other six during their first year.

Work in the coming year will include mandating the completion of online research integrity training as a condition of probation for new staff on research, or teaching and research, contracts.

### Events

Inductions for new staff, postgraduate research students, and supervisors of postgraduate research students consistently contain dedicated content on research integrity, ethics and governance, both in the form of explicit talks on the issue and distribution of fliers providing the key research integrity information and contact points. There is brief content on research integrity, ethics and governance in the University-wide staff handbook. Workshops are provided on an ad hoc basis, e.g. for undergraduate students on the [Laidlaw scholarship programme in research and leadership](#) and different cohorts of Physics postgraduates.

- The PGR induction presentation remains online given pandemic restrictions.
- The case-study workshop for one-year PGRs was put on pause, introduced to complement the online modules with discussion of case studies, given the shorter time that these individuals have available to accumulate experience during their studies.
- Attempts to commence the lunchtime University-wide peer-to-peer discussion and learning event series titled 'Spotlight on research integrity' have continued, but the event has not yet taken place. Discussions around starting this series of events are active and ongoing.
- The PhD supervisor induction now includes a dedicated short talk on all aspects of research integrity, ethics and governance.
- We hosted a drop-in follow-up discussion after the UKRIO webinar on 'An Introduction to Research Integrity', open to all.

Work in the coming year will include: starting and maintaining the Spotlight event series; following submission to the exercise, using unit-level statements from REF2021 to engage with Schools and Departments on their integrity-related activities; developing a workshop tailored to technician colleagues; and continuing advocacy for the introduction of the 'new PI' training package.

### Research involving humans, their samples or data

- The training course developed for School ethics committee reviewers was extended to allow access by all staff and students and has been well received. Additional training has been provided one to one to School ethics administrators and convenors.
- A fortnightly discussion forum was introduced for all of the convenors of the School ethics committees to informally discuss emerging ethical issues, share best practice and obtain feedback on processes and guidance; this was initially a measure to help expedite review of COVID-19 studies during lockdown, but has persisted due to popular demand.
- Ad-hoc sessions continue to be delivered to student cohorts and staff at School level, often in partnership with internal (Data Protection, Research Data Management) and external (the NHS East of Scotland Research Ethics Service) collaborators.

### Research involving animals, their samples or data

For any research involving animals the researchers must be trained, supervised, and assessed to the required level of competence.

For those active with research involving animals there are a variety of training and induction provisions, including: specific induction material is provided to ethics committee members, which is based on [LASA Developing induction materials for AWERB members](#) but customised to our University; ethics committee members are offered tours of the facilities; researchers must complete inductions of any secure unit before starting any research in that location, including reading and understanding the Code of Practice for that unit; training for handling animals, and subsequent assessment of competency, are provided as required; and researchers requiring a personal licence attend external accredited training courses, which may cover law and ethics relating to animal research as well as species-specific information.

- For all University members, a new online training course for research involving animals has been developed which covers many of the topics associated with National Legislation (Module 1) and Ethics, animal welfare and the Three Rs (Module 2) as detailed in the [Caring for animals: Education and Training Framework document from the EU](#). This is paired with a follow-on online question and answer session with an ethics panel to ensure understanding of the key issues.
- University members, including animal care staff and any other persons expressing an interest, have been provided with the opportunity to use the external interactive training resource [Research Animal Training](#).

## External engagement

### Research integrity

Regarding research integrity broadly, the University is a subscriber to the UK Research Integrity Office (UKRIO), which has resulted in access to expert information and advice from the UKRIO team and attendance at UKRIO events, which provide valuable learning and networking opportunities for members of the RIC. The University also actively participates in the Scottish Research Integrity Network (SRIN)

- Staff have engaged in the:
  - UKRIO webinars covering the following topics: Research Ethics – 5 August 2020; Good research practice from the publishers' perspective – 20 January 2021; An Introduction to Research Integrity – 21 April 2021; Recognising & Rewarding Responsible Research Practice – 21 July 2021.
  - The Wellcome Reimagine Research Culture Festival in March 2021.
  - A UKRIO subscriber roundtable discussion in April 2021 on challenges and successes during lockdown
  - The UKRIO annual conference in May 2021.

Work in the coming year will include continued active engagement with UKRIO and SRIN events and discussions.

### Research involving humans, their samples or data

The University continues to engage with other Scottish HE organisations (via SRIN on Teams and the ARMA Ethics SIG mailing list), including sharing of resources and best practice.

- Communication with other UK HE organisations has been a key part of resuming Ethics Management Project activity, exploring use and implementation of an electronic ethics management system as well as structures and processes at other UK HE organisations
- Positive feedback on recently updated webpages, guidance and resources has been received from external researchers and research managers

Work in the coming year will include attending the ARMA annual conference which includes an ARMA ethics Special Interest Group networking meeting.

### Research involving animals, their samples or data

- There has been significant external engagement over the past year, in parts due to the new Home Office Change Programme. The typical networks and engagements that have occurred are with the:
  - Home Office and UK Establishment Licence Holders network regarding the Home Office changes.
  - External network ScotPILs which develops and assesses the provision of training for animal research across Scotland.
  - Scottish AWERB Hub, a network for those involved and coordinate the activities of their Scottish animal welfare and ethics committees.
  - HOLTIF Forum: The Home Office Liaison Training and Information Forum is a UK wide network for those with specific roles within the animal research regulations.

### Research governance

- We have particularly engaged with regulatory bodies and other Universities around the Nagoya Protocol and Export Controls.

- We have been engaging more substantively with the School of Medicine and NHS Fife to explore what could be done to improve processes from initiation to successful completion of research projects involving both the University of St Andrews and NHS Fife.

## Addressing research misconduct

Guidance on the various contact points available for asking questions, raising concerns and making allegations relating to research misconduct are provided on our [webpage](#) and form the emphatic central message of all awareness-raising activities. Because of the importance of research integrity, we have a separate email account for anyone with queries on matters of research integrity ([researchintegrity@st-andrews.ac.uk](mailto:researchintegrity@st-andrews.ac.uk)). We have a point of contact to act as confidential liaison for those making a public interest disclosure ('whistleblowers'): details can be found [here](#).

The Research Misconduct Policy and its Annexe provide a transparent process for reporting and investigating of allegations of research misconduct, a process which articulates and manifests appropriate principles and mechanisms to ensure that investigations are thorough and fair, carried out in a transparent and timely manner, and protected by appropriate confidentiality. The process also includes provisions for reporting to external bodies as appropriate.

	Academic year 2017-18*	Academic year 2018-19		Academic year 2019-20		Academic year 2020-21	
Questions asked	7	3		5		6	
Concerns raised		9		8		5	
Allegations received and investigations undertaken	3	1	Progressed through preliminary and formal investigation stages and was referred to disciplinary procedures. The outcome was a correction to the research record.	0		3	1 did not pass screening due to insufficient evidence. 2 progressed to Preliminary Investigation: one was found to be unfounded and progressed no further, the other was ongoing.
Ongoing investigations	0	0		0		1	

*\*as reported last year. The terminology of questions and concerns was introduced this year: both were together referred to as 'inquiries' in previous years' statements. Data has not been broken down by discipline, type of misconduct or funding body because that could potentially allow for the identification of individuals or research projects.*

### Definitions:

- A 'question' is an enquiry relating to general guidance on good research conduct, or explicitly related to a specific piece of research conducted under the auspices of another organisation.
- A 'concern' is an enquiry explicitly related to a specific piece of research conducted under the auspices of the University.
- 'Allegations received and investigations undertaken' refers to the receipt of a formal allegation in writing and its handling in accordance with the relevant section of our Research Misconduct Policy.
- 'Ongoing investigations' refers to investigations that commenced but not concluded before the end of the academic year, and are therefore not counted in the 'Allegations received and investigations undertaken' section.

The questions and concerns were on the topics of:

- The position of an individual in the authorship list on piece of published work (Science)
- The outcomes and implications of a research study undertaken by a Government body in a foreign jurisdiction, a study in which researchers based here provided peer review of the methodology (Science)
- Misappropriation of the ideas and misrepresentation of the contributions of an ex-University research staff member by a staff researcher (Science x 2 – one of these resulted in allegation 2 below)

- The suitability of currently-active terrorist groups as a topic of legitimate research study (Arts, Humanities and Social Sciences)
- Plagiarism, referencing problems and factual inaccuracies (Arts, Humanities and Social Sciences)
- Acknowledging the contribution of a researcher based at another University to a collaborative publication, following that researcher having had a Human Resources-related allegation investigated and upheld against them (Science)

Only one of these concerns led to a subsequent allegation (as indicated); all others were resolved via providing advice, mediation or direction toward guidance.

The allegations were on the topics of:

1. The position of an individual in the authorship list of a piece of published work being allegedly under-representative of their contribution (Science – concluded, was not upheld following Preliminary Investigation stage)
2. The absence of an individual from the authorship list of a piece of published work to which they allegedly contributed to a degree worthy of authorship (Science – concluded, was not upheld following Screening stage)
3. The alleged misappropriation of a postgraduate student's ideas by their supervisor and another student (Arts, Humanities and Social Sciences – allegation being prepared for submission)

## Monitoring and evaluation

In spring 2021, a research project at St Andrews was undertaken in which over 600 members of the University community (very large given the size of the University) responded to a survey regarding research culture, with a balanced representation from Arts, Humanities and Social Sciences. In contrast to other surveys on research culture, across the sector and at other Universities, the results demonstrated strong perceptions that the University is taking integrity seriously (67%), and that research at the University is undertaken with honesty (63%).

### *Research integrity*

In the absence of established indicators of integrity culture across the sector, we keep track of the following to inform our understanding of how effective our above efforts have been.

#### **Trends in numbers of questions, concerns and allegations over the 5 years from 2015/6 to 2020/21**

Analysis performed during this year, using previous annual statements, shows the following. Questions asked and concerns raised were 0, 1, 7, 12, 13, 11. Allegations received were 0, 1, 3, 1, 0, and 3. Therefore allegation numbers have fluctuated between 0 and 3 each year, whereas questions and concerns have increased over time. We take this as an indication of an increasing awareness of the service and a developing culture of research integrity.

#### **Training and awareness-raising: completion of online training modules**

Starting with the intake of September 2019, postgraduate research students (PGRs) are required to complete the first module as part of matriculation, and the other six during their first year.

- Students cannot matriculate without meeting these requirements, and therefore completion is 100% every year.

#### **Training and awareness-raising: feedback on training and induction activities**

Feedback on the session at postgraduate induction, and the workshops for postgraduate students, undergraduate Laidlaw scholars and Physics PGR cohorts receive consistently positive feedback from attendees, resulting in requests for repeat sessions in subsequent years. Feedback comments include the following: “nicely presented, engaging, to the point, interactive: this was actually useful, beyond the intellectual engagement”, “extremely useful for someone returning to academia. I found the practical problem-solving approach very thought-provoking”, presentations on policy were “very informative and I have a better understanding of what is expected of me”, “lots of practical and specific advice covered”, “it worked surprisingly well (was detailed enough) in the multi-disciplinary sphere”, “useful, friendly input”, “useful, especially on research integrity and ethics”, and in one case was considered to be the “most informative” of all the talks.

### **Research involving humans, their samples or data**

All research involving humans, their samples or data is subject to ethical review by a School ethics committee, and summaries of every application are reviewed on a regular basis (monthly) either at a meeting of the University-level committee, UTREC, or virtually via Teams. This monitoring results in in-depth discussion of the issues raised by projects, sometimes resulting in the invitation of researchers to present on their work, and sometimes resulting in the development of guidance on a particular topic that is then shared across the University. Between meetings of UTREC, there is an informal SEC convenors forum that allows for the surfacing of issues. A desire to maximise engagement led to the overhaul of the webpages and guidance and the development of ‘applicant training’ and its move online; and

is a key driver of the ongoing project to digitise the ethical review process. Numbers of applications processed per year are presented for discussion each year at UTREC and then EARIAG, with consideration of any trends in the data over the years and whether there are any concerns with engagement.

### ***Research involving animals, their samples or data***

All research involving animals, their samples or data is subject to ethical review by a School ethics committee, and numbers of applications for licenced and non-licenced work are reviewed regularly by the University-level committee, AWEC. AWEC also discusses best practice relating to and arising from projects undertaken and ensures that it is shared as widely as possible across the University. Numbers of applications processed per year are presented for discussion each year at AWEC and then EARIAG, with consideration of any trends in the data over the years and whether there are any concerns with engagement.

### ***Research governance***

- We were audited by the UK Government's [Office for Product Safety and Standards](#) for our compliance with the [Nagoya Protocol on Access and Benefits Sharing](#). A handful of relevant projects were selected for audit, and all were found to be compliant.