

# University of St Andrews

## Research Integrity statement for academic year 2021-22

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, 2021-22.

This statement captures a period following 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, whilst many existing provisions continued to be delivered in full, most new actions anticipated to be completed during this year continued to be paused, and will progress during academic year 2022-23.

### 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 last year, and the representative from arts and humanities 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. Recruitment of both a social sciences and an arts and humanities academic representative is waiting for the progressing of a strand of research culture work on recruitment to research-related committees and service roles but will be completed promptly.

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. Overhauled policies and guidance were launched in January 2019, reviewed and updated in June 2021, 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.

- Following feedback from research misconduct investigations, pan-University work has taken place to update the vexatious complainants policy and integrate it with all University investigative processes.

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 regularly reviewing and updating the [webpages](#) and [guidance](#). The temporary guidance, adjustments to documents and processes introduced by the coronavirus have now been retired aside from two elements that were felt to be of value going forward – articulation of risks and benefits of the research in application forms and the proportionate review process.
- The committee continues to balance regular standing items with process development and in-depth discussion on ethics topics, including a discussion session on re-traumatisation, with speakers from Student Services and the research community, which has led to the development of specific guidance.
- The committee also undertook a self-audit using the UKRIO/ARMA tool and participated in a research project spanning several Scottish Institutions, both of which lead to several recommendations which will be explored further in coming years.
- The Ethics Management Project continues to progress with the support of a Working Group (the EMPWG, formed in 2018-19 and comprised of representatives from key stakeholder groups), VP Governance and the Business Transformation Portfolio Office. Following on from the LEAN workshop and background research and analysis conducted previously, the project has seen development of the required Business Transformation documents such as the Requirements catalogue and engagement with Procurement to initiate and undertake the procurement process. The project is progressing towards submission of a final Full Business Case and implementation and engagement phases (anticipated for the first half of 2022-23, depending on procurement timelines).

Work in the coming year will include completion 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; 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 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:

- Streamlining AWEC's monitoring of SECs' reviews of non-licensed research: from the August 2021 AWEC meeting onward, the summaries of non-licensed applications approved by the SECs have been circulated for comment ahead of the AWEC meeting, allowing for questions to be resolved ahead of the AWEC meeting and summarised to AWEC. This has freed up considerable time in AWEC meetings.
- Reviewed and approved the secondary data application process, piloted since March 2021. At the June 2022 meeting of AWEC, the SECs reported to AWEC that the year-long pilot of the secondary data process/form were working well, suggesting some clarifications be made to the documents to further refine the process.
- Rolling out the use of the existing ethics application (research involving humans) storage database to house applications for non-licensed research involving animals.

Work in the coming year will include: full systems review, of all documentation and guidance at an AWERB, central and facility level, identifying and taking opportunities for enhancing fullness, clarity, consistency (where appropriate) and interoperability; introduction of an enhanced method of communication and document storage/sharing, involving MS Teams.

## Research governance

- Regarding Sponsorship of projects involving the NHS, MOD or health and social care services
  - We developed, tested and rolled out a suite of comprehensive new [webpages](#), receiving very positive feedback from internal and external (including NHS) stakeholders
  - Working with NHS Fife, we developed and are piloting swimlane diagrams (e.g. [primary data collection](#)) with the aim of managing researchers expectations around complexity and timelines of approval processes
- Regarding due diligence on overseas research partners
  - We provided information into an internal audit by KPMG, which resulted in an outcome of 'significant assurance with minor improvement opportunities'.

- Work was undertaken to finalise the implementation of the remaining outcomes of the 2020 review of the draft process including:
  - a harmonised master record of reviews involving new data fields, to embed a new taxonomy ('nature of activity') to be used to render more transparent and easily auditable the non-financial review side of the process;
  - review of updated guidance from UKRI and the proposed new questionnaire from UKRI and ARMA (the Association of Research Managers and Administrators) against the existing process, to propose a new interactive version of the pre-award form, involving mandatory fields, streamlined data capture and potential links to post-award process;
  - enhanced documentation explaining exactly what non-financial checks are undertaken by RIS in what circumstances, how they are undertaken, and how they relate to the UKRI requirements.
  - experimentation with MS Teams and MS Forms as potential vehicles for process improvement moving forward.

Work in the coming year will include: reviewing institutional provision for export controls against the HEECA self-assessment tool; developing enhanced template documents, and piloting 'case meetings' regarding Sponsorship of NHS or health/social care-related research; substantive re-review of the due diligence process against new UKRI guidance and Trusted Research requirements; evaluating using the 2020 [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.

- The PGR online training module schedule was changed: now all seven must be completed at point of first matriculation.
- The mandatory PGR modules were refreshed, repositioned and repackaged in liaison with CEED (the Centre for Educational Enhancement and Development) to be presented as TRIE (Training in Research Integrity and Ethics) alongside TGAP (Training in Good Academic Practice).
- Work commenced to, with the new Mandatory Training Group, to action the decision from Research, Impact and Innovation Committee to mandate the first (St Andrews specific) module of the 7 online modules for new research staff (those on research only, or teaching and research, contracts) as condition of probation.

Work in the coming year will include: reviewing the modules again with a wider range of relevant Professional Service leads, to ensure comprehensive signposting and alignment with USTAN policies, processes and contact points regarding the various dimensions of research integrity; merging those changes with those undertaken in producing TRIE; and rolling out the updated package for mandating (as well as self-enrolment, which is widely encouraged).

### **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. After moving online during the pandemic, these events have started to occur in person.

- A session on research integrity, ethics and governance is now a permanent fixture in the programme for new Head of School inductions. One such session has already taken place, with 3 new Heads of School.

Work in the coming year will include: starting and maintaining the lunchtime University-wide academic-led peer-to-peer discussion and learning event series titled 'Spotlight on research integrity'; developing a workshop tailored to technician colleagues; developing a workshop template that can be tailored to any given discipline and delivered at School level; advocating for the introduction of the 'new PI' training package; considering restarting the in-person case-study workshop for one-year PGRs; and considering liaising with Human Resources to explore providing a 'bolt

on' session on research misconduct investigations to the existing Investigator training (which is fairly general, but focused on HR investigations).

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

- The online Moodle training course (initially developed for School ethics committee reviewers but extended to allow access by all staff and students) continues to be well received.
- Training has been provided one to one to School ethics administrators and convenors.
- The Senior Research Governance Officer also facilitates and attends handover sessions when School ethics committee convenors change.
- A regular virtual drop-in session with the Senior Research Governance Officer (and UTREC secretariat) continues to be offered for School ethics committee convenors
- 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.

There will be considerable updates to training in the coming year in line with progress in the Ethics Management Project and subsequent process and guidance changes plus stakeholder engagement and awareness-raising activities. Consideration also being given to the best time (given the project activities planned) to host a UKRIO workshop for ethics committee members.

### **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. The previous year, the 'local module' was refreshed and paired with a follow-on online question and answer session with an ethics panel to ensure understanding of the key issues.

Work in the coming year will include: online and in person sessions with personal and project licence holders regarding aseptic technique; a review and refresh of training policy (for all cohorts of persons involved in research involving animals), and refresher training for named people where needed; and a review and refresh of the local module.

## **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 annual conference, at which the Head of Research Policy, Integrity and Governance was one of 2 speakers invited to reflect on the practicalities and impracticalities of the current template research misconduct investigation process.
  - UKRIO consultation on the new template procedure for investigating research misconduct.
  - UKRIO consultation on the template for the annual statement.
  - Pan-Scotland online research integrity conference for PGRs organised by the University of Dundee, but open to all PGRs in Scotland (presentations were provided by both the Head of Research Policy, Integrity and Governance, and a Professor of Modern Languages)
  - Involvement in UK-level work, led by funders, to explore the potential for development of indicators of research integrity. Our staff member was 1 of 22 interviewees drawn from across the world, and 1 of 30 attendees at a follow-on workshop. It is anticipated that UK CORI will continue this work and convene a working group from the workshop attendees.

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 the 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
- Positive feedback on UTREC's approach to ethics review as part of the Carnegie project
- Interaction with other UK HE organisations on governance and ethics approvals around research with human participants involving the MoD

Work in the coming year will include attending the ARMA, UKRIO and other events and any relevant meetings of the ARMA ethics Special Interest Group.

### Research involving animals, their samples or data

Significant external engagement has continued over the past year, in parts due to the continuing developments arising from the 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 ScotPIL 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; and the 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.

- New engagement has occurred with:
  - The Animal and Plant Health Agency (APHA), regarding animal by products and animal importation
  - The Universities of Dundee and Aberdeen, in the form of launching a joint 3Rs/culture of care webinar series for all PPLH, PILH, named people and welfare technicians in those institutions.

Work in the coming year will include: enhancing our provision regarding the 3Rs and culture of care, exploring doing this in collaboration with other nearby institutions; and continuing our involvement in the joint 3Rs webinar series.

### Research governance

We remain engaged with networks the DEFRA ABS Stakeholder's Forum regarding the Nagoya Protocol; and continue our work with NHS Fife exploring opportunities and challenges in relation to current support, and governance for, research studies involving both organisations.

- We have joined the Higher Education Export Controls Association (HEECA) and attended its annual conference in June 2022.
- We have liaised with other Universities regarding Sponsorship of research involving the MoD
- MoD – other Unis

Work in the coming year will include continuing work with NHS Fife and continuing to engage with HEECA.

### 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 2018-19	Academic year 2019-20	Academic year 2020-21	Academic year 2021-22
Questions asked	3	5	6	6
Concerns raised	9	8	5	3
Allegations received (for which investigations <i>have concluded</i> )	1	0	3	2
Allegations received (for which investigations <i>are ongoing</i> )	-	-	1	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' refers to the receipt of a formal allegation in writing, all of which are investigated in accordance with the Research Misconduct Policy.

The questions and concerns were on the topics of:

- Questions
  - The concept of plagiarism as it applies to content in lecture slides/notes. (Sciences)
  - Re-use, by a third party, of research findings published under a CC-BY licence. (Sciences)
  - Dealing with potential research misconduct appearing in a thesis for which the USTAN staff member was an external examiner. (Sciences)
  - Replying to an unsolicited email from a person, who appears to have previously committed research misconduct, seeking a studentship at the University. (Sciences)
  - Seeking guidance on data sharing and author attribution, in particular between members of a research group. (Arts, Humanities, Social Sciences)
  - Guidance on fair attribution of credit (acknowledgement or authorship) in research outputs, in particular regarding the contributions of technician staff. (Sciences)
- Concerns
  - Attribution of credit in a research output and a research presentation. (Arts, Humanities, Social Sciences)
  - Plagiarism by someone else of the work of a postdoctoral researcher. (Arts, Humanities, Social Sciences)
  - Responding to evidence indicating plagiarism in published work. (Arts, Humanities, Social Sciences)

One question became a concern and then an allegation. One other concern became an allegation.

The concluded allegations were on the topics of:

- The alleged misappropriation of a postgraduate student's ideas by their supervisor and another student (Arts, Humanities and Social Sciences –concluded, was not upheld following Preliminary Investigation stage)
- The alleged misappropriation of a postdoctoral researcher's ideas by their supervisor (Arts, Humanities and Social Sciences –concluded, was partly upheld following Preliminary Investigation stage)

Experience of handling these allegations has presented the following for consideration as future updates to the research misconduct policy/process: updating the misconduct proforma to have section explicitly asking about what mediation options have been considered/explored ahead of presenting the allegation; clarifications on the process for obtaining witness statements as evidence for an investigation; ensuring explicit notifications to internal Complainants and/or Respondents of the pastoral/wellbeing support available (directly, or signposted) via their Human Resources Business Partners; and consideration of whether there are circumstances in which an investigation could justifiably go directly from Screening to Formal Investigation.

## **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%).

In AY2022-23, the Integrity, Ethics and Governance team plan to have discussions as a team with each Director of Research, to understand their perspectives and needs around integrity and how we may be able to help, and their sense of relative prioritisation of actions.

## **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, 9. Allegations received were 0, 1, 3, 1, 0, 3 and 2. Therefore allegation numbers have fluctuated between 0 and 3 each year, whereas questions and concerns have increased over time, before appearing to fluctuate around 10 per year. 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 occasionally also resulting in the development of or updates to guidance on a particular topic that is then shared across the University via the webpages. Between meetings of UTREC, there is an informal SEC convenors drop-in session that allows for the surfacing of issues. A desire to maximise engagement 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 about engagement. The University’s research ethics, integrity and governance team liaise regularly with academics, Schools and professional services to identify and resolve issues relating to research involving humans, wherever these may be identified in the research lifecycle.

### **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.

- Applications for ethical review of non-licensed research

### **Research governance**

- As part of an ongoing project with the School of Medicine and NHS Fife, exploring opportunities and challenges in relation to current support, and governance for, research studies involving both the University and NHS Fife, RIS undertook a comprehensive and detailed calendar audit of NHS Sponsorship reviews and approvals involving the University and NHS Fife in the preceding 3 years. This audit demonstrated that RIS normally respond within 1-5 working days (, with longer response times from researchers or external NHS contacts. Factors which influence approval timelines are: complexity of study; experience and diligence of applicants; degree of engagement of applicants’ supervisors; and novelty (to RIS) of aspects of the study, including resolving inconsistencies in guidance provided by different parts of the NHS and building internal processes to manage risk. This has resulted in RIS proposing a series of recommendations to further improve these timelines and the quality of applications, including: introducing case meetings; enhancing guidance and template documents; more active, visible and explicit expectation management; and enhancing the skillset of RIS colleagues.
- The due diligence on overseas research partners process was subject to internal audit by KPMG, resulting in an outcome of ‘significant assurance with minor improvement opportunities’.