

University of St Andrews

Research Integrity statement for academic year 2019-20

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.

- All developments that took place in this academic year are highlighted as bullet points.

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 representatives from physical science and arts and humanities joined this year, ensuring that the RIC contains representatives from all disciplinary areas present at the University, which was identified as a concern in the previous annual statement.

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 considered the work of [Wellcome](#) and [Vitae](#) regarding research culture, and the degree to which building a culture of research integrity is facilitated or hindered by wider research culture. Based on these considerations, the RIC has passed comments to a newly-formed University research culture group to take forward: in essence, the RIC anticipates that progress on building a culture of integrity will depend significantly upon developments in wider research culture. The University expects to undertake work on research culture in the coming year by constituting a university research culture group that will aim to produce a vision statement and action plan, work that will draw on a wide range of input, including from the RIC.

Supporting and strengthening research integrity

Policy and guidance

Good research conduct and research misconduct

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 guidance on authorship and contributorship has been expanded to refer to the contributions taxonomy [Project CRediT](#).

Work in the coming year will include: reviewing the policies and guidance webpages, the former to ensure lessons learned from investigations are codified as normal practice moving forward, the latter to further explore guidance

around authorship, and also regarding composing allegations of research misconduct and responses thereto; and reviewing the policies launched in January 2019, taking into account the updated Concordat.

Research involving humans, their samples or data

- As part of an ongoing project of refreshing our policies, processes and guidance around research involving humans, our [University Teaching and Research Ethics Committee \(UTREC\)](#) launched [completely new webpages](#) and [guidance](#) at the start of the academic year. New academic-led guidance topics were developed including [Social Media](#) and [Online Questionnaires and Surveys](#), and additions made to existing topics such as enhanced guidance on [data retention](#). Exemplar applications were identified, and excerpts made available. In response to lockdown restrictions, and then variable restrictions, professional services staff worked with academics to put in place processes and guidance to support the halting of in-person research, and the transition to online or remote methods. This included the development and introduction of a risk-proportionate review process to ensure appropriate review could continue whilst resources were very stretched, and enhanced links between ethical, travel and health and safety approval processes. All of these developments drew extensively on external requirements and guidance.

Work in the coming year will include: continuation of the ongoing project to refresh policies and processes, with consideration of evolving the risk-proportionate review process brought in during lockdown into an ongoing standard with risk-proportionate question sets and the digitisation of the entire application and review process; the review of current policies, processes and training against the recently released [UK Research Integrity Office – Association of Research Managers and Administrators \(UKRIO-ARMA\) guidance on research ethics support and review](#); further supporting compliance with new data protection laws when undertaking research involving humans, especially on data destruction and use of third-party services; enhancing the accessibility and inclusivity of our research involving humans through changes to guidance and documentation.

Research involving animals, their samples or data

The University's guidance and processes relating to research involving animals are provided through the information and contact points present on the [relevant webpages](#), which includes [a public facing webpage](#) containing information on the number of animals involved in our research and what they have experienced.

- Our [animal welfare and ethics committee \(AWEC\)](#) has been working on reviewing and updating the processes relating to oversight of research involving animals to ensure maximal clarity and thus compliance amongst researchers, aiming to produce a summary document that can be shared widely within the University. This work has involved considering issues such as: recruiting new academic and lay members to committees; ensuring that review of research conducted out-with the UK is performed in accordance with the National Centre for the Replacement, Refinement and Reduction of Animals in Research (NC3Rs) [Responsibility in the use of animals in bioscience research](#); and the review of studies involving secondary data obtained outwith the UK.

Work in the coming year will include: finalising these revisions to processes, and developing the existing ethics application (research involving humans) storage database to house applications for research involving animals.

Research governance

- To better support our researchers to follow relevant legal requirements, we have placed updated guidance on export controls and the Nagoya Protocol on our [research governance webpage](#), and improved guidance on sponsorship of NHS related studies on our [research involving the NHS webpage](#), including the process for restarting research following the pause of all NHS research in March 2020 due to the pandemic.

Work in the coming year will include: evaluating existing policies and processes against [new guidance on safeguarding in research](#) from the UK Collaborative on Development Research (UKCDR); 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 starting to develop formal policies on areas of research governance including export controls, due diligence, the Nagoya Protocol, and the Sponsorship of NHS research.

Training and awareness-raising

Good research conduct and research misconduct

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) are 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

Staff and postgraduate inductions consistently contain dedicated content on research integrity, 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 2019 PGR induction presentation was reformulated to spend more time on the discussion of a case study and the exploration of academic vs research misconduct, to avoid repeating content from the now-mandated online training modules.
- A new workshop for one-year PGRs was 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.
- The PhD supervisor training event has previously mentioned research integrity and distributed written material, but starting this year it now includes a dedicated short talk on research integrity.
- Following discussions at RIC regarding the training offering for new researchers, members of RIC canvassed colleagues in their Schools and liaised with Organisational and Staff Development Services (OSDS) to undertake a gap analysis against current training. RIC proposed that training regarding the following be put together under a 'training for new principal investigators' (PI) heading: recruitment (including immigration issues), research contracts, project management, time and workload management, managing a team (including handling conflict, difficult conversations etc), research reporting requirements (internal and external), research finance (including budgeting, dealing with under/over spend, buying and the tender process, sharing resources and funding with collaborators), research governance requirements.
- The RIC carefully planned the commencement of a lunchtime University-wide peer-to-peer discussion and learning event series titled 'Spotlight on research integrity', intending to start with an event in which individuals exonerated from research misconduct allegations discuss their experience without breaching the confidence of the investigation. However this was twice scheduled and cancelled, firstly for speaker diary reasons, then due to the pandemic. Discussions around starting this series of events are active and ongoing.

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, offering the tailorable case study workshop as a potential tool to use; 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

- A training course focused on applicants was developed and delivered, to complement that provided to reviewers every three years. To widen and ease access, both training modules, one for reviewers, and one for applicants, were migrated online. A new 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. A UKRIO regional event (for all of Scotland) on research ethics was planned for March 2020 to be hosted at St Andrews, but was postponed.

Research involving animals, their samples or data

The University facilitates relevant individuals to complete external accredited training courses as required by law, such as the basics of law and ethics relating to animal research, and the handling of specific species of animals.

External engagement

Good research conduct and research misconduct

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.

- In November 2019, staff participated in the first meeting of the Scottish Research Integrity Network (SRIN), which is being set up to share experience and expertise on research integrity across Scottish HE organisations.
- In December 2019, a member of staff presented on research misconduct investigations to a delegation from the Chinese Ministry of Science and Technology representing a wide variety of research organisations from across China.
- In February 2020, staff attended the Edinburgh consultation event with UKRI regarding the formation of a new national research integrity committee, and followed up afterwards with written input to the consultation.
- In February 2020, staff participated in the Wellcome research culture town hall event in Dundee, with one member of staff participating in a select pre-event roundtable with Wellcome staff.
- Since May 2020, staff have engaged in the UKRIO webinars covering research culture, the Vitae landscape study, ethical review processes, obtaining consent from human participants, and publication practices.

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

Research involving humans, their samples or data

- In late 2019 and early 2020, the University was organising with UKRIO to host a regional event (for all of Scotland) on research ethics, which was planned for March 2020 but postponed.
- In May 2020, the University led the sharing amongst Scottish HE organisations (via SRIN on Teams) of resources relating to the ethics of research during a pandemic, pulling together resources from across Scottish universities into single document to share across the network.

Work in the coming year will include continued liaison with UKRIO regarding hosting the regional event.

Research involving animals, their samples or data

The University is a member of the Scottish AWERB hub (a Home Office facilitated regional 'hub' that acts as a platform for inter-University support).

Research governance

- In 2020, we engaged with counterparts at other Universities via the ARMA Special Interest Group (SIG) email lists regarding sponsorship of Ministry of Defence studies, and shared definitions of research versus service evaluation or audit arising from internal and NHS guidance.

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). 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 Annex 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	
Questions asked	7	3		5	
Concerns raised		9		8	
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	
Ongoing investigations	0	0		0	

**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 numbers in brackets in the following paragraphs indicate the number of instances of the question or concern.

The questions asked related to advice about: authorship criteria (1); a researcher based elsewhere allegedly plagiarising the work of one of our researchers (2); copyright infringement of the work of one of our researchers by individuals in another country (1); the reassignment of a student to a new supervisor (1).

Concerns raised related to: potential plagiarism (5); post-publication dispute regarding author ordering (1); the peer review of the methods used by those undertaking work elsewhere (1); and the disengagement of an author from a developing manuscript, which required attempts at active mediation (1). None of these concerns led to subsequent allegations; all were resolved via providing advice, mediation or direction toward guidance.

Monitoring and evaluation

There were no relevant external inspections or audits during AY2019-20.

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.

Policies and guidance

Feedback on investigations from non-conflicted persons involved

Such feedback has been sought after all investigations and has been very positive, with constructive suggestions of potential improvements feeding into policy review. The following feedback, and points arising from consideration of the updated Concordat, will be considered when reviewing the policies in the coming year:

- Ensuring the potential conflicts of interest are minimised, for example by changing the default person who undertakes the Preliminary Investigation;

- Ensure that sector-wide guidance on handling authorship disputes (UKRIO and the Committee on Publication Ethics, COPE) is appropriately reflected in the research misconduct policy and process;
- Refining the structuring and ordering of information passed between stages and on to disciplinary, to ease navigation of paperwork;
- Mapping internal investigative expertise across the University to create a directory of experts to draw on e.g. for forensic data analysis etc;
- Explore the scope for putting in place formal training for those acting as investigators in the process, i.e. the Investigator and the Panel; and
- The scope for adjusting wording around the use of non-disclosure agreements.

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%.

Careers in Research Online Survey (CROS) responses

The trend in positive responses to the question “How would you rate your knowledge and understanding of the following UK initiatives relevant to research staff...Concordat to Support Research Integrity” has been as follows: 2013, 26.8%; 2015, 21.7%; 2017, 32.1%, and in 2019 was 42.8% (an increase of 10.7% or x1.3 from 2017). Although there is still much room for improvement, the proportion of staff aware of the Concordat has doubled since 2015 and is now at its highest point since the Concordat’s publication.

Trends in numbers of questions, concerns and allegations over the 4 years from 2015/6 to 2019/20

- Analysis performed during this year, using previous annual statements, shows the following. Questions asked and concerns raised were 0, 1, 7, 12, 13. Allegations received were 0, 1, 3, 1, and 0. Therefore allegation numbers have remained fairly constant, 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.

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.

- The first induction session following the introduction of online modules as a condition of matriculation resulted in an off-trend spike of negative feedback stating that the talk was too repetitious of the online modules. In response to this, the talk was reformulated, as indicated in the training section of this statement, to ‘spend more time on the discussion of a case study and the exploration of academic vs research misconduct’ and avoid such repetition. Following this reformulation, the feedback reverted to the previous positive trend.

Engagement with ethical review processes

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 at each (monthly) meeting of the University-level committee, UTREC. 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 during this year; 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.

- The inclusivity of persons with disabilities in our human participant research was the focus of a research project, which will report in the coming year and inform developments to guidance, documents and processes.

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. Work is ongoing to ensure full engagement with these processes for work involving only existing datasets. 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.