1. Introduction

The University of Edinburgh is committed to ensuring that all of its research is conducted in accordance with the five commitments of the Universities UK Concordat to Support Research Integrity (2019). The Concordat is underpinned by both the UK Research Integrity Office’s Code of Practice for Research and the UKRI Policy and Guidelines on Governance of Good Research Conduct. Together, they represent an essential reference tool to support researchers and research organisations in the conduct of research of the highest quality and standards.

This Annual Report represents a snapshot of the hard work being carried out by colleagues across the University to put our institutional commitment to strengthening the integrity of our research into practice.

The statements demonstrating the particular actions we are taking to meet our obligations under Commitment 5 of the Concordat can be found at Sections 2 (Actions and activities undertaken to support and strengthen understanding and the application of research integrity issues) and 5 (Addressing Research Misconduct and Assurance Statements).

2. Actions and activities undertaken to support and strengthen understanding and the application of research integrity issues

The examples given below illustrate the types of activities undertaken to support and strengthen understanding of research integrity issues at College and School level as well as topics brought to the attention of the University’s Research Ethics and Integrity Review Group (REIRG) through the annual review process.

Arts, Humanities and Social Sciences (AHSS)

The College Research Ethics and Integrity team led on the development of ethics guidance to support the pivot to online research methods necessitated by the COVID-19 pandemic and was integral to the development of procedures to support the starting and restarting of non-clinical research involving human participants as the session progressed. Elsewhere, a newly developed REC Reviewer’s handbook is a valuable resource for the training of ethics reviewers, while the College has sought proactively to use the MS Teams platform to create a community around its Research Ethics Committee by raising the profile of Committee members and encouraging interaction, sharing and collaboration.

Medicine and Veterinary Medicine (MVM)

All staff and students are expected to undertake online training on the core principles of research integrity ("Research Ethics and Integrity – an introduction", developed by the University’s Institute for Academic Development (IAD)) and researchers within the College also receive information about the full range of training and support available. Processes are in place to ensure reporting of issues impacting on research integrity at both student and staff levels.
Elsewhere, staff at the Academic and Clinical Central Office for Research and Development (ACCORD) receive regular ongoing training enabling them, in turn, to support researchers in the planning and initiation of clinical research projects. The Wellcome Trust Clinical Research Facility’s Edinburgh Education programme runs a regular programme of local courses with a strong focus on teaching understanding of good clinical practice and the avoidance of research misconduct and poor practice in all its forms.

UK Reproducibility Network (UKRN) sponsored “Reproducibilitea” webinars and presentations, including social media channels, are organised and marketed by MVM PhD students providing opportunities for peer to peer information sharing and the promotion of research integrity best practice.

**Science and Engineering (S&E)**

Two initiatives in the School of Geosciences demonstrate that measures designed to strengthen understanding and the application of research integrity issues can also assist in building a positive research culture. In a new series of reflections under the banner ‘What does “Good Research” mean to you?’, staff within the School share what they really care about in their research, how they maintain its integrity, and a piece of advice they would like to share with others. The series provides an opportunity to celebrate the diversity of people and perspectives within the School and with it, to widen understanding of the many facets of research ethics and integrity. The School’s Ethics and Integrity Committee also organises monthly ‘Good Research: Sharing Experience’ meetings which provide an informal forum bringing together staff, postdocs and doctoral students to discuss the ethics and concerns that arise in their research and wider academic experience.

Meanwhile, the School of Biological Sciences has modified the curriculum of its Ethics Day for first year postgraduate students. Coverage of data ownership, authorship and peer review has been bolstered by the creation of a separate third year course, which allows students both to revisit their earlier learning after several years in the lab and to approach these particular issues in a way that is more relevant at that stage in their studies.

**University level**

With effect from January 2020, Professor Malcolm Macleod of the Centre for Clinical Brain Sciences within MVM was appointed Academic Lead for Research Integrity and Improvement. The role will enhance the University’s ability to pursue research improvement strategies across the institution, identifying changes and adaptations to practice that can deliver significant positive impact. Prof Macleod has also taken an active interest in initiatives designed to strengthen the research culture at the University (see also Section 4).

During the summer of 2019, Prof Macleod, together with Emily Woollen of the Institute for Academic Development (IAD) led on a new online ethics and integrity induction programme. A working group including colleagues from each of the three Colleges and key central University service teams produced a curriculum, which was translated into a series of online modules by Emily and her IAD colleague, Evgeniya.
Plotnikova. The initial module went live on the University’s LEARN training platform in spring 2020, with additional content being added on a regular basis since.

The Scottish Research Integrity Network is a new forum initiated by Alan Campbell, Research Integrity Manager in Edinburgh Research Office and Inke Näthke, Associate Dean for Professional Culture and Acting Dean, School of Life Sciences, University of Dundee. The network’s aim is to facilitate the sharing of expertise and best practice in the area of research integrity among Scottish higher education institutions. The University hosted over thirty representatives of Scottish universities, research institutes and higher education stakeholder bodies at the inaugural meeting of the group in November 2019.

As discussed more fully in Section 3, the University launched a new Export Control and Sanctions Policy and Procedure during the autumn of 2019. To accompany the policy launch, Edinburgh Research Office organised a full day training session in November 2019 led by export control consultant Richard Tauwhare and attended by researchers, senior managers and professional services staff from across the University.

3. Outline of processes for ethical approval of research proposals, dealing with allegations of misconduct and review of these processes

3.1 Processes for ethical approval of research proposals and dealing with allegations of misconduct

Those wishing to see details of the ethics and integrity governance arrangements at University, College and School levels are referred to the report for 2014/15. An update report was provided for sessions 2015/6, 2016/17, 2017/18 and 2018/19. A fresh, detailed report had been planned for session 2019/20, however due to a number of factors, including constraints resulting from the COVID-19 pandemic, this year’s report once again takes the form of an update.

3.2 Review of processes

AHSS

Session 2019/20 saw continued pilot testing of the new College Ethics and Integrity Review form and feedback from the testing is being used to enhance the development of the new university-wide ethics management system. During this session, significant focus has fallen on rapidly adapting to the new working situation created by the COVID-19 pandemic, including the development of resources and support structures for ethics leads and researchers across the College. The College’s Research Ethics and Integrity SharePoint pages are continually updated with information supplied by the Schools and are widely regarded as a valuable resource.

MVM

During the period of the report, two specific Research Improvement Group projects were being implemented across the College:-

- Induction training materials related to in vivo experimentation: access to animal facilities across the University is being linked to compliance with
training for current staff, as well as inductees.

- Improved process for trial reporting to the European Clinical Trials Database (EuDRACT): implemented in partnership with ACCORD. All studies sponsored by the University are mandated to register and openly report.

Following a recent review of University and NHS Lothian governance for sponsorship and ethics approval, the structures for managing requests for ethics review of MVM projects are undergoing transition. The ACCORD Medical Ethics Committee (AMREC), which had been established in partnership with the local NHS Research Ethics Committee in order to facilitate the review of research that did not fall within the latter's review criteria, was discontinued and a new interim committee, the Edinburgh Medical School Research Ethics Committee (EMREC), was created. In addition to those proposals that would have previously gone to AMREC, EMREC has taken responsibility for (non PG student) global health research that is sponsored by the University, but is being conducted entirely outside the UK and undergoing ethical review in that country. EMREC met for the first time in June 2020 and is expected to move to a permanent footing during academic session 2020/21. As it develops over the coming months, EMREC will take over some of the responsibilities currently exercised by the Usher Institute Research Ethics Group (UREG).

Elsewhere, the University and NHS Lothian commissioned an external review of current clinical pathways and research development, approval and delivery arrangements. A steering group was formed to oversee the review and has been tasked with developing an action plan based on findings and recommendations.

In recognition of the constraints imposed on research infrastructure by COVID-19 restrictions, a COVID-19 priority research committee, chaired by Prof David Dockrell, was convened to provide a rapid assessment of planned projects and ensure that appropriate projects were prioritised.

**S&E**

At College level, the integration of the Data Protection Impact Assessment (DPIA) into ethics applications and its inclusion in the subsequent assessment and review is regarded as a significant development in process. Separately, in October 2019, the College invited Data Protection Champions and Ethics Officers from the Schools to a session attended by the University Data Protection Officer in order to update on developments in data protection law and regulation.

**University level**

In recognition of growing engagement with partners in academia, business and industry worldwide, the University launched an Export Control and Sanctions Policy and Procedure in October 2019. The policy was the main output of a working group including colleagues from Edinburgh Global, Legal Services, Edinburgh Innovations and Edinburgh Research Office. Alongside the Policy and Procedure, Edinburgh Research Office launched a suite of dedicated export control webpages on its website offering information and guidance on the topic, as well as an email inbox to respond to specific enquiries. The policy and web launches were supported by a full
day training event organised by Edinburgh Research Office in November 2019 (see also Section 2).

Elsewhere, work continued during the session to prepare for the introduction of the new online ethics management system by Infonetica. When complete, the ambition is that the system will provide an institution-wide platform for the management of ethical review, providing greater consistency and flexibility, as well as improving review processes for multi-disciplinary research.

4. Building a Positive Research Culture

At its best, a positive research culture makes for contented, motivated researchers who feel energised to focus on delivering research of the highest quality. As employers of researchers, it is in the interests of universities like this one to do all we can to create the best possible working environment for our researchers. The following section includes selected examples of the range of initiatives taking place across the University to promote and maintain a healthy working environment for all of our researchers.

**AHSS**

The College has a commitment to fostering a strong and inclusive research culture. All of its goals, policies and guidance aim to instil a culture that is inclusive, promotes diversity and equality, and aspires to the highest standards of research integrity. For example, the College has adopted a proactive and supportive approach to helping colleagues manage the research-related challenges of COVID-19, with targeted support for those most disadvantaged by the pandemic.

At School level, a number of local initiatives exist to support staff. The School of Literatures, Languages and Cultures for example, offers a comprehensive package of initiatives, including an equitable system of research leave incorporating forward planning so that leave can be managed and research and teaching commitments balanced. Support to develop research grant applications, including day-long and residential writing retreats and funding for research and impact activities to enable researchers to host events, attend conferences, develop research collaborations and publish outputs is also available. Among the mechanisms deployed by the School of Law are a dedicated research facilitation fund, which aims to support the development of research ideas, collaboration and networks and weekly staff seminars where members of staff present their research and receive feedback from attendees. These sessions are well attended by colleagues from all subject areas and have been an overwhelming success since their introduction over a year ago. These are only two examples of an abundance of work being undertaken at School level across the College.

**MVM**

The College has been developing new grant submission policies to support a standardised grant submission process. The aim is to encourage Principal Investigators to engage with research support colleagues early in the bid development process and as a result, to reduce complexity and improve efficiency whilst delivering high quality applications with a greater chance of being funded. The
benefit to research culture comes from the promotion of greater transparency and traceability. The new policies are expected to be implemented in 2021.

The Easter Bush Science Management Group meets fortnightly in order to review Concept Notes aligned to all new funding applications. This ensures that projects receive peer review prior to submission, with constructive criticism helping improve the quality of applications.

The Edinburgh Open Science Initiative is a programme driven by MVM staff (Cawthorn, CCVS) and PhD Students (Thomas, CCVS) with an aim to promote open research and research integrity.

**S&E**

Initiatives taking place within the College’s Schools include a new informal researcher support group, which has been created by the Edinburgh Parallel Computing Centre (EPCC) to help its research fellows. Separately, the Director of the Software Sustainability Institute and Centre Research Ethics and Integrity Officer, Neil Chue Hong, has been an active participant in the University’s response to the Researcher Concordat and Wellcome Trust’s ‘Reimagining Research Culture’ workshops and is developing proposals for new projects within the Centre. The School of Mathematics emphasises the role that supporting relationships between PhD and Post-Doctoral advisors and their advisees plays in building and maintaining a good research culture. The School pursues this goal by including professional relationship building in the training programme for PhD mentors and ensuring that second supervisors discuss the student/advisor relationship at their regular meeting with the student each semester. The School regularly surveys its Post-Doctoral researchers on their mentoring experience and follows up on issues that come to light. Post-Doctoral researchers can also discuss concerns with post-doc representatives or the post-doc advocate within the School. Positive and successful mentorship also places a significant role in the School’s promotion and reward processes.

**University level**

In thinking about how we create the best possible working environment for our researchers, a key challenge for any organisation of the size and scale of the University of Edinburgh is understanding where precisely the challenges and difficulties lie. Unless we know where the problems are in the first place, we can’t be sure that the measures we take to address them will be effective. With that in mind, Prof Malcolm Macleod, Academic Lead for Research Integrity and Improvement, initiated a comprehensive survey of attitudes towards research culture among the University’s research community during the summer of 2020. The survey, which questioned participants on some 195 separate items, received almost 1,500 responses from researchers and support staff. The questions were similar to those posed by a nationwide researcher survey conducted by the Wellcome Trust during the autumn of 2019. The responses will be analysed against eight separate demographics and the similarity with the Wellcome Trust question set will allow comparison of the situation at Edinburgh with the national position. Above all, the survey responses will provide the University with a rich and nuanced baseline of data in terms of which aspects of the working environment we are getting right and where
we have more to do. As well as informing targeted initiatives designed to promote a better working environment, the survey data can also be shared with other institutions who have done similar surveys for improved benchmarking purposes.

5. Addressing Research Misconduct and Assurance Statements

5.1 High level statement about allegations of research misconduct and any formal investigations

**AHSS**

No allegations of research misconduct have been reported as having formal investigations completed during session 2019/20. One formal investigation remained ongoing.

**MVM**

No allegations of research misconduct were reported as having formal investigations either under way or completed during session 2019/20.

**S&E**

No allegations of research misconduct have been reported as having formal investigations either under way or completed during session 2019/20.

**University level**

A review of the University’s Research Misconduct Policy and Procedure took place during the second half of 2019 and early 2020. Concerns were raised in a number of quarters about perceived slowness in the application of the procedure, which follows the UKRIO Procedure for the Investigation of Misconduct in Research. A consultation draft of an updated version of the UKRIO Procedure has been anticipated for some time, however its publication has been subject to delay, most recently due to the COVID-19 pandemic. The University will take the opportunity, in due course, to participate fully in that consultation and will consider options for change once the outcome is known.

5.2 Assurance: Transparency, timeliness, robustness, fairness and continued appropriateness of processes for dealing with allegations of misconduct.

As stated above, the University carried out a review of the operation of its Research Misconduct Policy and Procedure during the course of session 2019/20, partly in response to the perceptions around timeliness of process that were noted in last year’s report. The delayed consultation on an updated UKRIO Procedure for the Investigation of Misconduct in Research will provide a starting point for decision making on improvements in this connection.
5.3 Assurance: Learnings from formal investigations of research misconduct.

No formal investigations concluded during the period covered by this report.

5.4 Assurance: Creating and embedding an environment in which all staff, researchers and students feel comfortable to report instances of research misconduct.

At central University level, the Research Ethics and Integrity Review Group (REIRG) commissioned a paper during summer 2019 to investigate ways in which the University might support those affected by research misconduct. The paper contained a range of proposals and was presented to the University’s Research Policy Group at its meeting in July 2020, where it received a positive response. A key theme underlying the proposals was the removal, or alleviation, of perceived barriers – whether emotional, psychological or practical – that may dissuade staff, researchers or students from reporting instances of research misconduct. Building on that paper, and informed by learnings from the University’s Research Culture Survey (see Section 4), Edinburgh Research Office will press ahead during session 2020/21 with plans for a system of Research Integrity Champions at School and College level. One aspect of the role will be to facilitate the sharing of concerns on the part of staff and students about poor practice and the reporting of research misconduct.

6. External Engagement

Colleagues from across the University led and participated in a wide variety of research integrity themed events, conferences and activities throughout the session:-

- Professor Malcolm Macleod co-leads the UK Reproducibility Network (UKRN), a peer-led consortium that investigates the factors underpinning robust research, provides training, disseminates best practice and works with stakeholders to ensure coordination across the sector.
- Edinburgh Research Office represented the University at meetings of the Russell Group Research Integrity Forum.
- The University is a member of the League of European Research Universities (LERU) and Edinburgh Research Office represented the University at meetings of LERU’s Research Integrity Policy Group and Dual-Use Ad Hoc Group.
- Colleagues from around the University were among attendees at the inaugural meeting of the Scottish Research Integrity Network, hosted by the University in November 2019 (see also Section 2).
- Colleagues from a number of Colleges and central University units participated in workshops organised as part of the Wellcome Trust’s ‘Reimagining Research Culture’ campaign at the Universities of Glasgow and Dundee.
- During the period of restrictions related to the COVID-19 pandemic, colleagues from across the University have engaged with UKRI’s programme of monthly research integrity themed webinars.
Report Annex

UNIVERSITY WEBSITES
University Research Integrity homepage
Links to the REIRG website; External online training resources; University policies relevant to Research ethics and Integrity; Research Funders’ policies on Research ethics and Integrity.

University Export Control webpages
Information and guidance on the topic and links to the University’s Export Control and Sanctions Policy and Compliance Procedure, the UK Government’s Export Control Joint Unit and the UK Government’s SPIRE online export licensing system.

College Research Ethics and Integrity websites
College of Arts, Humanities and Social Sciences
College of Science and Engineering
College of Medicine and Veterinary Medicine
Academic and Clinical Office for Research and Development (ACCORD)
Covers clinical research-led involving human participants, tissues or data. This includes research falling within the scope of NHS Research Ethics Committee Review and all clinical trials covered by the Medicines for Human Use (Clinical trial regulations). Proposals put to these groups that is considered outside their remit is assessed by relevant University Research Ethics Committees.

Regulation of research involving animals
Maintaining high standards of Animal ethics and welfare

Commitment to replace, reduce and refine the use of animals in research

EXTERNAL WEBSITES
Universities UK
The Concordat to Support Research Integrity
The five commitments set out in the UUK concordat
- We are committed to upholding the highest standards of rigour and integrity in all aspects of research
- We are committed to ensuring that research is conducted according to appropriate ethical, legal and professional frameworks, obligations and standards
- We are committed to supporting a research environment that is underpinned by a culture of integrity and based on good governance, best practice and support for the development of researchers
- We are committed to using transparent, timely, robust and fair processes to deal with allegations of research misconduct when they arise
- We are committed to working together to strengthen the integrity of research and to reviewing progress regularly and openly.

UK Research Integrity Office (UKRIO)
- Code of Practice for Research – Promoting good practice and preventing misconduct
- Procedure for the Investigation of Misconduct in Research

UK Research and Innovation (Umbrella body for UK Research Councils)
- UKRI Policy and Guidelines on Governance of Good Research Conduct