Annual Integrity Report to Council 2016-2017

The mission of the University of Cambridge is to contribute to society through the pursuit of education, learning, and research at the highest international levels of excellence. The University recognises that the pursuit of excellent research and the fulfilment of our responsibilities to participants in research, research users and the wider community require the maintenance of the highest standards of integrity and ethics. As such the University supports and is committed to upholding the Universities UK *Concordat to Support Research Integrity*.

This statement has been made to the University's Council to demonstrate that measures are being taken to sustain and further enhance the integrity of the research undertaken at the University. It is in fulfilment of recommendations made by the *Concordat* for annual reporting on research integrity to the University's governing body and covers the academic year 2016-17. As recommended by the *Concordat* this statement will be made publically available online.

This annual report has been designed to be a stand-alone document that does not require readers to consult previous years' reports. The report therefore repeats text from previous reports where this relates to structural aspects of the University's research integrity procedures and processes, as well as developments made in previous years that have continued to be important during 2016-17.

Governance of Research Integrity at the University of Cambridge

The University of Cambridge recognises that supporting and strengthening the understanding and application of research integrity issues requires clear senior leadership. To ensure that research integrity is governed at a high level within the University, the Pro-Vice-Chancellor for Research (PVC-R) was appointed as the senior academic lead on research integrity matters within the University in October 2013. The PVC-R is responsible for providing academic leadership on research integrity and acts as the first point of contact for anyone with comments, concerns or questions regarding research integrity at Cambridge, fulfilling a recommendation under Commitment 3 of the *Concordat*. The PVC-R may be contacted through the Research Strategy Office using the researchintegrity@admin.cam.ac.uk email address.

The PVC-R is supported by the University's Research Strategy Office (RSO), from whom he receives reports on research integrity matters. A Research Governance and Integrity Officer (RGIO) manages the RSO's responsibilities in this area. The RGIO supports the PVC-R, Head of the Research Office and University Research Ethics Committee (UREC) to oversee the University's research ethics and governance systems, foster a culture of research integrity across the institution and support the implementation of the University's *Misconduct in Research* policy. The RGIO is tasked with ensuring that actions are taken to embed the commitments of the *Concordat* into the University's research environment and ensuring that systems, practices and processes across the University are periodically reviewed so that they remain fit for purpose and reflect best practice in research integrity. The RGIO also provides researchers and staff with a clear point of contact for advice, support and guidance on research integrity, research ethics, legal requirements, and professional obligations and standards. The RGIO works with other administrative teams, including the Human

Resources Division, Legal Services Office and Research Operations Office, to ensure that new ethical, legal and regulatory requirements are communicated and implemented effectively. This is a permanent position and is central to the University's ongoing commitment to strengthen research integrity at Cambridge.

The UREC has also been given responsibility to 'advise the Pro-Vice-Chancellor (Research) on the development and implementation of policies and procedures relating to research integrity', particularly in relation to Commitment 2 of the *Concordat*. All changes to research integrity policies and procedures are commented on by the UREC before decisions are made by the University's central committees. To facilitate a joined up approach to research governance, the PVC-R and the UREC receive reports on research integrity matters from the RSO.

The UREC has responsibility for the co-ordination of the continual development and dissemination of the University's research ethics policies (excluding animal research) and has oversight of local and School-level Research Ethics Committees (RECs). Ethical review is primarily provided by local and School-level RECs. The UREC provides review to projects that are beyond the expertise of School-level RECs and hears appeals against local and School level RECs. The University's RECs report annually to the UREC so that potential concerns can be identified and addressed. The UREC undertakes continuous review and monitoring of the University's ethics system to ensure that it meets best practice standards and provides a streamlined and effective service for researchers. The UREC is also responsible for monitoring the implementation of the University's ethics policies, which is carried out primarily through their monitoring of local ethics committees and surveys of and consultations with departments. The UREC provides the University's RECs with regular advice and guidance. The UREC reports annually to the General Board.

The PVC-R is Chair of the RPC. The RPC receives minutes of the UREC and major issues or new policies relating to research integrity are referred to the RPC for consideration and approval. The RPC also refers research integrity matters to the General Board where necessary.

The University also has management procedures to ensure that consideration of the 3Rs (the Replacement, Refinement and Reduction of Animals in Research) are embedded into all aspects of our strategic operation management and a well-developed governance system for animal welfare. The <u>Animal Welfare and Ethical Review Body (AWERB)</u>, currently chaired by the Establishment Licence Holder, has regular meetings with the University's three Named Veterinary Surgeons and Named Animal Care and Welfare Officers and actively/directly oversees the management of governance. University Policies developed by the AWERB are implemented in all research facilities.

In any work involving animals of protected species, the policy of the University of Cambridge is to adhere to high standards of humane care and treatment of those animals. Research and teaching activities at the University involving animals considered to be sentient are governed by a range of legislation, including the Animals (Scientific Procedures) Act, 1986 and, in the case of teaching to veterinary students, the Veterinary Surgeons Act 1966. Compliance of research involving these species is monitored by University staff, including the Named Veterinary Surgeons, and by the Home Office through its inspectors. All members of the University carrying out procedures regulated under the Act must by law

have prior training, relevant experience, and authority from the Home Office. All projects affecting such animals are subject to prior formal ethical review within the University. Further details on animal welfare at the University are available here:

https://www.cam.ac.uk/research/research-at-cambridge/animal-research

Heads of Department and Faculty are responsible for research integrity and ethics matters in their institution, including the implementation of the University's research ethics and integrity policies and procedures at a local level and taking initial responsibility for actions under the *Misconduct in Research* policy.

Policies and procedures for supporting research integrity

Under Commitments 2 and 3 of the *Concordat*, the University is required to have clear policies and procedures to support research integrity.

The University's commitment to upholding the principles of the Concordat is set out in its *Statement on Research Integrity*, which is publically available on the University's Research Integrity website. The Statement explains the ways in which the University will support researchers to maintain the highest standards of integrity in research and publically highlights the role of the PVC-R as first point of contact for anyone with comments, concerns or questions regarding research integrity at Cambridge.

The Statement on Research Integrity has been designed to complement existing University policies and guidelines for supporting the highest standards in research. The University's Guidelines on Good Research Practice sets out principles of good conduct that all those engaged in research at the University are expected to follow. They cover a range of issues including openness, supervision, training, intellectual property, the use of data and equipment, the publication of research results, and ethical practice. The Guidelines provide a more comprehensive introduction to good research practice at Cambridge than the Statement on Research Integrity and highlight links to further guidance on key issues.

The Guidelines have also been developed into a *Research Integrity and Good Research Practice Checklist*, which is designed to help supervisors to provide research students with an introduction to issues of research integrity and encourage broader dialogue about good research practice. The *Checklist* is available as a webpage and downloadable document.

The University's approach to the governance of the ethics of research and the ethical review process are set out in the *Policy on the Ethics of Research involving Human Participants and Personal Data*. This policy provides guidance on the University's expectations of ethical practice in research, setting out guiding principles by which all research activities undertaken by University employees, or on University premises, must abide. It also offers clear guidance for those seeking and those undertaking ethical review of a project and the governance arrangements for the University's ethical review process. Heads of Department and Chairmen of Faculty Boards are responsible for implementing the policy at a local level and individual researchers and supervisors of research students are expected to familiarise themselves with their responsibilities.

The University also recognises that its position globally as a centre of research excellence comes with the associated responsibility of ensuring that all research with animals is

undertaken with a priority in achieving the highest welfare standards. This underpins the University Animal Welfare Policy.

As required by the *Concordat*, the University's policies are subject to periodic review to ensure that they remain 'fit for purpose'. During 2016-17 the University's *Policy on the Ethics of Research Involving Human Participants and Personal Data* underwent a review by the UREC. The review recommended a number of changes that were agreed by the General Board at their 2 November 2016 meeting. These changes included:

- Update of a number of terms in the policy to reflect current usage;
- Highlighting the need to comply with the University's Children and Vulnerable Adults Safeguarding Policy, the Mental Capacity Act and NHS rules on seeking ethical approval for projects involving those over the age of 18 who lack the capacity to consent.
- Clarity that expedited review should only be used for projects for which the risk is minimal.

The regulatory/operational framework governing animal research underwent a review, concluding in August 2014, details of which are <u>available online</u>. The *Guidelines on Good Research Practice* is currently under review, which is due for completion during 2017.

The policies listed above, together with other policies relevant to research integrity, are freely available online. Up to date links to these policies will be published as part of each Annual Research Integrity Report:

- Statement on Research Integrity: http://www.research-integrity-statement
 integrity-statement
- Guidelines on Good Research Practice: http://www.research-integrity/good-research-practice
- Policy on the Ethics of Research involving Human Participants and Personal Data: http://www.research-involving-numen-integrity.admin.cam.ac.uk/files/policy_on_the_ethics_of_research_involving_numen_
- Animal welfare policies: http://www.cam.ac.uk/research/research-at-cambridge/animal-research/our-policies
- University Financial Regulations: http://www.admin.cam.ac.uk/offices/finance/regulations/

participants_and_personal_data_oct_2016.pdf

- 'Whistleblowing' Policy: http://www.admin.cam.ac.uk/offices/hr/policy/whistleblowing.html
- Policy Against Bribery and Corruption: http://www.admin.cam.ac.uk/offices/secretariat/bac/
- Children and Vulnerable Adults Safeguarding Policy: http://www.hr.admin.cam.ac.uk/policies-procedures/children-and-vulnerable-adults-safeguarding-policy
- Research Data Management Policy Framework: http://www.data.cam.ac.uk/university-policy

Cultivating best practice

The University is committed to continually improving the way in which it works to sustain and enhance the integrity of research undertaken at the University. To achieve this, the University has taken the following actions during 2016-17.

Following a decision taken in 2015-16, the University's <u>Code of Practice for Graduate Students</u> has been updated to include a requirement for supervisors of graduate students to "ensure that [graduate students] are aware of the University's expectations in respect of research integrity and good practice". A link to the *Research Integrity and Good Research Practice Checklist* has also been added to the supplementary <u>online guidance</u> relating to the Code.

In order to improve central awareness of the support graduate students need in relation to research integrity, the RGIO has arranged to meet at least annually with the Graduate Union and Student Advice Service to discuss University research integrity support and how this might be improved.

Following the revision of the University's Export Control policies during 2015-16, a University export control website had been launched to provide guidance on export control matters and support efforts to disseminate information on export control legislation across the University. Export Control training has also been developed and is due to be rolled out during 2017-18.

During 2016-17, the University also finalised and issued its guidance for departments and faculties on compliance with the <u>Nagoya Protocol</u>. From 2017-18 this will be supplemented by the creation of a Nagoya Protocol website.

Supporting and strengthening the understanding and application of research integrity issues

The *Concordat* requires institutions to take actions to maintain awareness among researchers of, and help them to comply with, institutional policies and processes relating to research integrity and ethical approval and the wider funder, professional and legal standards expected of them.

Advice and guidance

Expert support and guidance on research integrity is offered throughout the University. Centrally the RGIO and the Clinical School's Research Governance Team support researchers to understand and meet to expected standards of research ethics and integrity, as well as legal, professional, regulatory and funder obligations. Additional support and guidance on specific issues can be found throughout the central administrative offices, including the Research Office, University Biomedical Support Services, Health and Safety, Human Resources, the Information Compliance Office, Office of Scholarly Communications, and the Legal Office. Department and Faculty research ethics committees provide an additional source of support for researchers. Guidance can also be sought from School-level research ethics committees and the UREC.

The dissemination of research ethics and integrity policies and procedures has been identified as a key focus for strengthening the understanding and application of research integrity issues at Cambridge. Central to the University's awareness raising efforts is the maintenance of the <u>University research integrity website</u>. The website provides guidance on

research ethics and research integrity, including the University's ethical review process for research. The site also provides links to the University *Misconduct in Research* policy and information on research ethics and research integrity training.

The site is managed and developed by the RGIO and is regularly updated with new policies and guidance, as well as links to external sources of support. The main addition to the website during 2016-17 is new guidance on declaring conflicts of interest as part of applications for ethical review. Guidance on the ethical review of overseas research has also been prepared and is due to be made available on the website by the end of Michaelmas Term 2017.

The University's *Statement on Research Integrity* has also been developed as a means of building awareness of research integrity. The *Statement* has been designed to act as a brief introduction to research integrity for new staff at Cambridge. It sets out the standards by which the University expects all its researchers, research students and visiting researchers to abide and provides links to other University policies that relate to research integrity. The *Statement* has been made into a leaflet, which is <u>available online</u> so that it can be integrated into departmental and faculty training and induction. The leaflet is provided by the RGIO at central inductions for new postdoctoral staff and as part of centrally run training.

The research integrity website is also designed to act as a hub for anyone seeking information and guidance on research integrity issues at Cambridge; as such it provides links to guidance offered by Schools, departments, local research ethics committees and relevant administrative offices. Of particular importance is the University's guidance on animal welfare issues, which is provided on the <u>University's Animal Research webpages</u> and by the <u>University Biomedical Support Services (UBSS)</u>. Notable examples of online guidance provided elsewhere in the University include the clinical governance information provided on the <u>Clinical School website</u> and the detailed <u>guidance for research involving human participants in technology research</u> developed by the Schools of Technology and Physical Sciences.

Good data management practice is crucial for both the verification of research findings and to maintain the integrity of the research. In addition, <u>funders now require</u> that research data is properly managed during the research lifecycle and is made available at the end of research project/at time of publication. One of the key roles of the Research Data Management (RDM) Facility at the University of Cambridge is to create support services for research data management and sharing at Cambridge. In line with this, the RDM Facility conducts constant outreach and engagement with the research community, running information sessions, workshops and training on research data management, and organising collaborative initiatives to assess the support needed and barriers around open research with funders, such as the <u>Wellcome Trust</u> and <u>Cancer Research UK</u>. In addition the Facility runs a Twitter feed (<u>@CamOpenData</u>) with over 1500 followers and sends out a <u>regular newsletter</u> to over 2200 recipients.

The RDM Facility provides researchers with <u>seven core services</u>: online information, advocacy and outreach, training, consultancy on data management, policy development and discussions with funders, data management plan support and data repository. Thanks to the intense programme of advocacy and training in data management and sharing delivered by the RDM Facility, the number of data submissions received by the University repository

reached 1000 in September 2017, just two and a half years after the start of the RDM service. Cambridge holds more datasets in the institutional repository than any other UK university. In the 2016/7 academic year research data management workshops were added as core compulsory training for first year PhD students from the Graduate School of Life Sciences and received overwhelmingly positive feedback. In September 2016 the RDM Facility initiated a programme – Data Champions – that recruited researchers, librarians and support staff interested in research data management to provide local and customised RDM support to their departments. Over 40 individuals applied to join the initiative and have been delivering training and providing advice to peers. This model has garnered much interest from RDM services around the globe.

The research community benefits from good research data management practice in terms of efficiency within their own research programmes, increased recognition for data that is shared through the ability to cite data that has a DOI allocated to it, the ability to use other datasets made available and a more cost effective use of research funds because work does not need to be duplicated.

Training, mentoring and events

Training has also been identified as a priority for the University's work to support research integrity. Face-to-face research integrity training has been available centrally since 2014. The course is open to all research staff and research students and aims to familiarise attendees with the University's policies and procedures for research integrity, ethics and misconduct. The course also uses case studies and discussion to explore key research integrity issues.

The RGIO also offers bespoke training for departments, faculties and Schools where this is requested. During 2016-17 the RGIO provided:

- compulsory research integrity training for all new PhD students in the School of Clinical Medicine, Department of Chemistry and Department of History of Art;
- non-compulsory training for PhD students across the Departments of Biochemistry, Genetics, PDN, Zoology and the Gurdon Institute;
- a bespoke research integrity training course for conservation postdocs and graduate students through the University's Conservation Research Institute;
- research integrity introductory sessions as part of the Department of Veterinary Medicine's research afternoon for all staff and the Institute for Manufacturing's Research Methodology Workshop;
- research integrity training for administrators that was delivered to staff in the University Library, Research Office and as part of the Research Office's Training course for departmental administrators;
- export control training for Research Office staff, that is to be rolled out to departmental administrators and research staff during 2017-18.

In addition the RGIO is one of the speakers on the University's Pathways to Higher Education Practice course for newly appointed probationary lecturers and is part of a Research Office working group preparing training, to include research ethics and integrity, for all new principal investigators, which will begin to be delivered during 2017-18. The University also benefits from training as part of its membership of UKRIO; during 2016-17

this has included a training session on good practice in authorship delivered by the Chief Executive of UKRIO.

Centrally the University also provides online or face-to-face training in areas such as good research practice, working with human subjects, data protection and health and safety. Training is provided by the University Biomedical Support Services for those seeking Home Office Licences.

Online research integrity training is in development and externally provided online training is promoted through the <u>research integrity website</u> and the Clinical School's <u>Research</u> Governance website.

Since 2015 departments and faculties have been expected to integrate the *Concordat* and all relevant University statements and policies, including the *Misconduct in Research* policy, into faculty or department inductions for new academic staff and PhD students. In addition to this, many of the University's departments and Schools offer subject-specific training in research integrity issues. The approach taken to this varies locally: it includes training that has been integrated into Departmental research skills courses; stand-alone lectures or workshops; School-level support, such as research ethics training offered by the Social Sciences' Research Methods Centre; and courses arranged with external providers.

Induction events for postdoctoral staff are run by the University's Office of Postdoctoral Affairs. The RGIO attends all such inductions to provide a brief introduction to research integrity and research ethics and to answer questions from attendees.

Mentoring plays a key role in building awareness and understanding of policies and procedures at Cambridge. The University formally requires that all its institutions make arrangements for the mentoring of newly appointed staff and runs schemes for peer and developmental mentoring.

The University is committed to the continuing and ongoing improvement of its processes for supporting and strengthening the understanding of research integrity at Cambridge and future efforts will be reported on in subsequent annual reports.

Addressing research misconduct

As required under Commitment 4 of the *Concordat*, the University has a *Misconduct in Research* policy and procedure that sets out a transparent, robust, confidential and fair process for dealing with allegations of research misconduct. The policy provides a clear definition of research misconduct and the responsibility of members to report incidents of misconduct, whether these have been witnessed or are suspected.

The investigation procedure sets out a thorough process through which allegations are investigated by individuals with appropriate authority, qualifications and experience and no conflict of interest in the case. The procedure is clearly linked to disciplinary procedures contained within the University's Statutes and Ordinances to ensure that appropriate action can be taken when concerns are upheld. The procedure also ensures that allegations are investigated in an appropriately confidential manner.

The University is committed to ensuring that it meets all obligations to provide information on investigations of research misconduct to funders of research and professional and/or

statutory bodies as required by conditions of grant and other legal, professional and statutory obligations, and will support researchers to do the same.

The *Misconduct in Research* policy, including details of the relevant contacts and procedures, is available on the <u>University HR website</u>. It is also highlighted on the <u>University research integrity website</u>, as part of research integrity training, within the *Good Research Practice Guidelines* and accompanying checklist, and in the research integrity leaflet.

Individuals seeking advice on the University's misconduct procedure are able to contact the PVC-R, the Academic Secretary, the RGIO, their Head of Institution and/or the relevant HR Advisor for the institution concerned.

The policy is appropriate to the needs of the University. To ensure that this continues to be the case, the policy is currently under review.

Whistleblowers receive specific protections under the University's 'Whistleblowing' policy. Under the 'Whistleblowing' policy disclosures may be made to the Academic Secretary (in the case of Institutions under the supervision of the General Board) or the Registrary (in the case of all other University Institutions).

At present in the absence of an officer in the role of Academic Secretary, the role of the Academic Secretary in the *Misconduct in Research* policy is being performed by the Registrary.

The University's *Misconduct in Research* policy sets out a two stage investigation process. Allegations are initially considered through a preliminary investigation and will progress to a formal investigation if a *prima facie* case that requires further investigation is identified at the preliminary stage. The *Concordat* requires that the University provide a high-level report on any formal investigations of research misconduct that have been undertaken during each academic year and to include it in this public statement. In the interests of transparency, the University has decided to also report on any preliminary investigations of research misconduct undertaken. The table below provides this report for the 2016-17 academic year.

Table 1: Investigations carried out under the University of Cambridge Misconduct in Research policy, 2016-17.

Type of allegation	Stage reached	Investigation result
Fabrication	Formal Investigation	Ongoing (also reported 2015-16)
Falsification	Preliminary Investigation	Not upheld
Plagiarism	Preliminary Investigation	Not upheld
Plagiarism	Preliminary Investigation	Not upheld
Falsification	Preliminary Investigation	Ongoing

External engagement

The *Concordat* recognises that a key part of successfully supporting a culture of research integrity in universities is for institutions to learn from each other and disseminate good practice. The sector has responded to this impetus and Cambridge has actively engaged with the resulting collaboration and sharing of good practice.

The University is a subscriber to the UK Research Integrity Office (UKRIO). UKRIO is an independent charity, funded by subscriptions, that seeks to support researchers and research organisations in relation to matters of research integrity, research ethics and research misconduct. Joining UKRIO has given the University access to additional training assistance from UKRIO, UKRIO guidance documents and assistance, a register of UKRIO advisors for misconduct investigations, and assistance in developing and enhancing our guidelines, procedures and training. In addition, by subscribing, the University is supporting the UKRIO's advice service, which is available to anyone in need of assistance of advice with issues relating to research integrity. The University's membership of UKRIO is advertised on the research integrity website.

During 2016-17 the RGIO, Head of Research Office and Clinical School Governance Officer have been active participants in conferences and workshops organised by bodies such as the UK Research Integrity Office, Export Control Organisation, and Regulatory Delivery (for issues relating to the Nagoya Protocol).

The RGIO is also a member of the Russell Group's Research Integrity Forum, which has been established to ensure that good practice is shared and to support shared efforts to foster a research environment that nurtures research integrity. The importance of this group as a space for open discussion and shared learning was highlighted by UUK in their 2016 review of the Concordat. The RGIO has been part of the organising team and presented at both of the meetings of the Forum in 2016-17. Through involvement in this group, the RGIO has also taken a leading role in Russell Group responses to the consultation on the Research Integrity POSTnote produced by the Parliamentary Office of Science and Technology and the ongoing Science and Technology Committee inquiry into Research Integrity. The University also engaged independently with both the POSTnote consultation and inquiry, making independent submissions to both.

The RGIO is also a member of the League of European Research University's Research Integrity Thematic Group. In this role he has contributed towards the organisation of LERU research integrity activities and responses to European-wide consultations on research integrity issues. He also attended the first meeting of the group in Brussels in May 2017.

The RGIO also represented the University at the World Research Integrity Conference 2017 enabling him to ensure University awareness of recent developments in this area and to contribute toward the development of policy and guidance at a global level.

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¹ Universities UK, 'The Concordat to Support Research Integrity: A Progress Report' (November, 2016), p. 26. Available at: http://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2016/concordat-research-integrity-progress-report.pdf [Accessed 18.09.17]

External Audit

RCUK audit research ethics and integrity processes as part of their Funding Assurance audit. The University's most recent such audit was held during November 2015. The report of the audit notes that "there is good evidence of very effective processes around... Research Integrity and Ethics" and that "Research Ethics and Integrity procedures have been significantly enhanced since our last visit".

In November 2016 Universities UK published the first *Concordat* progress report. This report provided additional clarification on what the Concordat stakeholders held to be the minimum expected for compliance with the Concordat as follows:

"a dedicated and discoverable webpage on research integrity; a named point of contact for research integrity and misconduct enquiries; and a publicly available annual narrative statement setting out the steps they have taken to promote a positive culture of research integrity."

As can be seen from the report above, the University of Cambridge is compliant with these three expectations. This is not the case across all institutions. The report undertook a web-based audit of institutional support for research integrity at UK universities, which concluded that of 131 institutions surveyed "half of institutional websites lacked easy-to-find information on research integrity activities and the concordat", only 37% provided a named member of staff for research integrity enquiries and only 27% had made an annual narrative statement publically available. ²

 $\underline{analysis/reports/Documents/2016/concordat-research-integrity-progress-report.pdf} \ [Accessed \ 18.09.17]$

² Universities UK, 'The Concordat to Support Research Integrity: A Progress Report' (November, 2016), pp. 3-4, 28-33. Available at: http://www.universitiesuk.ac.uk/policy-and-