



**University of
Nottingham**
UK | CHINA | MALAYSIA

The University of Nottingham Annual Statement on Research Integrity to the Council 2020



Table of Contents

The University of Nottingham Annual Statement on Research Integrity to the Council 2020	1
1. Context	3
2. Research Integrity and Research Ethics - Centrally	3
2.1. Overview - institutional strategy and objectives to strengthen understanding of research integrity	3
2.2. Introduction and revision of research integrity policies and procedures, requirements, process reviews and support mechanisms	4
2.3. The Researcher Academy - Educational and Training provisions, Communication and Awareness Raising Activities	5
2.4. Human Resources- Educational and Training provisions, Communication and Awareness Raising Activities	7
3. Faculties - Educational and Training provisions, Communication and Awareness Raising Activities	7
3.1. Undergraduate, Taught and Research Students:	8
3.2. R&T Staff:	8
3.3. University of Nottingham Malaysia	9
3.4. University of Nottingham Ningbo China	10
4. Research Relating to Research Integrity	10
5. External Collaborations and Initiatives to Support Research Integrity	12
6. Internal Monitoring and Audit Processes	14
7. Research Misconduct	14
7.1. Reporting and Handling Allegations of Research Misconduct	14
7.2. Anonymised Summary on Investigations into Allegations of Research Misconduct	15
7.3. Lessons Learned and Identified Needs	15
8. Conclusion	17
9. Action for the Council	17

1. Context

This is the *seventh annual statement on Research Integrity* that the University of Nottingham (referred to as 'the University' hereafter) is presenting to the Council (University's governing body) on the actions and activities undertaken for the period between 1 August 2019 and 31 July 2020 to sustain and further enhance research integrity in the University. To comply with the requirements of the Concordat to Support Research Integrity¹ (the Concordat, hereafter) and the majority of UK and EU research funders (e.g. UKRI, Wellcome Trust, NIHR etc.), this statement will subsequently be publicly released through our University website for accountability and assurance on activities undertaken in support of research integrity.

This annual statement, coordinated by Research and Innovation, has been developed following the guidelines and suggested structure of the statement from the UK Research Integrity Office (UKRIO) self-assessment tool and in line with commitment five of the Concordat. It provides a wide-ranging summary of actions and activities undertaken across the University to support and strengthen the understanding and application of research integrity, including addressing allegations of misconduct. This information was collected through a survey of activities supporting research integrity conducted across Faculties and relevant departments within Professional Services by the Head of Research Integrity. Each of the five Faculties, the University's International Campuses (UNM and UNNC), Human Resources, the Researcher Academy and Student Services have responded separately.

This report has been reviewed by the University's Research Integrity Officer (The Pro-Vice-Chancellor for Research and Knowledge Exchange), the Chair of the University Research Integrity and Research Ethics Committee and approved by the latter Committee.

2. Research Integrity and Research Ethics - Centrally

2.1. Overview - institutional strategy and objectives to strengthen understanding of research integrity

In response to the requirements of the Concordat and the evolving requirements of funders, the University undertook a comprehensive review of the processes and procedures for managing research integrity at an institutional level, which included a review of the role and remit of University Research Ethics Committee (UREC). A revised procedure for managing research integrity at an institutional level has been developed and has been implemented. The remit and membership of UREC has been expanded to include research integrity. The UREC name was changed to the **University Research Integrity and Research Ethics Committee (URIEC)**². This new committee is a committee of Senate. URIEC oversees and defines research integrity and research ethics policies, establishes the University's process and procedures for providing oversight of research integrity and ethical review, provides quality assurance of such procedures, ensures and monitors best practice of research integrity and research ethics across the University, advises the Research Committee on research integrity and research ethics components of the Code of Research Conduct and Research Ethics, and legal and statutory requirements, champions the training and the embedding of a culture of research integrity and good practice across all areas of the university and reviews and approves this University's Annual Statement on Research Integrity for submission to Council.

The Pro-Vice-Chancellor for Research and Knowledge Exchange is the named *University Research Integrity Officer*. In November 2019, the University has appointed a dedicated *Head of Research Integrity* role that supports the *University Research Integrity Officer*, acts as the secretary for URIEC and is the

¹ <https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2019/the-concordat-to-support-research-integrity.pdf>

² <https://www.nottingham.ac.uk/governance/universitycommittees/research-ethics.aspx>

contact liaison for all Research Integrity matters across the University including research misconduct queries and investigations.

2.2. Introduction and revision of research integrity policies and procedures, requirements, process reviews and support mechanisms

2.2.1. In January 2020, the University published a dedicated **code of practice on the handling of allegations of research misconduct**³. This code of practice applies to all staff and PGR students across all University campuses. This code of practice defines research misconduct in line with the Concordat, is in line with the UK Research Integrity Office recommendations and meets the expectations of research funders and regulatory bodies. The scope of the code makes a clear distinction from *The Academic Misconduct Procedure*⁴ for students and *the Whistleblowing (Public Interest Disclosure) Code*⁵.

2.2.2. The University's Code of Research Conduct and Research Ethics⁶ (referred to as 'the Code' hereafter) provides a comprehensive framework for good research conduct, research ethics principles and the governance of all research carried out across the University. The Code takes into consideration the University's international campuses. The Code underpins the University's commitment to maintaining the highest standards of integrity, rigour and excellence in all aspects of our research and for all research to be conducted according to the appropriate ethical, legal and professional frameworks and standards. The Code is a fundamental component of the research environment, which is characterised by our culture of research integrity, good research practice, and the development and training of researchers at all stages of their careers. The Code outlines the duty of researchers including their responsibilities towards all human participants in research, animals, the environment, and cultural materials, and it provides a basis for the transparent and appropriate communication and dissemination of research findings.

As part of the annual review of the Code, the University Research Integrity and Research Ethics Committee has approved Version 7 dated June 2020. This Code applies to all research staff and students across our UK, China and Malaysia campuses.

The updates include substantial amendments to reflect the updated Concordat 2019, clarifications to existing sections, and the addition of new sections (e.g., it has expanded on the Supervision and Leadership, the new sections include Researcher responsibilities, Equality, Diversity and Inclusion, Intellectual Property, Health and Safety, etc.)

The Code and its implementation are reviewed on an annual basis by the University Research Integrity and Research Ethics Committee (URIEC). These reviews take into account changes and recommendations from external research funders, Acts of Parliament and other legislation, and developments in the field.

2.2.3. Research Ethics and Integrity SharePoint Pages⁷ (internal) were published in May 2020 to provide central support on all aspects of Research Ethics and Research Integrity.

These pages are dedicated to Research Ethics and Integrity, which include contact information for the research ethics committees and resources for researchers. The pages include Research Integrity Bytes, which are one pagers addressing common

³ <https://www.nottingham.ac.uk/research/resources/documents/code-of-practice-on-handling-allegations-of-research-misconduct-v1-09-jan-2020.pdf>

⁴ <https://www.nottingham.ac.uk/academic-services/current-students/academic-misconduct.aspx>

⁵ <https://www.nottingham.ac.uk/governance/other-regulations/whistleblowing/index.aspx>

⁶ <https://www.nottingham.ac.uk/research/resources/documents/code-of-research-conduct-and-research-ethics-v7.0-june-2020.pdf>

⁷ <https://uniofnottm.sharepoint.com/sites/ResearchEthicsandIntegrity/SitePages/Code-of-conduct.aspx>

issues and questions raised by researchers in all fields. The Bytes were introduced to give researchers a starting point when considering issues that may impact the integrity of their research.

Two pre-recorded Video presentations, one introducing researchers to the Code and another on International Research and Research Ethics, were made available to allow researchers access at their own time.

- 2.2.4. Research and Innovation COVID-19 resources⁸** (internal) were published at the early stages of the COVID-19 and were updated as required. The main purpose of these pages was to support the research community within the University. The content aligned with the University's main COVID-19 advice and became a repository for all research related advice and guidance. A dedicated page on Research Ethics and Integrity was developed within this resource to provide up to date information to all PI's, staff and students working on research projects, in addition to an online video presentation addressing Research Integrity and Ethics during COVID-19. This has highlighted potential changes to recruitment processes, social distancing requirements, best practices for data handling, information security and compliance, and potential implications and required actions.
- 2.2.5. Clinical Research and COVID-19;** Clinical Research is supported centrally by the Research Governance team. The team have dedicated internal pages that is kept up to date with COVID-19 information and resources in line with the HRA, MHRA and NIHR guidance.
- 2.2.6. Digital Research:** The digital research team have created a wealth of guidance and materials to support researchers in managing their research data. The dedicated SharePoint pages⁹ (internal) included resources covering planning, data storage, process and analysis, archiving. These included detailed guidance and information on, to name a few, publishing and sharing data, data access and restrictions, data management plans, case studies, automated transcription services, research data repositories, and cyber essentials and secure designs.

2.3. The Researcher Academy - Educational and Training provisions, Communication and Awareness Raising Activities

- 2.3.1.** The Researcher Academy (RA) (previously; the Graduate School) is a provider of Research Integrity education and training and is responsible for both awareness raising with regards to professional conduct topics and the development of appropriate behaviours amongst postgraduate research students and Research Staff.

The RA offers training in Research Integrity related topics both within the central programme of training and within a series of Faculty specific training programmes. During 2019-20 the RA, in partnership with the University of Nottingham Institute for Science and Society launched a new 10-day online course in *Responsible Research and Innovation* (RRI). The new course was launched at a full day conference focusing on RRI which was opened by Steven Hill, Director of Research at Research England.

The following research integrity related courses were delivered either through the RA central programme of training for researchers, or through the faculty specific programmes convened by the RA for the Faculties of Arts, Engineering and Medicine & Health Sciences:

⁸ <https://uniofnottm.sharepoint.com/sites/ResearchandInnovation-COVID-19resources>

⁹ <https://uniofnottm.sharepoint.com/sites/DigitalResearch/SitePages/Publish.aspx>

a. Within the central programme -

- Research Integrity – Online comprehensive
- Research Integrity – Online concise
- Research ethics for doctoral researchers
- Philosophy of science and scientific ethics
- Identifying and managing intellectual property issues in research
- Copyright condensed: a short introduction to copyright for your research
- Introduction to responsible research and innovation

b. Faculty Programmes

- Patient, carers and public involvement in research
- Open access: what researchers need to know
- Good laboratory practice: fundamentals
- Good laboratory practice: techniques
- Good Clinical Practice training
- Exploring ethics in research
- Embedding the 3Rs in Research
- A question of ethics: the use of humans and animals in biomedical research
- Responsible Innovation: Engineering with Society

c. For staff only: Introduction to the ethics review process - for new ethics officers and panel members

2.3.2. Research Integrity training

- a. The University provides two online Research Integrity training courses provided by Epigeum¹⁰; Research Integrity Concise and Comprehensive. In the 2019/2020 academic year, 505 members of staff and students undertook and passed the **Concise** course. Research Integrity training is mandated in Year 1 for all new PGR Researchers. As a result, the total enrolled on the Comprehensive course doubled compared to the previous academic year and the number of staff and students who passed the **Comprehensive** course has risen to 604.
- b. From the central training programme; class based provision in 2019/20:
- Research Ethics for doctoral researchers (83 researchers trained)
 - Introduction to the ethics review process - for new ethics officers and panel members (14 new officers trained)
 - Bespoke RI training for Faculty of Engineering (46 researchers trained)
- c. The Researcher Academy's training and development provision in the Research Integrity is informed and shaped by UKRIO guidelines and is delivered in partnership with the University's Head of Research Integrity.

2.3.3. Responsible Research and Innovation; A large number of academic and Research Staff and doctoral researchers contributed to the delivery of the Responsible Research and Innovation Conference 2019¹¹. The conference was attended by 221 participants drawn from Science (97), Engineering (82), Social Science (25), Medicine and Health

¹⁰ <https://www.epigeum.com/epigeum/>

¹¹ Full conference details including conference speakers can be found at <https://www.nottingham.ac.uk/iss/events/2019-20/responsible-research-and-innovation-conference.aspx>

Sciences (8) and Arts (9). The RA delivered 3 instances of the online RRI course within the central programme training where a total of 120 doctoral researchers attended. The course has also been delivered within a blended learning programme by The Institute for Science and Society to doctoral researchers based within Doctoral Training Partnerships and/or Centres for Doctoral Training. The blended course has been delivered on 4 occasions training approximately 150 further doctoral researchers.

2.4. Human Resources- Educational and Training provisions, Communication and Awareness Raising Activities

The Research and Innovation team and the HR team have worked together to:

- 2.4.1.** Develop protocols and processes to ensure compliance with funder's requirements, e.g. assuring the funder that the researcher/s has not been subject to any allegations or investigations regarding bullying and harassment.
- 2.4.2.** Advised on the development of the Code of Practice on Handling Allegations of Research Misconduct and provided assurance that processes for dealing with allegations of research misconduct are transparent, robust, and fair.
- 2.4.3.** Advised on producing high-level statement on any formal investigations of research misconduct that have been undertaken in the previous academic year.

3. Faculties - Educational and Training provisions, Communication and Awareness Raising Activities

Each School has a Research Ethics Officer with the responsibility for ethics approval, raising awareness of and providing training on research integrity and ethics, writing annual monitoring reports for Research Ethics Committees and keeping their School informed about University policy on research ethics and integrity.

Due to COVID-19, many planned face-to-face activities in the Faculties were cancelled. In order to help researchers navigate the new circumstances and to ensure the safety of both the researchers and the participants, projects under review and new applicants were provided instructions about how to redesign their research projects to avoid face-to-face data collection, and employ alternative methods for gathering data that were originally planned to use interviews or focus groups. Researchers were also advised to visit the Research and Innovation COVID-19 resources.

Various methods of communications, including email, newsletters, training platforms, announcement, workshops, internal SharePoint and workspace pages, main faculty/school website and shared drives are utilised to inform staff and students of available resources, updates, and facilitate their access.

Below are selected points of activities reported by the faculties within the University.

3.1. Undergraduate, Taught and Research Students:

- Modules included written information, prominently placed in Moodle, along with in-class guidance and supervision advice on plagiarism and how to avoid it, as well as the appropriate standards of individual student research. Moodle information includes clear communication of penalties for carrying out research without the appropriate ethical assessments and permissions.
- Research Ethics and Research Integrity is well embedded in many UG courses; and training is rooted within a number of new and existing PGT courses. Further ethics and Research Integrity training is being developed for PGR training and staff. Ethics and data management workshops are embedded in many UG and PGT modules as well. Raising awareness on research integrity and plagiarism is an integral part of research skills training provided through a mixture of compulsory and non-compulsory modules.
- Research integrity plays a particular role in the teaching and supervision of dissertation modules. Dissertation modules are subject to the Faculty process for ethical review; where individual student research projects require ethical approval, students are prompted by their supervisors to complete the relevant forms and submit to the School Ethics officer. The same process applies to other modules which involve interaction with individuals or groups outside the University.
- Individual research supervision includes guidance on research integrity. For research projects that raise ethical issues, supervisors ensure students submit an ethical approval form to the School Ethics officer.
- The online postgraduate student handbooks provide clear advice on research ethics and the procedures for applying for ethics approval.
- As part of doctoral lunchtime sessions, the School Ethics Officers delivered seminars on ethics and governance issues and provide additional sessions for different cohorts of Masters students.
- In some areas that require additional support, e.g. the Bilingualism and Psycholinguistics research group, visits from the University Service Manager for Research IT were arranged to ensure all members are following University best practice in these areas.

3.2. R&T Staff:

All research-active staff in faculties are included in a range of systems which ensure that researchers abide by the appropriate standards of honesty, rigour and transparency:

- Mentoring: Early Career Researchers and new staff have experienced mentors assisting in the planning and conduct of individual research and its publication, including issues of research integrity. University induction meetings for postdocs include guidance on the University Research Integrity and Research Ethics policies and guidance.
- Research planning: all research-active staff have annual meetings with their Head of Department or departmental Director of Research to discuss their research plans for the next five years, including discussion of any issues arising.
- Peer review of publications: in preparation for REF, publications are peer-reviewed internally for ranking and rating purposes, which also include monitoring that the publications adhere to the standards now formalised by Concordat. Publications published through Nottingham's

RIS repository are also peer-reviewed internally, including checking that they adhere to the appropriate standards of research integrity.

- Peer review of research funding applications: all applications for external research funding are mentored in the Departments and the Schools. This includes monitoring of the appropriate disciplinary standards of honesty, rigour and transparency, as well as of adherence to the Code.
- School Ethics Officers: The School Ethics officers keep their School up to date (via the School Research Committee, dedicated workshops, and emails to all staff) about University wide and Faculty specific policies on research ethics. They oversee ethics approval within the School as members of their Ethics Committees. Ethics Officers have provided a series of teaching sessions (including lectures, seminars workshops and one-to-one drop-in sessions) for all staff and students at different levels of study and research engagement (UG, BSc, Masters and PhD). These sessions included consideration of ethical principles and dilemmas in research as well as information about research governance.
- Staff are encouraged to attend courses run by the university Leadership and Management Academy (LMA), many of which include a research integrity component, including the research leadership training programmes.
- Strategies to reduce risk are further reinforced by sessions (e.g. at awaydays) on Open Science (topics covered have included pre-registration, data sharing, the importance of rigour and reproducibility rather than journal 'impact factor').
- Staff conducting in vivo studies in the Biomedical Support Unit aim to Reduce, Refine and Replace (3Rs) the use of animals as far as possible and their published results conform to the ARRIVE Guidelines.
- NC3Rs programme manager provides advice at the earliest stages of project planning. The FPVC for Science has been appointed as Chair of NC3Rs Board demonstrating the university level commitment to the 3Rs in animal research. To support ongoing projects, the group hold annual workshops to promote best practice across the Midlands universities (Birmingham, Leicester and Nottingham). Thus, the 3Rs are an integral part of our high standards for laboratory animal work and the associated reporting framework.
- Research integrity reinforced as part of the annual appraisal process, circulation and promotion of the University's Code of Research Conduct and Research Ethics via email and at staff meetings.

3.3. University of Nottingham Malaysia

- It is compulsory for all new postgraduate students admitted to the Faculty of Science and Engineering to attend an induction programme that includes a seminar on the Code of Research Conduct and Research Ethics, and Research Integrity organized by the Faculty of Science and Engineering Graduate School. The basic process of the ethical review of projects seeking ethical approval, is also introduced.
- Individual Schools/Departments run separate sessions on research ethics and research integrity as well. These sessions are delivered at the beginning of the Final Year Project modules.

- Researchers (both staff and student) of the Faculty of Science and Engineering are encouraged to view and access the 'Science and Engineering Research Ethics Committee' Moodle page. The Moodle page contains links to training on 'Research Integrity' that they could access and be informed. It also explains the processes that should be followed for submitting applications for ethical approval, allegations of misconduct relating to research ethics and integrity, standard templates of official forms, codes of conduct and provides links to further (related) information.
- In collaboration with UNM Graduate School, Dr Soma Mitra and Dr Marieke De Vries held a two-hour session on Research Ethics & Integrity for staff and PGRs.

3.4. University of Nottingham Ningbo China

- Trainings at faculty level is organized for both students and staff every year.
- We are exploring online training courses for staff/student to raise up the awareness of research ethics/integrity and provide guidance for daily activities.
- A major activity in 2019/20 was the launch of the online ethics approval web site, currently in the transition phase (from paper to fully electronic).
- Regularly share and circulate updated research ethics/integrity information, regulation and policies from local funders and authorities.

4. Research Relating to Research Integrity

4.1. Faculty of Arts:

The Department of Philosophy includes at least 7 members of staff who conduct research in ethics, including research ethics topics like the right to privacy (Benedict Rumbold), Trust (Jonathan Tallant), Corruption and Injustice (Ian James Kidd).

4.2. Faculty of Science:

- a) The School of Biosciences (and the School of Veterinary Medicine and Science) host the Centre for Applied Bioethics. This research group comprises academic members of staff from across the University (Prof Millar, Dr Hobson-West, Prof Hyde), honorary professors and lecturers, research fellows and PhD students. These researchers are conducting research in the field of applied bioethics focused on animal, agri-food and environmental management issues, and participatory ethics. Some of the current work is funded by EC H2020, The Bill and Melinda Gates Foundation, The Wellcome Trust, DFID/Royal Society, BBSRC, EPSRC, etc.
- b) Projects are examining themes of (i) Ethics of Animal Use in Experimentation; (ii) Harm/Benefit in Ethical Assessment, (iii) the relationship between Responsible Research and Innovation (RRI) and Research Ethics, (iv) development of Ethical Tools to support decision-making in (animal) REC processes, (v) openness and transparency in bioscience research; (vi) developing tools to support research ethics training for bioscience researchers. Other academics in the School who have training in the social sciences are also interested in research ethics questions related to their research topics (e.g. within the Division of Nutritional Sciences) but at present external funding has not been secured.

- c) The School of Computer Science: While there is no direct work on research integrity the Horizon Digital Economy Research hub is very active in the closely related area research into ethical use of computing technology. The hub promotes an 'ethical by design' approach to handle human data: i) The fair and transparent use of human data, ii) Ensuring privacy in handling human data, iii). Establishing appropriate rights of ownership and use for human data.
- d) The School of Psychology: A Lancet Psychiatry commentary on research ethics in the pandemic (Townsend, Cassidy) was the featured piece on the front page of Lancet Psychiatry [https://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366\(20\)30150-4/fulltext](https://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366(20)30150-4/fulltext)

4.3. Faculty of Medicine and Health Sciences:

- a) Dr Carmen McLeod, Senior Research Fellow at SBRC, published a research paper in 2020: 'In Search of Stool Donors: A Multicenter Study of Prior Knowledge, Perceptions, Motivators, and Deterrents among Potential Donors for Fecal Microbiota Transplantation' (doi: 10.1080/19490976.2019.1611153).
- b) Dr Eleanor Hadley Kershaw led a programme of research on RRI across several research projects affiliated with the SBRC:
 - o SBRC core project (BBSRC/EPSRC, 2020-2021) on language use in the SBRC, especially in relation to notions of responsibility and interdisciplinarity; an in-depth ethnographic study of the work of the scientists within the SBRC; Circling Sustainability and Responsibility; Responsible multispecies and more-than-human relations in synthetic biology and industrial biotechnology.
 - o ENGICOIN (H2020) investigates the relations between science, technology and society and facilitates an RRI approach by delivering RRI training and workshops for Consortium partners.
 - o CCnet (BBSRC-funded Network in Industrial Biotechnology and Biofuels (BBSRC-NIBB), 2019-2024): development of RRI workshops.
 - o BIOMETCHEM (ERA CoBioTech funded, 2018-2020: WP2: implement an RRI approach to map public perceptions and concerns over the envisaged process technology. Three workshops have been held across the lifetime of the project (including one in Aug 2019 and one in Oct 2019) with scientists, social scientists and stakeholders/members of the public.
 - o SynConsort4Butanol (ERA CoBioTech funded, 2019-2022: RRI, Responsible Research and Innovation.
- c) Dr Eleanor Hadley Kershaw has had two research outputs during the 2019/20 period: 'Generational aspirations: ethnographic perspectives on the UK experiment in synthetic biology and responsible innovation 2010-2020', invited for submission on 9 June 2020 to special issue of the Journal of Responsible Innovation; and 'The sustainable path to a circular bioeconomy', invited for submissions in Trends in Biotechnology in May 2020.
- d) Staff and students at the School of Veterinary Medicine and Science benefit from activities and teaching led by the Centre for Applied Bioethics, which spans the SVMS and the School of Biosciences (led by Professor Kate Millar). Staff in the Centre have an interest in research integrity but, more specifically, undertake funded research related to research ethics. Dr. Pru Hobson-West (moved to School of Sociology and Social Policy in 2018) remains an Honorary Associate Professor in the School of Veterinary Medicine and Science and her research work is based in Centre for Applied Bioethics (CAB) and the Institute for Science and Society (ISS).

4.4. Faculty of Social Sciences

Research by Pru Hobson-West (funded by the Wellcome Trust and ESRC DTP) looks at debates over the use of animals as models in science. This involves the production of outputs that speak to issues of research ethics in laboratory science.

4.5. University of Nottingham Ningbo China

Upon request of local government in China, in April 2020, we undertook a standard research ethics/integrity survey in medical and life sciences.

5. *External Collaborations and Initiatives to Support Research Integrity*

All Faculties have reported to have either contributed to or been involved in external events and activities in support of research integrity. For example:

- a. School of Humanities: Dr Ian James Kidd was awarded a Fellowship from the Abraham Kuyper Centre for 'The Epistemic Responsibilities of the University'. This resulted in 2 papers commissioned for edited collections, a research fellowship at Vrije Universiteit Amsterdam, 2 keynote addresses at VUA and continued collaboration with VUA faculty.

Kidd and Woodard were awarded a BA/Leverhulme Small Research Grant 'Civic Virtues and Vices'. This funded two workshops hosted at Nottingham, one on Civic Virtues, one on Civic Vices (the latter cancelled due to Covid-19).

- b. School of Cultures, Languages and Area Studies: The School Director of Research attended the "Research Integrity: A Landscape Study" workshop on October 25, 2019. The workshop formed part of a study commissioned by Research England, on behalf of UKRI, led by Vitae in partnership with UKRIO to consider the effects of incentives in the research system on researcher behaviour in the context of research integrity. The aims of the workshop were to:
 - Explore the UK research integrity landscape
 - Ensure perceptions of researchers were included in the study
 - Validate and inform the early results from the study
 - Produce outcomes that can be presented to Research England, UKRI
- c. School of English: Staff regularly deal with issues relating to research integrity via their work as reviewers for a range of national and international funding bodies, including the Leverhulme Trust, ESRC, AHRC and Wellcome Trust; and via serving on the editorial boards of leading journals. They participate in the governance of national and international subject organisations, including, for example, as the President and as an Executive Officer of the Scottish Text Society; President of the D.H. Lawrence Society; Research Officer of TAPRA, the national Theatre and Performance Research Association for UK and Ireland; and as a Trustee of Red Earth Theatre.
- d. The School of Biosciences has a new project with Fund for Replacement of Animals in Medical Experimentation (2019 – 2022) to be developed and run an annual Training School on Ethics, 3Rs and Experimental Design. Strengthening good practice at the University the Training School on Ethics, 3Rs and Experimental Design will be held at the Sutton Bonington campus on alternate years.
- e. Prof Millar and Dr Hudson-Shore are also developing a new 'Excellent in Research Practice' integrated Research Ethics and Research Integrity training work package for the BBSRC doctoral training programme (DTP) 2020-2028.

- f. Two members of staff (Jackson and Wilding), of the School of Psychology, have served on the editorial board of *Cortex*, which is amongst the first few journals of the discipline to make adherence to transparency and openness a requirement for publication.
- g. The School of Psychology makes a significant contribution to promoting best practice at the national level. Gibson was part of the (NC3Rs supported) group who published the IMPROVE guidelines for in vivo stroke research. Moran was on the steering panel responsible for the Laboratory Animal Science Association (LASA) publication *Guiding Principles for Behavioural Laboratory Animal Science*. This output of collaboration between LASA, learned societies, the Home Office and the RSPCA has the objective to promote best practice for behavioural experiments with animals. Cassaday has coordinated the latest update to the *Guidelines for Psychologists Working with Animals* published by the BPS.
- h. The School of Health Sciences Research Ethics Officer has been appointed as an expert member of the Scientific Advisory Panel of Pharmacy Research UK (PRUK). She is also an external member of the University of Nottingham School of Pharmacy Research Ethics Committee. In addition, individual staff hold positions which impact on research integrity, e.g. roles on editorial boards of journals, membership of funding bodies (NIHR, national charities) and membership of professional bodies (RCP, RCN, CSP, BPS, UKSBM).
- i. Professor Robert Layfield, Head of PPN Division in School of Life Sciences, is Chair of the Paget's Association Research Subcommittee and recently led the production of a piece of guidance, soon to be adopted as policy, for a new 'Research funding Code of Conduct and Conflict policy for Research Committees and Trustees'.
- j. Dr Eleanor Hadley Kershaw drafted content for a UoN institutional response to an EPSRC survey on responsible innovation at the University of Nottingham (August 2019).
- k. The Animal Research Nexus programme involves collaboration with individuals from external bodies including NC3Rs and MRC (see <https://animalresearchnexus.org/people/pac>).
- l. The School of Geography: Several staff have roles with external bodies which expose them to issues of research integrity/ethics. For example, several staff have editorial roles with leading journals and hence encounter issues related to publication ethics (e.g. authorship, plagiarism, dual submission etc.).
- m. Dr. Hobson-West and Dimitris Popodopolous were awarded an ESRC DTP Collaborative Award which involves working with the RSPCA Research Animals Department. The RSPCA are a key stakeholder in the ethics and governance of laboratory animal research in the UK.
- n. Dr. Hobson-West, who remains an Honorary Associate Professor at the School of Vet medicine and Science, has been a co-author on the following outputs.
 - Davies G, Gorman R, Greenhough B, Hobson-West P, Kirk RGW, Message R, Myelnikov D, Palmer A, Roe E, Ashall V, Crudgington B, McGlacken R, Peres S, Skidmore T. Animal research nexus: a new approach to the connections between science, health and animal welfare. *Med Humanit.* 2020 Feb 19. pii: medhum-2019-011778. doi: 10.1136/medhum-2019-011778. [Epub ahead of print] PubMed PMID: 32075866.
 - Hobson-West P, Jutel A. Animals, veterinarians and the sociology of diagnosis. *Sociol Health Illn.* 2020 Feb;42(2):393-406. doi: 10.1111/1467-9566.13017. Epub 2019 Oct 28. PubMed PMID: 31657051; PubMed Central PMCID: PMC7028051.
 - Ormandy EH, Weary DM, Cvek K, Fisher M, Herrmann K, Hobson-West P, McDonald M, Milsom W, Rose M, Rowan A, Zurlo J, von Keyserlingk MAG. Animal Research, Accountability, Openness and Public Engagement: Report from an International Expert Forum. *Animals (Basel).* 2019 Aug 29;9(9). pii: E622. doi:

6. *Internal Monitoring and Audit Processes*

The University Research Integrity and Research Ethics Committee (URIEC) has overall responsibility for monitoring research integrity and ethics, including application of the Code. URIEC undertakes an annual monitoring review of all ethics reviews and committees operated by Schools and Faculties. The current monitoring requires the annual collection of qualitative and quantitative data from Schools by Research and Innovation. These are then reviewed by URIEC, who highlights any issues and makes suggestions for any new policies that need to be developed, identify training requirements, highlights good practice and areas for any other development.

Risks associated with managing University research are considered in the Internal Audit Service (IAS) annual planning cycle. Audit coverage to date has focused on the overall governance framework for research, including policies relating to research conduct and ethics and responsibilities of key groups and committees.

The University continues reflection, evaluation and development towards a set of common best practice standards and is reviewing the Research Ethics Committees structure and will implement plans to strengthen their governance in the coming year.

7. *Research Misconduct*

7.1. *Reporting and Handling Allegations of Research Misconduct*

The University has relevant policies and procedures to respond to research misconduct; namely The Code of Practice on Handling Allegations of Research Misconduct¹², Policy on academic misconduct¹³ Regulations of Academic Misconduct, Staff Disciplinary Procedure¹⁴, Whistleblowing (Public Interest Disclosure) Code¹⁵, Grievance Procedure¹⁶ and the University of Nottingham Ethical Framework¹⁷.

These procedures have 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.

As all these procedures and policies are reported into different administrative services, the University Research Integrity Officer (The Pro-Vice-Chancellor for Research and Knowledge Exchange) and the Head of Research Integrity are the main points of contact for reporting allegations of research misconduct at an institution level and the University's Head of Research Integrity will ensure

¹² <https://www.nottingham.ac.uk/research/resources/documents/code-of-practice-on-handling-allegations-of-research-misconduct-v1-09-jan-2020.pdf>

¹³ <https://www.nottingham.ac.uk/qualitymanual/assessment-awards-and-deg-classification/pol-academic-misconduct.aspx>

¹⁴ <https://www.nottingham.ac.uk/hr/guidesandsupport/performanceatwork/disciplinaryprocedures/index.aspx>

¹⁵ <https://www.nottingham.ac.uk/governance/otherregulations/whistleblowing/index.aspx>

¹⁶ <https://www.nottingham.ac.uk/hr/guidesandsupport/complaintsgrievanceanddignity/grievance/index.aspx>

¹⁷ <https://www.nottingham.ac.uk/governance/otherregulations/ethical-framework.aspx>

compliance with the Code of Practice on Handling Allegations of Research Misconduct and keep a record of any investigations.

7.2. Anonymised Summary on Investigations into Allegations of Research Misconduct

The University has introduced a new Code of Practice on Handling Allegations of Research Misconduct in January 2020. The new process provides clear definition of Research Misconduct and the procedures to be followed in line with guidance from UKRIO, UKRI, and the Advisory, Conciliation and Arbitration Service (ACAS). The University's proficiency in handling allegations of research misconduct has increased, and consequently the number of cases on research misconduct investigated have decreased this year compared to the number of cases reported in previous years.

The details of investigations into allegations of research misconduct reported this year are as below:

- Between **1 August 2019 and 31 July 2020**, two cases were investigated, both cases did not merit a formal investigation and were closed at the screening panel stage. In both cases it was concluded that allegations against the Respondents were not upheld. In one, the screening panel has concluded that the allegations were considered vexatious and malicious. A third case from the previous year was reopened in light of new information coming to light and allegations were dismissed. The funder, Medical Research Council, was informed throughout the process.
- Between **1 August 2019 and 31 July 2020**, only 1 PGR student has been investigated for academic misconduct.

Reference No.	Funder	Fabrication	Falsification	Plagiarism	Misrepresentation	Breach of duty of care	Improper dealing with allegations	Other	Allegations upheld
Case_09.	MRC	0	0	1	0	0	0	0	No

Formal Investigations between 1 August 2019 and 31 July 2020

7.3. Lessons Learned and Identified Needs

7.3.1. Lessons learned assessment is undertaken after every case of research misconduct allegation for the purpose of recording, sharing, avoiding any shortfalls identified, improving current standards and good practices, and contribute to organisational growth and maturity by achieving long term improvements in the way we embed and share best practices.

- a) It was recognised that more training and awareness raising, for researchers at all levels, is needed regarding funders' requirement of being informed of cases of research misconduct related to researchers associated with them.

- b) It is also acknowledged that awareness of research integrity and good practices plays an important role in maintaining good research relations and better appreciation of the differences in opinions and research designs, which in turn would help in preventing potential breakdown in research relations amongst researchers.
- c) It was noted that lead investigators lacked sufficient administrative and process support. As a result, the new Code of Practice on Handling Allegations of Research Misconduct stipulates the Head of Research Integrity's support throughout the process.
- d) It was acknowledged that clearer communications were needed from the very start of the process on what to expect, the next steps and potential outcomes. This is now part of the new Code of Practice on Handling Allegations of Research Misconduct.

7.3.2. What worked well:

- a) The Russell Group Statement of Cooperation in respect of cross-institutional research misconduct allegations¹⁸, when in receipt of an allegation of research misconduct that crosses institutional boundaries to other Russell Group members, ensures that allegations are considered fully, proportionately and fairly; respectful cooperation and communication between all institutions involved; open and transparent while ensuring that legal obligations and duty of care to staff are maintained; avoid unnecessary duplication and allows from the outset, whether it would be most appropriate for a single institutional process, separate processes, or a combination of processes to be followed.
- b) The process allows the consideration of new evidence revealed during HR disciplinary process. This has resulted in the re-opening of a case and eventually allegations were not upheld.
- c) The process takes into consideration potential and perceived conflicts of interest and allows for escalation.
- d) The process makes a clear distinction between HR related disputes and potential research misconduct and allows for them to be handled separately.
- e) The process allows for investigation panels to make recommendations even when the allegations are not upheld.

7.3.3. Identified needs to further support Research Integrity

- a) Post Covid-19 guidance and resource, including more face-to-face training opportunities covering both research integrity and research ethics.
- b) The need for a policy on the use of transcription services to ensure clearer guidance for researchers on how to seek approval for the use of transcription or the services available.
- c) Bespoke training on research integrity and research ethics for the various schools and departments across all campuses, and a formal process for ensuring all research active staff and students are regularly undertaking this training.

¹⁸ <http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/science-and-technology-committee/research-integrity/written/83128.html>

- d) The need for more regular events at the faculty level, where research integrity is discussed, and emerging issues are identified and dealt with.
- e) Utilising “*Research Ethics Support and Review in Research Organisations*”¹⁹ a joint publication by UKRIO and Association of Research Managers and Administrators (ARMA) to align Research Ethics Committees processes.
- f) It was noted that an online research ethics system would increase proficiency and would ensure process alignment across the University.

8. Conclusion

This annual statement to the Council presents the actions and activities that the University has undertaken to sustain and further enhance research integrity, it also outlines some of the measures taken to reduce the impact of some of the restrictions imposed due to Covid-19. This statement confirms compliance with commitment 5 of the Concordat to Support Research Integrity and the research integrity requirements of the UKRI.

9. Action for the Council

The Council is requested to take note of the activities, the University has undertaken to sustain and further enhance research integrity across all aspects of a research process, as delineated in this Annual Statement on research integrity.

¹⁹ <https://doi.org/10.37672/UKRIO-2020.01-ARMA> (<https://ukrio.org/wp-content/uploads/Research-Ethics-Support-and-Review-in-Research-Organisations-UKRIO-ARMA-2020.pdf>)