1. Context

This is the sixth 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 during 1 August 2018 and 31 July 2019 to sustain and further enhance research integrity in the University. This statement will subsequently be publicly released through our University website for accountability and assurance on activities undertaken in support of research integrity which is a compliance requirement of both Concordat to Support Research Integrity1 (the Concordat, hereafter) and the UKRI.

The UKRI requirement is that Higher Education Institutions (HEIs) confirm compliance through the University’s annual assurance statement to HEFCE. The 2018/19 assurance statement is due in December 2019.

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. 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 all academic Schools and relevant Professional Services Departments (Human Resources, Graduate School and Academic Services) by Research and Innovation. All 21 academic Schools and the Faculty of Engineering have responded to the above-mentioned Survey. An overarching summary of the survey responses are presented in this statement in a reporting format as recommended by the UKRIO.

2. Supporting and Strengthening Research Integrity

i. Overview of institution’s strategy and objectives to strengthen understanding of research integrity

The University of Nottingham’s Code of Research Conduct and Research Ethics2 (referred to as ‘The Code’ hereafter) provides a comprehensive framework for good research conduct and the governance of all research carried out across the University. 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 was updated in 2013, following the publication of the Concordat, to make it consistent with the recommendations and requirements of the Concordat and is the basis for applying research integrity across the University.

1 http://www.universitiesuk.ac.uk/highereducation/Documents/2012/TheConcordatToSupportResearchIntegrity.pdf
2 https://www.nottingham.ac.uk/research/ethics-and-integrity/
ii. Introduction or revision of research integrity policies and procedures, requirements, process reviews or support mechanisms

The Code and its implementation are reviewed on an annual basis by the University Research Ethics Committee (UREC) and on a triennial basis by consultation across the institution. These reviews take into account changes and recommendations from external research funders, Acts of Parliament and other legislation. All reviews are undertaken by the University Research Ethics Committee in conjunction with and ratified by the University’s Research Committee, and coordinated by Research and Innovation. The last triennial review of the Code was undertaken by consultation across the institution in 2016.

Further, in response to the requirements of the Concordat and the changing requirements of funders, the University is undertaking a comprehensive review of the processes and procedures for managing research integrity at an institutional level, which included review of the role and remit of UREC. A revised procedure for managing research integrity matters at an institutional level has been developed and has been implemented. The remit and membership of UREC has been expanded and is now the University Research Integrity and Research Ethics Committee. This new committee will oversee research integrity and research ethics policy and procedures for the University. This new committee is a committee of Senate, and will be chaired by the Pro-Vice-Chancellor for Research and Knowledge Exchange. The formation and terms of reference of the new committee will be considered for approval by Senate at their meeting in November 2019.

The Director of Research and Innovation is the named University Research Integrity Officer who has the responsibility to provide ‘confidential liaison for research misconduct complainants or any other person wishing to raise concerns about the integrity of research being conducted under their auspices’.

The REF and Research Policy Manager in Research and Innovation was the named University Research Integrity Manager for the period 1 August 2018 and 31 July 2019 with the responsibility to act as the ‘first point of contact for anyone wanting more information on matters of research integrity’. From November 2019, the newly appointed Head of Research integrity will be the named University Research Integrity Manager.

iii. Summary of education and training provision, communication or awareness raising activities undertaken by Schools and departments within the University

Each School has a Research Ethics Officer with the responsibility for processing research ethics applications, raising awareness of and providing training on research integrity and ethics, producing annual monitoring reports for Research Ethics Committees and keeping Schools informed of the University policy/s and guidance on research ethics and integrity. Research integrity is central to staff induction and post graduate researchers. The schools’ Ethics Committees monitor and ensure high ethical standards across all areas of School research activity.

Research Integrity forms part of termly staff meeting agendas in Schools as a regular reminder of the importance of integrity in their research, especially, the collection, storage and use of research data, thereby highlighting the importance of research data management and open access of research outputs and research data. The University’s Research Ethics Officers’ Forum provides opportunities for sharing of best practice amongst Schools across the University. Research Integrity plays a particular role in the teaching and supervision of dissertation modules of undergraduate courses.

The University, a member of the UKRIO, has access to training provision by UKRIO on research integrity and runs annual training workshops on research integrity which are attended by staff and students.
Within teaching and training activities of Schools, Research Integrity is discussed alongside Research Ethics. Research Integrity is discussed in terms of good scientific practice, for example, observing high standards, compliance, honesty as a researcher, and, bad practice, such as, misconduct, secretive working and self-interest. In addition to training, the University Code of Conduct, and copies of the UK Concordat, are also provided to increase awareness of research integrity. School Intranet pages containing regularly updated guidelines on Research Ethics and Integrity and module pages in Moodle (our training platform) are also used as means of communication with academic staff, researchers and students.

**For Students:** Lectures on research integrity and ethics are embedded in most Under Graduate (UG) courses, Post Graduate Teaching (PGT), Post Graduate Research (PGR) including Professional Doctorate in Education (EdD) training programmes. Information and guidance on research integrity are provided to students through a variety of channels such as,

- Postgraduate research training modules on research methods, research design, for example, the ESRC DTC taught modules for PhD students include a dedicated module on “Research Design, Practice and Ethics”
- Professional Skills modules required as part of the specification for degrees accredited by professional societies, especially in Engineering
- Training on research integrity provided the University Graduate School and central Professional Development services
- Postgraduate Studies Handbook
- The University’s online Epigeum course on ‘Research Integrity’
- Workshops on research integrity led by the CEO of the UK Research Integrity Office (UKRIO) which included presentation and consideration of a number of case studies
- Separate sessions are also provided by the Doctoral Training Centres that are integrated into courses on research design and philosophy of social research which are compulsory for PhD students
- Responsible conduct of research and research integrity introduced as part of new student induction process and student handbook
- Research Skills Programme run by the Graduate School

**For staff:** School Research Ethics Officers play an important role in raising awareness and communicating with researchers in the Schools with information about any updates and changes in either the University and/or the government and UKRIO policies and procedures.

Information and training on research integrity for staff is provided through a variety of routes, for example,

- By having a regular item on ethics and integrity in School meetings and in the School Research Ethics Committee meetings
- Regular email updates on ethics and integrity
- Staff mentoring programme
• Dedicated workshops on Research Integrity run by Schools
• School series of seminars and dedicated workshops on research integrity delivered by UKRIO
• School Away Days with dedicated sessions on research integrity
• Training and information dissemination on research data management, grant writing, open access of outputs, the supervisor’s role in the ethics process
• School Research Career Liaison Officer, a representative for research staff, facilitates sharing of good practice through new staff inductions
• Provision of guidance on research governance during informal mentoring and regular research staff meetings
• Circulation and promotion of the updated University of Nottingham Code of Research Conduct via email, at monthly staff meetings and termly research staff meetings
• Responsible conduct of research, including ethical review, and research integrity discussed at monthly staff meetings and termly research staff meetings
• Research integrity is reinforced as part of annual staff review (PDPR) process
• The E3R programme (a series of seminars and events on topics relevant for research and academic staff) for academic and research staff in Engineering includes sessions on Research Integrity and Ethics

The following research integrity related courses were delivered by the Graduate School to both research students and research staff either through the Graduate School’s central programme of training for researchers or through the faculty specific programmes convened by the Graduate School for the Faculties of Arts, Engineering and Medicine & Health Sciences:

Central programme

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

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
For staff only:

- Introduction to the ethics review process - for new ethics officers and panel members

Training on Research Data Management was delivered by the Graduate School for some parts of the reporting period then transferred to be delivered by the Library Research Support team.

The staff and student engagement with the Epigeum comprehensive research integrity course (tailored for postgraduate students, postdoctoral researchers and early-career researchers across five key disciplines (Arts & Humanities, Engineering, Natural Science, Social Science, and Biomedical Science)) for academic year 2018/19

<table>
<thead>
<tr>
<th>RI Course version</th>
<th>Total Enrolled</th>
<th>Total Engaged</th>
<th>Percentage engaged</th>
<th>Total completed</th>
<th>Percentage completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science</td>
<td>142</td>
<td>109</td>
<td>76%</td>
<td>83</td>
<td>58%</td>
</tr>
<tr>
<td>M&amp;HS</td>
<td>75</td>
<td>63</td>
<td>84%</td>
<td>23</td>
<td>31%</td>
</tr>
<tr>
<td>Arts</td>
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<td>16</td>
<td>84%</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>Engineering</td>
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<td>28</td>
<td>57%</td>
<td>4</td>
<td>8%</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>82</td>
<td>66</td>
<td>80%</td>
<td>29</td>
<td>35%</td>
</tr>
<tr>
<td>Total</td>
<td>367</td>
<td>282</td>
<td>76%</td>
<td>140</td>
<td>38%</td>
</tr>
</tbody>
</table>

The staff and student engagement with the Epigeum concise research integrity course (specifically designed for experienced researchers with some prior training) which was launched partway into the 2018/19 academic year in February 2019

- Researchers who have completed and passed = 18
- Researchers who have completed and failed = 3
- Researchers who have commenced but not completed the course = 19

The RI concise courses were launched in February 2019. The concise course is now part of a portfolio of mandatory RI training offered.

From the central training programme class based provision in 2018/19

- Introduction to Research Integrity (16 researchers trained)
- Research Ethics for doctoral researchers (71 researchers trained)
- Introduction to the ethics review process - for new ethics officers and panel members (3 new officers trained)
- Bespoke RI training for Faculty of Engineering (6 researchers trained)
iv. Any research into research integrity or related fields, such as research ethics, undertaken by members of the School

Five Schools have reported to have been undertaking research related research integrity or related fields such as research ethics. These are as follow:

- Academics within the School of Biosciences are involved in the overview of current Research Integrity provision and the development of future training strategies to extend and provide enhanced training in this area. This has particularly occurred through bids for new Research Council DTP and CDT programmes.

- School of Geography reported that some research within the School has helped define best practice methods and enhanced scientific rigour in their field of study.

- Within Humanities, the Philosophy department has ten members including the current Director of the British Society for Ethical Theory, where research ethics is one of their subjects of research.

- One member of staff in the School of Politics and International Relations is engaged in research on research transparency and reproducibility.

- Staff and students at the School of Veterinary Medicine and Science (SVMS) benefit from activities and teaching led by the Centre for Applied Bioethics, which spans the SVMS and the School of Biosciences. Staff in the Centre have an interest in research integrity but, more specifically, undertake funded research related to research ethics. A number of SVMS staff have been involved in ethics research based in Centre for Applied Bioethics (CAB) and the Institute for Science and Society (ISS).

vi. A description of internal monitoring and audit processes, including information on any revisions or developments

The University Research Committee has overall responsibility for monitoring research integrity, including application of the Code. The University Research Ethics Committee (UREC) undertakes an annual monitoring review of all ethics reviews and committees operating within the 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 a sub-group of UREC, 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. UREC receives a detailed report from the sub-groups and signs-off the process. A new governance structure and processes to strengthen research integrity is being implemented across the University.

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.
3. Addressing research misconduct

i. Confirmation that the University has processes for reporting and investigating of allegations of research misconduct

The University has relevant policies and procedures to respond to research misconduct; namely Regulations of Academic Misconduct, Staff Disciplinary Procedure, Code of Discipline for Students and Fraud Policy. 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.

These procedures can be found at:

Research Misconduct Policy for research student:

http://www.nottingham.ac.uk/academicservices/qualitymanual/assessmentandawards/academic-misconduct.aspx

Quality Manual - Academic Misconduct Policy:

http://www.nottingham.ac.uk/academicservices/qualitymanual/assessmentandawards/academic-misconduct.aspx

Academic Misconduct Procedure:

http://www.nottingham.ac.uk/academicservices/documents/qmdocuments/regulations-on-academic-misconduct----academic-misconduct-committee-hearings.pdf

The University also has a number of resources on research misconduct which can be found at the workspace intranet pages for staff use.

As all these procedures and policies are reported into different administrative services, the Director of Research and Innovation is the single point of contact for reporting allegations of research misconduct at an institution level and is the University Research Integrity Officer who will refer these to the appropriate procedure dependent on the nature of the allegation.

ii. Brief anonymised summary data on any formal investigations conducted by your institution into allegations of research misconduct

The University has introduced a new governance structure and procedure for handling research integrity issues which is one of the outcomes of the review of the governance of research integrity and ethics as alluded to earlier in this report. Implementation of this new structure and procedure has enhanced the University’s proficiency in handling research misconduct cases.

The details of formal investigations reported this year are as below:

Between 1 August 2018 and 31 July 2019, formal investigations were conducted by the University on 2 members of staff involving research misconduct. Of these 2 cases, one case was upheld and the other case was dismissed.

Between 1 August 2018 and 31 July 2019, formal investigations were conducted by the University on 4 PGR student cases. Of these 4 cases, 1 required to undertake another annual review, 1 received a written warning, and 2 are awaiting consideration by an academic misconduct panel.
4. External Engagement

i. Collaborations or initiatives with external organisations to support and strengthen understanding and application of research integrity for example with professional bodies, or funding councils.

Eleven schools and the Faculty of Engineering have reported to have either contributed to or be involved in external events and activities in support of research integrity. For example,

- 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, 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 Wellcome Trust, The Leverhulme Trust, DFID/Royal Society.

- In the School of Business, one of the staff members is an academic member of the Education Committee of the Chartered Institute of Taxation, which also awards research grants, in which ethical considerations constitute an important dimension.

- In the School of Computer Science, one of the staff members is a member of the ORBIT (https://www.orbit-rrri.org) steering committee and was on the panel for the midpoint review of ORBIT by EPSRC.

- In the School of Cultures, Languages and Area Studies, one of the staff members has been working with UKRI and another staff has been working with AHRC.

- In the Faculty of Engineering, undergraduate Engineering courses are accredited by the relevant professional bodies and as part of this accreditation standards are met which include teaching on Research Integrity and Ethics for students.

- In the 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.

- In 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.).

- School of Humanities hosted a Research workshop (Philosophy) on 7th November 2018: Just Philosophy 3. This consisted of 3 papers discussing issues about the relationship between audiences, topics, and research methods in philosophy, with a focus on inclusivity.

- In the School of Psychology, staff are moving towards adherence to Transparency and Openness Promotion Guidelines and two members of staff are on the editorial board of Cortex which is amongst the first few journals of our discipline to make adherence to these guidelines a requirement for publication.

The new ARRIVE (revised) guidelines for the NC3Rs is being ‘roadtested by an academic staff. Another staff member 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. Another
member of staff is updating the Guidelines for Psychologists Working with Animals published by the British Psychological Society.

- In the **School of Sociology and Social Policy**, the Institute for Science and Society (ISS), School of Sociology and Social Policy, is designing and developing a 10-part comprehensive blended course for UoN EPSRC Centre for Doctoral Training students, comprising online content and classroom-based activities. This is in addition to Responsible Innovation training for energy-focused EPSRC CDT students that ISS has been providing since 2009.

- The Animal Research Nexus programme in the **School of Veterinary Medicine and Science** involves collaboration with individuals from external bodies including NC3Rs and MRC (see https://animalresearchnexus.org/people/pac)

### ii. Details of staff or student contributions or involvement in external events and activities in support of Research Integrity such as: Public Engagement Events, Conferences.

Two schools and two Professional Services departments have reported to have either collaboration, initiatives or memberships with external organisations in support of Research Integrity. Examples are:

- In the **School of English**, staff and students regularly participate in external events and activities and thus engage with the theory and practice of research integrity. Recent examples of activity include: special events, e.g. the public exhibition ‘Romantic Facts and Fantasies’ (Lakeside Arts Centre, 2019); and on-going public engagement initiatives such as the Dementia Reading Group, the Community Reading Group, and the Literacy Support Project.

- The **School of Veterinary Medicine and Science** has reported the following engagements:
  - Pint of Science, 21 May 2019, Nottingham: Of mice and men.
  - Should We Label Medicines As Tested on Animals?
  - ‘Understanding the UK Animal Research’ Debate: Puboics, Polls and Protests. Animal Geography Research Workshop, University of Nottingham in 2018
  - Professional laboratory roles: The value of nexus research. LAVA Annual Conference in 2018
  - People and Profession, NC3Rs Midlands Event, Birmingham in 2018
  - Animal Research and Publics: Voices in the UK debate, NC3Rs Midlands Event, Birmingham in 2018

- Staff from **Research and Innovation** and **Graduate School**, participated in the ‘Next Steps for Research Integrity in Higher Education’ conference, London, November 2018. Presenters and contributors were drawn from UK research intensive universities and agencies and bodies with an RI remit. Conference content and action points were shared with University of Nottingham colleagues responsible for RI at a strategic level and with those who are responsible for elements of the RI training provision.
iii. Memberships of, or collaborations with, organisations with a particular interest in research integrity and related issues.

Seven schools reported memberships or collaborations with organisations with a particular interest in research integrity and related issues. For example,

- Staff members from the School of Biosciences and the School of Veterinary Medicine and Science are members of The Nutrition Society, Society for Applied Microbiology, Society for Experimental Biology, Royal Society of Biology, British Ecological Society, British Society of Animal Science (BSAS), European Society of Agriculture and Food Ethics (EurSafe). Each of these organizations has a Code of Conduct / a form of Scientific Integrity Policy.

- In the School of English, 3 members of staff are Fellows of the English Association; 7 are members of the AHRC peer review college, 2 are members of the AHRC Strategic College; and a member of staff is a member of the ESRC’s Strategic Advisory Network. Staff 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.

- In the School of Geography several staff have editorial roles and encounter issues connected with research integrity/ethics as a result.

- In the School of Psychology, 1 member of staff is a member of the British Psychological Society Ethics Committee, as Responsibility; Holder for Animal Welfare in Psychology (2013-2019).

- School of Chemistry is a member of the Royal Society of Chemistry.

- In the School of Veterinary Medicine and Science, 1 member of staff is a member of the Nuffield Council of Bioethics Working Group on ‘Genome editing and farmed animals’ (http://nuffieldbioethics.org/project/genome-editing-farmed-animals), which began an inquiry, and ethical scrutiny, in January 2019 into the potential development of genome editing applications in farmed animals.

- In the School of Health Sciences, 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).

Conclusion

This annual statement to the Council presents the actions and activities that the University has undertaken to sustain and further enhance research integrity and confirms compliance with the commitment 5 of the Concordat to Support Research Integrity and the research integrity requirements of the UKRI.

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.