2022 University of Nottingham Annual Statement on Research Integrity to the Council

Table of Contents

Context

This is the *ninth 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 2021 and 31 July 2022** to sustain and further enhance research integrity in the University. To demonstrate the University's commitment to the Concordat to Support Research Integrity[1] (the Concordat hereafter) and the majority of UK and EU research funders (e.g. UKRI, Wellcome Trust, NIHR etc.); the University has identified and made publicly available a named person who will act as a first point of contact for anyone wanting more information on matters of research integrity, and act as confidential liaison for whistle-blowers or any other persons wishing to raise concerns about the integrity of research being conducted under the University's auspices. In addition, the University publishes and releases publicly through its website, an annual statement on how it's meeting the requirements of the revised concordat for accountability and assurance on activities undertaken in support of research integrity. (https://www.nottingham.ac.uk/research/ethics-and-integrity/index.aspx)

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, Digital Research, Libraries and Student Services has responded separately.

This report has been reviewed by 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.

Actions and Activities that have been undertaken to support and strengthen understanding and the application of research integrity

The University is committed to 'The Concordat to Support Research Integrity' and its values through which trust and confidence in research stem, and from which the value and benefits of research flow. The University, through the various functions and departments, continues to publish, improve, update, and deliver a range of policies, guidance, training, resources to ensure a research environment characterised by our culture of research integrity, good research practice, and the development and training of researchers at all stages of their careers and to assist all staff and students involved in research to meet legal and ethical requirements, and help prevent research misconduct.

Below is a breakdown of the activities and actions undertaken within the University at the different levels and functions:

---

[1] https://www.universitiesuk.ac.uk/sites/default/files/field/downloads/2021-08/Updated%20FINAL-the-concordat-to-support-research-integrity.pdf

1. Research Integrity and Research Ethics - Centrally

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

Research integrity thrives in a positive research culture and environment and the University of Nottingham is committed to enhancing the culture in which research integrity is maintained. The University continues to review the processes and procedures for managing research integrity at an institutional level, with strong leadership by the **University Research Integrity and Research Ethics Committee (URIEC)** [2]. 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 (Professor Dame Jessica Corner) is the named *University Research Integrity Officer*, supported by URIEC, the chair of URIEC Professor Penny Gowland[3], and the Head of Research Integrity.

The Head of Research Integrity acts as the secretary for URIEC and is the point of contact and liaison for all Research Integrity matters across the University including research misconduct queries and investigations[4].

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

1.2.1. As noted in the 2021 annual statement; in July 2021, the University published a dedicated **Code of Practice for Research Ethics Committees (CoPREC)**[5]. Whilst the *Code of Research Conduct and Research Ethics* outlines the guiding principles for conducting research, the CoPREC outlines the minimum expectations for the operation of Research Ethics Review Committees and specific guidance on the operation of School, Department or Faculty Research Ethics Review Committees (RECs) and associated processes, including review criteria. It was designed to ensure alignment of process and governance but also allow discipline-appropriate procedures to be implemented where appropriate and ensures that RECs are always independent in forming their opinions.
The CoPREC was designed to ensure alignment with the principles and standards of the Declaration of Helsinki: Ethical Principles for Medical Research Involving Human Subjects[6] and draws from the joint publication 'Research Ethics Support and Review in Research Organisations'[7] by the UK Research Integrity Office (UKRIO) and the Association of Research Managers and Administrators (ARMA) to support the research community in achieving high standards of research ethics review. It also builds on the UKRI ESRC framework for research ethics[8]; WHO ethical standards and procedures for research with human beings[9];

---

[2] https://www.nottingham.ac.uk/governance/universitycommittees/research-ethics.aspx
[3] https://www.nottingham.ac.uk/research/beacons-of-excellence/precision-imaging/our-experts/penny-gowland/index.aspx
[4] https://www.nottingham.ac.uk/research/ethics-and-integrity/
[5]https://uniofnottm.sharepoint.com/:b:/r/sites/ResearchEthicsandIntegrity/CoPREC%20Docs/Code%20of%20Practice%20for%20Research%20Ethics%20Committees%20v1.1%2009%20July%202021.pdf?csf=1&web=1&e=WgpOMG
[6] https://www.wma.net/policies-post/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human-subjects/
[7] https://ukrio.org/wp-content/uploads/Research-Ethics-Support-and-Review-in-Research-Organisations-UKRIO-ARMA-2020.pdf
[8] https://esrc.ukri.org/funding/guidance-for-applicants/research-ethics/
[9] https://www.who.int/activities/ensuring-ethical-standards-and-procedures-for-research-with-human-beings

and the European Commission's Ethics for Researchers[10]. Faculty and School Research Ethics Committees have successfully worked throughout the reporting period to implement CoPREC in their procedures and governance structures. Some Faculties have established new faculty level RECs, and others have opted to nominating an existing school REC to assume the duties of Faculty REC. The CoPREC is scheduled to be reviewed next year to reflect lessons learnt from its implementation and apply any potential updates. However, given the successful implementation we do not foresee any substantial changes.

1.2.2. **The University's Code of Research Conduct and Research Ethics**[11] (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, including on 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.

The Code has been reviewed and revised in the light of feedback from colleagues and to reflect the changes in the ever-evolving research landscape. As part of the recent revisions of the URIEC approved the inclusion of a Brief Summary of the Code which highlights aspects of research associated with particular risks or requirements in terms of research ethics, integrity or governance. The Summary signposts sources of additional support and guidance, including within the Code, making it easier for researchers to navigate.

All staff and students involved in research are expected to be familiar with the Summary (and to keep up to date with any revisions), to enable them to be aware of situations in which they are likely to need to seek further information, advice or guidance from the full Code.

The Code and its Brief Summary are reviewed annually and updated as necessary by URIEC.

1.2.3. **The Quality Manual**[12] sets out the regulations, policies and procedures around teaching and learning at the University. The manual is updated on regular basis and sets out information and guidance relating to academic misconduct[13]. Regular training is provided for academic misconduct officers in all schools and departments. The scope of the training does include research students.

1.2.4. **Research Ethics and Integrity SharePoint Pages[14]** (internal) were published in May 2020 to provide central support on all aspects of Research Ethics and Research Integrity. These pages are continually updated, including contact information for the research ethics committees and resources for researchers.
Pre-recorded Video presentations are also being added to facilitate ease of access for researchers in their own time.

1.2.5. Guidance on the compliance with the **Nagoya Protocol** on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation to the Convention on Biological Diversity has been updated to reflect the changes introduced post Brexit[15].

1.2.6. **Research Integrity Week**; As part of the University's commitment to strengthen the integrity of research, URIEC, with the Head of Research Integrity and the support of the Researcher Academy, Libraries, Digital Research and UKRIO, organised our second Research Integrity

---

[10] https://ec.europa.eu/research/participants/data/ref/fp7/89888/ethics-for-researchers_en.pdf
[11] https://www.nottingham.ac.uk/research/resources/documents/code-of-research-conduct-and-research-ethics-v8.0-18-nov.-2021-.pdf
[12] https://www.nottingham.ac.uk/qualitymanual/quality-manual.aspx
[13] https://www.nottingham.ac.uk/qualitymanual/assessment-awards-and-deg-classification/pol-academic-misconduct.aspx
[14] https://uniofnottm.sharepoint.com/sites/ResearchEthicsandIntegrity/SitePages/Code-of-conduct.aspx
[15] https://uniofnottm.sharepoint.com/sites/ResearchEthicsandIntegrity/SitePages/Access-and-Benefits-Sharing.aspx

2022 University of Nottingham Annual Statement on Research Integrity to Council

Week from 20-24 June 2022. We delivered more sessions than the previous year, and these were intended to highlight many research integrity aspects, including ethical were delivered throughout the week and was open for staff and student at the University, including its international campuses. The sessions were recorded and subsequently published internally[16] to all staff and student within the University and included; Introduction to the Code of Research Conduct and Research Ethics, Good research practice and a healthy research culture, Papers, Publications and Retractions, Trusted Research, Gathering Research Data Online: Ethical Considerations, Digital Research and Libraries supporting Research Integrity, and Research Ethics and Big Data.

1.2.7. **Clinical Research:** Research Projects involving the NHS, Social care, and Prisoners and Prison and Probation Service is supported centrally by the Research Governance team. The team ensures compliance with and gaining the Health Research Authority approval and compliance with UK Policy Framework for Health and Social Care Research and the MHRA requirements and approvals needed for Clinical Trial of an Investigational Medicinal Product and medical devices. The team also provide a wealth of dedicated templates, SoPs, and guidance on regulatory requirements, best practices, Human Tissue Act and Administration of Radioactive Substances Advisory Committee. The team have dedicated internal pages[17] with information and resources in line with the HRA, MHRA and NIHR guidance and are kept up to date with relevant information and guidance.

1.2.8. **After the virus blog series two**[18]; As the world looks forward to recovering from Covid-19, our researchers reflect on the challenges we face as well as opportunities to rebuild a more resilient, fairer society. There is little that is untouched by the virus, and our experts examine issues ranging from international politics to individual mental health, from delivering economic recovery to consuming culture in new ways.

1.2.9. **Public Engagement**: The Institute for Policy and Engagement[19] has been created to help form partnerships and networks between the University's world-class research, and the people and organisations it can help. The Institute's mission is to support the exchange of knowledge and ideas to enrich policy making, inspire people, support communities, transform lives and shape the future. The commitment to public engagement features in the University's Strategy[20] under '*embedding collaboration in all we' do* goal which commits us to "[…] *endeavour to become a university without borders, reaching out to our students, to our alumni and to our civic partners, industry, governments and citizens to ensure our research and education is developed in collaboration with our stakeholders and that we are recognised for the many benefits we provide to society.*" This commitment is asserted in our Knowledge Exchange and Civic and Regional Strategic Delivery Plans that sit under the University Strategy. The principles of public engagement with research will be embedded in our Digital Nottingham initiative[21].

    1.2.9.1. **Annual Policy Impact and Public Engagement Awards**[22] were introduced by the Institute for Policy and Engagement in 2019 and have been run annually since. Our annual awards (Best policy impact initiative, Best public engagement initiative, Rising star award - policy impact, Rising star award - public engagement, and Institute Director's award) aim to recognise the excellent work by researchers and academics on all campuses in achieving policy impact and engaging the public with current research.

1.2.10. **Research Integrity and Ethics Champions**; The University's Research Integrity and Research Ethics Committee working with the Pro-Vice Chancellor for Research Knowledge and Exchange and Faculties through the University's Research Committee have established two new sets of roles within the University (Faculty Research Integrity Advisors and School Research Integrity and Ethics Champions). These roles now support the promotion of Research Integrity and

---

[16] https://uniofnottm.sharepoint.com/sites/ResearchEthicsandIntegrity
[17] https://uniofnottm.sharepoint.com/sites/ResearchandInnovation/SitePages/Medical-Research-Governance.aspx
[18] https://www.nottingham.ac.uk/research/covid-19/after-the-virus/series-two/index.aspx
[19] https://www.nottingham.ac.uk/research/institute-for-policy-and-engagement/institute-for-policy-and-engagement.aspx
[20] https://www.nottingham.ac.uk/strategy/goals.aspx
[21] https://leadershipatnottingham.com/about-digital-nottingham
[22] https://www.nottingham.ac.uk/policy-and-engagement/About-us/Awards/Awards.aspx

excellence in research across the faculties and schools and ensure awareness of ethical procedures and provide basic guidance to all researchers within the University. They also support the dissemination of relevant messages of excellence and integrity in research and provide advice on poor research practices where identified.

1.2.11. **Trusted Research**: The University published a dedicated resource, Trusted Research Toolkit[23], to support and guide international research projects and initiatives to comply with the Centre for the Protection of National Infrastructure's[24] Trusted Research requirements, which aim to secure the integrity of the system of international research collaboration, which is vital to the continued success of the UK's research and innovation sector. The Toolkit ensures the identification and management of potential risks to your Research/ Knowledge Exchange activities; helps researchers, UK universities and industry partners to have confidence in international collaboration and make informed decisions around those potential risks; and explains how to protect research and staff from potential theft, misuse or exploitation.

The Trusted Research team have substantially increased activities throughout the reporting period with: monthly open sessions during term time with ongoing analysis of attendees by School, Faculty and role (APM or Academic) and bespoke sessions for individual Schools and Research Groups. It has also identified high-risk research areas and provided Senior leaders' briefings.

1.2.12. **Research Integrity Bytes[25]**: are one page notes addressing common 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. Just to give a flavour of areas covered: Health and Safety in Research - Incidental Findings in Research - Version Control in Research - Vulnerable People in Research - Authorship - Documenting and Depositing Research Data- DPA- Online and Social Media Research - Researcher Responsibilities- Recruitment Posters - DPA and Anonymisation - Prize Draws in Research- Children in Research- Consent and Assent- Data Protection UK - Children in Research- Considerations- Data Sharing- Fundamentals of Informed Consent - Steps of Informed Consent- Pre-prints vs Pre-proof-press- Questionable Research Practices- Research Involving Illegal Activities - Health Research Authority - Safeguarding in Research.

1.2.13. **Animal Welfare and Ethical Review Body (AWERB):** All experimental work involving vertebrate animals conducted by the University of Nottingham is considered by AWERB even if this work is below the threshold requiring regulation under the Animals (Scientific Procedures) Act 1986 (ASPA). Research projects within the School of Veterinary Medicine and Science are reviewed by The Committee for Animal Research and Ethics (CARE). Projects received by CARE that fall under ASPA will be referred to AWERB.

1.2.14. **UK Access and Benefit Sharing Regulations**: The University of Nottingham is committed to compliance with the Nagoya Protocol[26] on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation to the Convention on Biological Diversity and the EU's Nagoya Protocol Implementation Regulation (Regulation (EU) No 511/2014). We have updated our dedicated guidance and SharePoint page to reflect updates in this area and published the latest Guidance on the UK Access and Benefit Sharing Regulations 28/04/2022[27] by the Department for Environment Food & Rural Affairs (Defra).

---

[23] https://uniofnottm.sharepoint.com/sites/ResearchandInnovation/SitePages/Trusted-Research-Toolkit.aspx

[24] https://www.cpni.gov.uk/trusted-research

[25] https://uniofnottm.sharepoint.com/sites/ResearchEthicsandIntegrity/SitePages/Research-Integrity-Bytes.aspx

[26] https://www.cbd.int/abs/doc/protocol/nagoya-protocol-en.pdf

[27] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1075912/abs-guidance-defra-2022.pdf

1.3. Digital and Technology Services - Educational and Training provisions, Communication and Awareness Raising Activities

1.3.1. The digital research team continues to update and refresh published guidance and materials to support researchers in managing their research data. The dedicated SharePoint pages[28] (internal) includes resources covering planning, data storage, process and analysis, archiving.

1.3.2. The *Automated Transcription Service[29]*, allows researchers to safely and securely transcribe audio files into text and increasing compliance with data protection regulations. The service has been updated and now uses the latest Microsoft transcription algorithms. The service has also been reconfigured to remove file-size limits from uploaded audio. It is fast, secure and cost effective.

1.3.3. Ongoing membership of, and contribution to, the Faculty of Social Sciences Research Ethics Committee with regular presentations and involvement aimed at staff.

1.3.4. Organisation and membership of the University's Research Data User Group, which champions FAIR[30] data across the organisation and is responsible for the University's Research Data Management Policy (aimed at staff and PGRs)

1.3.5. Trusted Research Environments[31]; Launched as a University-wide service to enable datasets belonging to organisations and research partners that are external to University of Nottingham to be shared with researchers within the University of Nottingham without the data being transferred into Nottingham IT infrastructure. Analysis can be performed inside the TRE research environment and the external organisation or partner can have assurance that the data resides only in the TRE research environment. TRE is founded on work done by the Alan Turing Institute to deliver a TRE standard, for use across UK research institutions. Trusted Research Environments are also known as Data Safe Havens.

1.3.6. Guidance on the Ethical Use of Artificial Intelligence approved and integrated into the process for developing new, University-wide technical solutions/services that rely on artificial intelligence technologies.

1.3.7. Introduction of multi-factor authentication for University-managed storage and systems, helping to protect research data against loss and theft

1.3.8. Training and awareness sessions around digital research and data management planning, for both staff and PGRs, including 'Digital Research and Libraries supporting Research Integrity' presentation as part of the University's Research Integrity week (aimed at staff and students)

1.4. Libraries- Educational and Training provisions, Communication and Awareness Raising Activities

Libraries provide a range of systems, services, advice, and training to enable researchers to conduct and disseminate robust and credible research:

1.4.1. Research Data Management
- Data management plan review: advice researchers on how to obtain & analyse data in a transparent, rigorous and ethical way. Advise on best practices in sharing data to ensure it is FAIR where possible, but secure when not.

---

[28] https://uniofnottm.sharepoint.com/sites/DigitalResearch/SitePages/Publish.aspx

[29] https://www.nottingham.ac.uk/dts/researcher/applications-and-tools/automated-transcription.aspx

[30] https://www.go-fair.org/fair-principles/

[31] https://uniofnottm.sharepoint.com/sites/DigitalResearch/SitePages/Trusted-Research-Environment.aspx

- Research Data Management training: Bespoke sessions to schools/research groups (primarily staff & PGRs). Moodle course on introduction to RDM (primarily PGR & PGT).

1.4.2. Support researchers in complying with copyright & funder obligations
- Gold team staff ensure that researchers are complying with UKRI & Wellcome Trust Open Access requirements e.g. open license, acknowledgment of funders in manuscript.
- Dedicated online pages on copyrights and advice.
- Training sessions on Copyright & Where to Publish (primarily PGR).

1.4.3. Support transparent sharing of research findings
- Management of RIS (publications) & RDMC (data) repositories.
- Provide DOIs to ensure longevity of data underlying findings.

1.4.4. Increase understanding of Open Research at the University
- Development of Open Research webpages.
- Promote and advise on open protocols for systematic review and more widely.
- Promote and advise on sharing of software as well as data.

1.4.5. Management of secure & sensitive data
- Recently acquired a SafePod to ensure safe and secure access to sensitive external data sets at the University.
- Provide access to a 'dark' archive where sensitive data can be archived but not shared.

1.4.6. Working with the University Research Integrity and Research Ethics Committee
- Fed into Code of Research Conduct and Research Ethics annual review, ensuring Open Access and Research Data Management sections are up to date.
- Took part in the University's Research Integrity Week (20-24 June 2022) and delivered a session titled "Digital research and Libraries supporting Research Integrity".

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

1.5.1. The Researcher Academy (RA) 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.

The Researcher Training and Development provision, which spans throughout all stages of the Researcher career, from PhD Students to Early Career Researcher to Supervisor and Senior Research Leaders, aims to instil and further develop the commitment to Research Integrity in our community. The RA continued to support attendance to events and conferences through our Online Conference Fund and Public Engagement activities such as 3-minute thesis (3MT) and Pint of Science.

1.5.2. Research Culture Conference: In July 2022, the Researcher Academy organised University of Nottingham first Research Culture Conference attended by research staff, postgraduate research students, technicians, academics, senior leaders, and professional service.
The conference explored how we transform our research culture into one that empowers everyone involved in research to feel valued, achieve their very best and fulfil their highest ambitions.
Research Culture comprises the behaviours, values, expectations, attitudes, and norms of our research communities. It influences researchers' career paths and determines the way that research is conducted and communicated. At Nottingham, we want to build a healthy and ambitious Research Culture that aims to solve the biggest challenges humanity has ever faced while nurturing talent. Working together and sharing personal and collective responsibility ensures we create a diverse, inclusive, equitable, forward-looking, and high-performing research community.
Participants at the conference participated in open discussions about what a healthy research culture at Nottingham should be; shared challenges that they face as researchers and how they could be part of collective problem solving; look into examples of how colleagues are improving research culture in their areas; and heard from leaders in the Researcher Community.

1.5.3. The Concordat to Support the Career Development of Researchers; We are proud to have been awarded the European Commission's HR Excellence in Research badge[32].

The award was first won by the University in 2010 based on our commitment to implement the principles of the 2008 Concordat to Support the Career Development of Researchers[33]. Since this original award the University has successfully renewed the award recognition following a biennial review process, most recently with a successful review in 2020.

In 2021, the Research Staff Group[34] commissioned a RAG analysis on the institutional readiness to the new 2019 Researcher Development Concordat. A Task and Finish Group comprising researchers, academics and professional service staff utilised the findings of this RAG analysis during their research and writing of a new forward facing action plan and strategy for the implementation of the 2019 Concordat. The new action plan 2022-24 and four year implementation strategy (2022-26) were approved by Research Committee, University Executive Board and Council.

RA will continue to report on the implementation of the Concordat, through a review process commissioned by the institutional Research Staff Group, which will be presented to Council annually.

1.5.4. The RA offers training in Research Integrity (RI) related topics both within the central programme of training and within a series of Faculty specific training programmes.

During 2021-2022 the RA continues to support the delivery and evaluation of the Research Integrity Courses developed by Epigeum®[35] (RI Comprehensive and RI Concise), with the new version launched in September 2020 via Moodle.

RI Comprehensive: The course has 6 core modules and 7 optional modules, where each module has an associated quiz at the end. Passing all 6 core modules qualify for a certificate. 219 participants enrolled during the reporting period.

RI Concise; is a shorter version particularly useful as a refresher, open to all staff and students. 286 participants enrolled during the reporting period.

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:

a. *Within the central programme* -

- 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*

- Good laboratory practice: fundamentals.
- Good laboratory practice: techniques.
- Exploring ethics in research.
- A question of ethics: the use of humans and animals in biomedical research.
- Responsible Research Innovation across all faculties.

1.5.5. Working with the University of Nottingham Research Integrity and Research Ethics Committee, and the Head of Research Integrity, RA helped promote the Research Integrity Week from 20-24 June 2022.

1.5.6. 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

---

[32] https://www.vitae.ac.uk/policy/hr-excellence-in-research
[33] https://www.vitae.ac.uk/policy/concordat-to-support-the-career-development-of-researchers
[34] https://uniofnottm.sharepoint.com/sites/RA-ResearchStaff/SitePages/Research-Culture.aspx
[35] https://www.epigeum.com/epigeum/

Head of Research Integrity. Working with the Head of Research Integrity, we facilitated the delivery of the following sessions:

- 3 sessions: Research Ethics for doctoral researchers.
- 4 sessions: Introduction to the Code of Research Conduct and Research Ethics.
- 3 sessions; Introduction to the ethics review process - for new Research Ethics Officers and Research Ethics Panel members.
- 3 sessions: Introduction to the Nagoya Protocol and Access and Benefit Sharing (ABS).

1.5.7. The Researcher Academy, through its many activities, holds membership and collaborates with a number of organisations that have got Researcher Integrity in the very core of their mission. Among them are:

- UKRI (and its Councils)
- Welcome Trust
- Leverhulme Trust
- U21
- Vitae
- EUA Council for Doctoral Education (EUA-CDE)

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

1.6.1. The University of Nottingham is committed to proactively creating an inclusive environment and works collaboratively with colleagues across the University to raise awareness of EDI. This includes a diversity festival and recognition month activity focusing on:

- Black History Month
- International Women's Day
- LGBTQ History month
- Disability Recognition Month

1.6.2. In addition, we have worked with local stakeholders and community members to collaborate on work such as the recognition of Stephen Lawrence Memorial Day; Holocaust Memorial Day; and Eid on the Downs. This work celebrates our diverse communities, provides opportunities to work on impactful activity with our staff liberation/EDI networks, and builds partnership and trust with historically and systemically excluded communities within the University and beyond. This year, recognition month event work has included: film screenings; keynotes; Inclusivity Toolkit launches, social media campaigns; and art and photography exhibitions.

1.6.3. The University hosted its second annual diversity festival[36] in June 2022, enabling staff, students and alumni to 'embrace and celebrate difference'. The festival offered a launch, four keynote events, over 20 local events and local celebrations across the university. Our researchers benefitted from learning about Equality diversity and inclusion cards an interactive tool for engaging with EDI in research[37].

1.6.4. The University has voluntarily published our ethnicity pay gap data alongside gender pay gap reporting to help drive positive progress in inclusivity for a 2nd year. In 2020/21 we saw a decrease in our ethnicity pay gap and we are committed to reducing both our gender and ethnicity pay gaps through concrete actions.

1.6.5. Focus on supporting wellbeing - Between the dates outlined, the University has implemented a staff wellbeing steering group, chaired by Professor Katherine Linehan our PVC for EDI &

---

[36] https://www.nottingham.ac.uk/diversityfestival/diversity-festival.aspx
[37] https://www.nottingham.ac.uk/diversityfestival/events/local/2022/equality-diversity-and-inclusion-cards-an-interactive-tool-for-engaging-with-edi-in-research.aspx

2022 University of Nottingham Annual Statement on Research Integrity to Council

People, to oversee a gap analysis process designed to understand gaps in accessibility and availability of our wellbeing resources for our staff population. An action plan is now in place to address identified gaps. A communication plan has also been implemented to share existing wellbeing resources more widely, to date a quarterly newsletter is now issued and the webpages are under review. The University has also undertaken a commitment to the mental wellbeing of staff by signing up to the Mental health at Work Commitment, a framework designed to support and improve mental health in the workplace.

1.6.6.   The Organisational and People Development team (bringing together Professional Development, and Leadership and Management teams) have sought to enable research staff to develop their understanding of the university's core values that contribute to research integrity. These values function as 'red threads' throughout our learning offer.

    1.6.6.1.   Within our Teaching and Learning activity we promote and celebrate the institutional culture of Scholarship of Teaching and Learning through an evidence and values based approach to professional development in support of demonstrating impact and nurturing reflective practice. Activities and outputs associated with these core features sustain and grow a rich community of practice and scholarly environment at UoN and inform the theory and practice of teaching and learning.

    1.6.6.2.   Both Research-only and Research & Teaching communities engage with a diverse offer of workshops, conferences, programmes of learning, resources, and reward and recognition schemes.

    1.6.6.3.   In relation to leadership and management skills, a focus has been to increase the number of staff from the research job family that are engaging with and accessing our offer. In real terms this has led to a doubling of the number of research staff coming on a programme between 2019/20 and 2021/22.

1.6.7.   The Faculty of Arts has launched its new Arts Research Career Toolkit for staff on Research and Teaching, and Research-focused contracts. This is a SharePoint site, sitting alongside our Arts Research Hub. It aims to assist staff in navigating the different stages of their careers and in accessing all the varied support structures available. The Toolkit is primarily intended to signpost helpful information and resources, and to provide material that invites researchers to consider how to plan their research career. It is also a place where they can hear the views of colleagues from across the faculty – at all levels and across various disciplines – sharing their personal experiences. These are offered as short video recordings on a variety of topics including: preparing for and securing promotion; starting out with KE and working with partners outside academia; taking on leadership roles within the University or advisory/strategic roles for external bodies; and how individuals have approached planning and publishing gold standard outputs within their field.

1.6.8.   A Work-related Stress Task and Finish Group has reviewed existing practices and developed recommendations for the prevention and management of stress. A revised policy has been approved and a stress risk assessment survey was piloted in both academic and professional service areas. The next step is to integrate this work with other initiatives addressing workload and wellbeing and to integrate questions which will enable us to survey the wider institution leading to the development of action plans for the reduction and management of stress.

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

In line with the new CoPREC, each faculty has a Faculty Research Ethics Committee whereby the School Research Ethics Committees and/or Research Ethics Officers with the responsibility for research ethics, raising awareness of and providing training on research integrity and ethics, writing annual monitoring reports for Research Ethics Committees, and keeping their Schools informed about the University's policies on research integrity and ethics.

Below is a select of the activities reported by the faculties within the University.

2.1. Undergraduate, Taught and Research Students:

- 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 and Research Ethics is embedded in many UG and PGT courses. Example activities.

  - School of Health Sciences: The ESRC DTC taught modules for PhD students include a dedicated module on "Research Design, Practice and Ethics". Tailored session consideration of ethical principles and dilemmas in research as well as information about research governance. The content is tailored for the level of research engagement expected at the learners' level.

  - School of Economics: UG and PGT Student Handbooks include information on academic misconduct Dissertation-linked module for UG students discusses plagiarism and other types of academic misconduct relevant to UG dissertation. Dissertation linked module for PGT students gives information on academic misconduct and all PGT students complete an academic integrity statement before submitting dissertation.

  - Law: Staff and students were also directed to the new training provided by the Graduate School, and the new Research Ethics and Integrity SharePoint. PhD training and supervision, REC activities (pertaining to both staff and students' research), and teaching provision across all UG and PGT degree programmes delivered by the School.

  - School of Geography: research integrity and good research practices are addressed in key documents such as Dissertation Handbooks and lecture presentations for UG and PGT students.

  - School of Sociology & Social Policy: provides annual induction training in research ethics and the ethical review and Research Ethics and Integrity Committee (REIC) process at the beginning of the academic year to all relevant School students (UG, PGT, PGR) incl. third-year undergraduates commencing work on their dissertations; ethics masterclass (and new workshop) to UG students working on their final-year dissertations is delivered; PGT supervisors are invited to attend the PGT REIC overview session.

  - School of Biosciences: The School notes its coverage of Research Ethics and Research Integrity across the School's UG and PGT courses through embedded research ethics lectures; additional training has been developed and embedded across new and existing PGT / PGR courses.

    PGR Training: A new work package (WP) on Research Ethics (RE) and Research Integrity (RI) has been developed for the BBSRC DTP Programme. This has been delivered twice (2020-2021/2021-2022) and has further been developed into a 20 credit Level 4 Module that will run in the academic year for 2022/23 - BIOS3024 - Research Ethics and Integrity. The Module Convenors are Prof Kate Millar and Dr Michelle Hudson-Shore (Centre for Applied Bioethics) and this training capacity is being developed with the Researcher Academy. An experimental design module has been developed by Prof Murray Lark for PGR and PGTs, this 10-credit module ran for the first time in 2021/22. The School is also developing discrete training that relates to specific research areas such as (i) Research Ethics Review training; and (ii) experimental design and animal research. New activities are planned for the academic years 2022/23 and 2023/24. The School has a discrete page on Workspace for Research Integrity information and links to the UK Research Concordat, alongside DPA 2018 documents and other research ethics policy documents. These pages will be migrated to SharePoint pages this year to be in line with the University URIEC SharePoint pages.

- Computer Sciences: PGT students are introduced to Research Integrity during their Research Methods module (COMP4037). The Horizon Centre for Doctoral Training includes a compulsory module on responsible innovation (for new PhD students on that programme).

- Pharmacy: Undergraduates on our MPharm degree are introduced to the Standards for Pharmacy Professionals, and Fitness to Practice (FtP) procedures, in their first few weeks on the course. FtP training includes Case Studies that include issues of research integrity.

- 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.

- School of Life Sciences: a Dr Eleanor Hadley Kershaw, SBRC RRI Research Fellow, delivered 1 UG lecture: Year 2 UG lecture (Microbial Biotechnology module LIFE2020) 'Synthetic biology and Responsible research and Innovation (RRI)' (March 2022); and contributed material to Year 3 UG lecture (Science and Society module LIFE3044) 'Responsible Innovation' (March 2022). Dr Vincent Wilson, Chair of school's Ethics Committee, delivered a lecture on ethics to undergraduate students that covers a case example of Research Integrity as part of the Science and Society Year 3 module offered to students doing Biology-related courses in the School of Life Sciences.

- School of Veterinary Medicine and Science: Research Integrity Week, the School ran an interactive workshop with researchers (academic and PG students) on research integrity, which included discussion of a variety of different case studies (adapted from the UKRIO case study pack) covering different aspects of research integrity and ethics (incl. publication authorship, participant consent, research data management)

- All PhD students must complete a mandatory Research Integrity Training in their first year.

2.2. Research and Teaching (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.

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.

The Research 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.

- The School of Biosciences and the School of Veterinary Medicine and Science host the Centre for Applied Bioethics (CAB)[38]. This research group comprises of academic staff from across the University, honorary professors and lecturers, research fellows and PhD students. These researchers conduct 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.

- The School of Geography: the School has acted to raise awareness of research integrity amongst its community throughout the year. Staff and PGR students have been informed of relevant training courses and useful documentation circulated. Reminders on the need for

---

[38] https://www.nottingham.ac.uk/research/groups/centre-for-applied-bioethics/index.aspx

2022 University of Nottingham Annual Statement on Research Integrity to Council

ethical review are also integrated into announcements of new research opportunities. New staff are briefed on the School's ethical review process as part of their induction.

- The School of Social Sciences: The School maintains an ethics website; regular email updates; items on ethics in School meetings and in meetings of the Research Committee. The REIC itself also meets several times a year. Staff and PGRs are required to attend the RI concise training course, for example via our ethics website. The School's ethics website provides guidance and links to ethical review processes, and is continually updated.

- Chemistry: information on the 'Introduction to the Nagoya Protocol and Access and Benefit Sharing (ABS) Webinars' with information and web links for students and staff to book online sessions via the Research Academy pages was sent on the 22nd March 2022 to all students and staff within the School of Chemistry who would like to learn more about compliance with the Nagoya Protocol. A web link was also provided to all to watch a relevant short (10 mins) video presentation.

- The School of Mathematical Sciences' Research Integrity Summary for Staff document was updated in June 2021. Available on Workspace/Moodle, it summarises actions taken by the University, the core elements of Research Integrity, School contacts, and available training for staff and students.

- The Sir Peter Mansfield Imaging Centre (SPMIC) fortnightly meetings regularly include features related to research practice and research integrity.

- School of Medicine: Jonathan Hollands regularly presents an online interactive Research Integrity Seminar. 3 sessions delivered over the past year.

- School of Veterinary Medicine and Science: Research Integrity Week, the School ran an interactive workshop with researchers (academic and PG students) on research integrity, which included discussion of a variety of different case studies (adapted from the UKRIO case study pack) covering different aspects of research integrity and ethics (incl. publication authorship, participant consent, research data management)

- Staff are advised 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.

- 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.

- 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.

- School of Health Sciences: a peer review system for research grant applications; a lone worker protocol; guidance on the responsibility of Principal Investigators including payment to research participants; guidance on good practice in research; a risk assessment protocol and advice (including updated COVID-19 risk assessment for students collecting data in the UK and International students' home countries). The School operates a research mentoring scheme both formal and informal. Staff also have access to support within their Research Groups.

2.3. *University of Nottingham Malaysia*

The University of Nottingham Malaysia (UNM) have established a new campus-wide committee to coordinate research integrity and research ethics activities at the Malaysia campus. This committee

modelled on the UK campus's URIEC. It oversees research integrity and research ethics activities of the Faculty of Science and Engineering (FOSE) and Faculty of Arts and Social Sciences (FASS), and report to UNM's Research and Knowledge Exchange (RKE) Committee and the UK's URIEC. The chair is Dr Steve Stewart-Williams from the School of Psychology who is also a member of UK's URIEC.

2.3.1. Faculty of Arts and Social Sciences Research Ethics Committee: All Directors of Research and/or School Research Ethics Officers have been requested to advise their colleagues and PGR students in their school to self-enrol on the FASS REC Moodle page. This page contains relevant guidance and information on research ethics, i.e., the University's Code of Research Conduct and Research Ethics, application forms and procedure, and online training on research ethics that can be accessed freely. Supervisors are expected to ensure that their PGR students gain ethical clearance from FASS REC, if needed, before collecting their data.

Staff Activities

1. Ensure the faculty and school research ethics processes are clearly communicated to staff by

    a. Encouraging existing staff to self-enrol on the FASS REC Moodle page
    b. Enrolling all new staff automatically on the FASS REC Moodle page
    c. Including relevant information on FASS REC and ethics processes in the School's research handbook
    d. Placing the School's research ethics protocol and forms on SharePoint and/or the School's Teaching and Learning Moodle page
2. Incorporate research ethics and integrity into the induction for new staff (e.g., build in a one-to-one session with the School Research Ethics Officer, provide relevant information in a handbook, etc.)
3. Email reminders to staff (at the start of each academic year) to include the School's research ethics guidance and forms in their module Moodle pages as well as advice on ethical review in their module handbooks
4. Email reminders to staff to use the latest application forms and templates provided via the FASS REC Moodle page
5. Encourage staff to self-enroll on the 'Research Integrity: Comprehensive' Moodle course and to engage with the online training provided in the page)
6. Remind staff of the research ethics process whenever applications for research grants are made

Student Activities
1. Incorporate research ethics and integrity into the induction for new PG students (e.g., highlight research ethics training conducted by the Graduate School (GS))
2. Email reminders to PGR students to use the latest application forms and templates provided via the FASS REC Moodle page
3. Encourage PGR students to self-enroll on the 'Research Integrity (Social Sciences)' Moodle course (https://moodle.nottingham.ac.uk/course/view.php?id=99530)
4. Request PhD to attend research ethics workshops/training by the GS, especially if they are conducting interviews or surveys with human subjects
5. Conduct annual workshops on ethics policies for PG students by individual school and GS.
6. Include general information about ethics and the relevant forms that students must complete in programme handbooks, programme Moodle pages, module handbooks and/or Moodle pages for modules
7. Offer a research methods module to PGT students as part of their MA programme
8. Build in ethics considerations/training into taught modules that have a research element
9. Incorporate an ethics/proposal stage into taught modules that have a research element to ensure ethical clearance is gained prior to any data collection
10. Conduct a briefing session/training on research ethics and the ethics review process for each run of modules with research elements (e.g., dissertation modules)
11. Email reminders to students about the ethical review around the time they are completing their dissertation research proposals

2.3.2. Faculty of Science and Engineering Research Ethics Committee:

1. Ethics Workshops for New Graduate Students and New Staff Members: With each new intake of graduate students (twice per year), the Graduate School puts on an ethics workshop run by the Chair of RIREC. The workshop explicitly deals with a range of research-integrity issues.

2. 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.

3. 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. It explains the processes that need to be followed for submitting applications for ethical approval, procedures related to allegations of misconduct, standard templates of official forms, codes of conduct, and links to further information.

4. Research Integrity Week 2021-2022. The Graduate School, the Chair of RIREC and the Chair of SEREC promoted this to graduate students in various ways.

2.4. University of Nottingham Ningbo China

During 2021-22 academic year, several training components and compulsory courses were organized in faculty level for both students and staff. In addition, all BA, MA, and Research Methods modules teach students what ethics is and how and when they should ask for ethics approval. Trainings included:

- Research Ethics training for PhD students, August 2022, PhD students
- Research Ethics Training, October 2021, students and staff
- Research and Innovation Training: Academic Research as Driver of Innovation and Growth, December 2021, PhD students
- Workshop on research ethics for PhD students in FHSS, December 2021, PhD students
- Introduction of research ethics to new intakes of PhD students, Feb 2022, students;
- Introduction of research ethics to PGTs for dissertation, Feb 2022, students
- Research Ethics compulsory course for PhD students, March 2022, PhD students
- Research Ethics compulsory course for PhD students, April 2022, PhD students
- Workshop on "Ethics and Research Integrity for Better Research", May 2022, staff and students
- Research Ethics compulsory course for PhD students, May 2022, PhD students
- Research Ethics training for PhD students, May 2022, PhD students
- V. Brusic Participated in UoN Three-campus Research Integrity Week, presented talk "Research Ethics and Big Data" July 2022

3. Research Relating to Research Integrity

3.1. 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, Prof Hyde, Dr Hobson-West), 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.

- Projects being conducted within CAB are examining themes of (i) Ethics of Animal Use in Experimentation; (ii) Development of tools and frameworks for ethical assessment, (iii) the

relationship between Responsible Research and Innovation (RRI) and Research Ethics, (vi) development of Ethical Tools to support decision-making in (animal) REC processes, (v) openness and transparency in bioscience research; (vi) Approaches to research ethics training for biosciences researchers.

- Other academics in the School who have a social science training 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.

- Research published this year that relates to developing ethics tools and frameworks include: Matandika, L, K Millar, E Umar, E Joy, J Mfutso-Bengo (2022) Operationalising a real-time research ethics approach: supporting ethical mindfulness in agriculture-nutrition-health research in Malawi. BMC Medical Ethics 23 (1), 1-17

b) School of Chemistry: Martin Dellar, our Head of Technical Services, has been doing some work for the Faculty of Science on research ethics, specifically on research publications and acknowledgements for technical services colleagues. Nottingham has over 650 technicians working across all our campuses with many making significant contributions to research outputs. This richness and depth of contribution is currently not captured so we have been working at University and Faculty level to understand research ethics and what contributions technical colleagues need to make to research projects in order to be acknowledged as authors or as a contributor in an acknowledgement statement. We have been communicating our findings to technical colleagues, encouraged their involvement in the Universities Research Integrity Week and are doing further work on encouraging academic colleagues to acknowledge technical contributions so we can measure the impact technical colleagues have made.

c) Computer Science: There are two current (linked) research projects on Responsible Research and Innovation (RRI), one in the Horizon Digital Economy Research Institute and one in the UKRI TAS Hub (where School of Computer is a core member) which have a Research Integrity component. These projects are looking specifically at responsible research and innovation with trusted data-driven products and trustworthy autonomous systems. This is also supporting ongoing work developing card-based tools to facilitate reflection on technology system ethics (and legal and social issues) as well as RRI. Similarly, Horizon and the TAS Hub both promote research integrity as a guiding principle. As noted above, all projects are specifically required to address RRI and EDI issues from their early stages.

3.2. Faculty of Medicine and Health Sciences

a) School of Medicine: There are several publications linked to research ethics and governance, in which School of Medicine researchers have contributed to and these researchers are emboldened in the citations below.

- Can an "Anatomy Law and Ethics" course decrease medical students' fear of the body being destroyed during dissection once donated? Patera E and Khamuani MP (2021) Anat Sci Educ . 2021 Nov;14(6):864-869. doi: 10.1002/ase.2111. Epub 2021 Oct 11.

- There was additional research integrity research carried out in 2021, that was not previously reported on, but was published just outside of this current reporting period for 2021 – 2022. These publications are as follows:

- Concerns about Data Integrity of 22 Randomized Controlled Trials in Women's Health. Liu Y, Thornton JG, Li W, van Wely M, Mol BW. Am J Perinatol. 2021 May 18. doi: 10.1055/s-0041-1727280. Epub ahead of print. PMID: 34005825.

- An investigation of seven other publications by the first author of a retracted paper due to doubts about data integrity. Bordewijk EM, Li W, Gurrin LC, Thornton JG, van Wely M, Mol BW (2021) Eur J Obstet Gynecol Reprod Biol, 261:236-241

- Ethics and Harm Reduction Approaches in Tobacco Control. Ashcroft RE, Langley T. (2021) Nicotine Tob Res. 2021 Jan 7;23(1):1-2. doi: 10.1093/ntr/ntaa228.

b) School of Life Sciences: Dr Eleanor Hadley Kershaw led a programme of research, with PDRAs Penny Polson and Ashley Lewis, on RRI across several research projects affiliated

with the SBRC (including delivering RRI workshops for project partners and wider scientific, industry, policy, civil society communities):

- SBRC core project (BBSRC/EPSRC) (to 30 March 2022) 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.

- ENGICOIN (H2020) investigates the relations between science, technology and society and facilitates an RRI approach by delivering RRI training and workshops for Consortium partners and conducting research into the social dimensions of the project.

- Carbon Recycling Network (BBSRC-funded Network in Industrial Biotechnology and Biofuels (BBSRC-NIBB), 2019-2025): development of RRI workshops.

- BIOMETCHEM (ERA CoBioTech funded, 2018-2021: 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 with scientists, social scientists and stakeholders/members of the public. Report available here: https://sbrc-nottingham.ac.uk/documents/rri/biometchem-wp2-rri-report.pdf

- SynConsor4Butanol (ERA CoBioTech funded, 2019-2022: RRI, Responsible Research and Innovation.

- Outputs of this work include: Hadley Kershaw, E. Forthcoming 2023. Multispecies mending from micro to macro: biome restoration, carbon recycling, and ecologies of participation. In D. Papadopoulos, M. Puig de la Bellacasa & M. Tacchetti (Eds.), Ecological reparation: Repair, remediation and resurgence in social and environmental conflict. Bristol University Press (and accompanying YouTube video as part of Ecological Reparation YouTube channel); Hadley Kershaw, E., Hartley, S., McLeod, C., & Polson, P. 2021. The sustainable path to a circular bioeconomy. Trends in Biotechnology, 39(6): pp. 542-545. https://doi.org/10.1016/j.tibtech.2020.10.015 ; the BioMetChem report mentioned above; and several other journal article manuscripts and reports at various stages of development.

c) School of Veterinary Medicine and Science: Staff and students at the School 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 the ethics of research involving humans and animals.

- Professor Pru Hobson-West (moved to School of Sociology and Social Policy in 2018), who remains an Honorary Professor in the School of Veterinary Medicine and Science, teaches bioethics in the School and conducts research through the Centre for Applied Bioethics and the Institute for Science and Society (ISS). Recent research that Professor Hobson-West is involved in, relating to animal research and ethics, include:

  o The Animal Research Nexus: Changing Constitutions of Science, Health and Welfare (Wellcome Trust 2017-2022). This programme of work aims: 1) to understand the historical interrelations between science, health and animal welfare 2) to identify challenges to animal research raised by scientific and social shifts around species and supply, professional roles, and patient engagements and 3) to facilitate dialogue with stakeholders, scientists and publics across the Animal Research Nexus. The overall programme seeks to identify what is required to remake the social contract around animal use in 21st century science and medicine. See https://www.animalresearchnexus.org/

  o Ensuring the social legitimacy of animal research (ESRC PhD Studentship with RSPCA, 2019-2022). This project focuses on the topic of animal research, with the aim of comparing 'public' expectations around animal research governance with current UK policy. The project explores the public imaginaries of animal ethics committees known as AWERBs (Animal Welfare and Ethical Review Bodies), and how the democratic legitimacy of scientific practice is constructed. Recent publications:

- McGlacken, R., & Hobson-West, P. (2022). Critiquing imaginaries of 'the public' in UK dialogue around animal research: Insights from the Mass Observation Project. Studies in History and Philosophy of Science, 91, 280-287. https://doi.org/10.1016/j.shpsa.2021.12.009
- Hobson-West, P., & Millar, K. (2021). Telling their own stories: Encouraging veterinary students to ethically reflect. Veterinary Record, 188(10), Article e17. https://doi.org/10.1002/vetr.17

- Professor Madeleine Campbell, Professor of Veterinary Ethics within the School, is also a leading expert on animal welfare, ethics and law. She is leading initiatives to develop ethical frameworks for the use of animals in sport. She is, together with other staff within the School and external organisations, also currently leading a project (2022-) on the development of an ethical framework to support the function of the veterinary animal care team.

d) Libraries: Beth Montague-Hellen, Senior Research Librarian has had a paper accepted for publication in UKSG Insights on the following:

- Open Research, and the sharing of data, has rapidly grown as a practice during the 21st Century. Advocates laud the practice as one which speeds up the progress of research and ensures that public funds are used to the best effect. To this end, UKRI, amongst other funders, instituted a set of data sharing principles, including the mandated inclusion of a data availability statement and some guidance on the content of the statement. The inclusion, and quality, of this statement can be used as a benchmark to identify whether funder policies have succeeded in increasing the quantity and quality of open data practices.

- This study uses a corpus of journal articles from the institutional repositories of 4 UK universities and identifies the impact of the institution, the publisher and UKRI funder policies on the quality of the data availability statement. The study confirms previous conclusions that publisher policies can increase the quantity of statements but shows that publishers currently have little influence over quality. Articles funded by UKRI do not all comply with the requirement for a data availability statement, but where they are included, these are more likely to be of a higher quality. The article has clear implications for both publishers and funding councils who wish to further open research and support researchers in sharing their data

3.3. University of Nottingham Ningbo China

a) Prof. Dave Towey and Prof. Vladimir Brusic organized workshop/conference "The IEEE International Workshop on Software Engineering for Social Impact of Smart Environments (SESISE 2022) " and produced two papers discussing on ethics, standards and ethics needs in science and engineering.

b) Professor Brusic and his PhD student published conference paper "Ethically Informed Software Process for Smart Health Home" at IEEE 35th International Symposium on Computer Based Medical Systems (CBMS)

4. 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) University of Nottingham Ningbo China: Prof. Vladimir Brusic was invited to give a training to students in Ningbo Institute of Materials Technology &Engineering, CAS. Title: Ethics and

Research Integrity for Better Research. Translators: Dr. Jin Chen from FoB, Lily Cai from Graduate School.

b) School of Health Sciences: The School Research Ethics Officer is the external member of the University of Nottingham School of Pharmacy Research Ethics Committee. She has also been an expert member of the NIHR Research for Patient Benefit East Midlands funding panel. In addition, individual staff members hold positions which impact on research integrity, for example roles on editorial boards and associate editorships of journals, membership of funding bodies (NIHR, national charities) and membership of professional bodies (RCP, RCN, CSP, BPS, UKSBM).

c) School of Life Sciences:

  i. Academic and research staff within SoLS that are members of UKRI funder panels are reminded at each panel meeting of their responsibilities, including towards research integrity.

  ii. Professor Lucy Donaldson is a member of the Fellowship Expert Committee for Versus Arthritis as well as vice-chair of the clinical research fellowships panel. She has completed bespoke training on diversity and inclusion offered specifically to Wellcome Trust DTP Directors during 2020-22 (Beyond Bias Training: a structural look at inequality, delivered by Race Reflections).

d) School of Veterinary Medicine and Science:

  i. Professor Richard Lea (Ethics Officer and Research Integrity Champion) consults contacts within the Veterinary Medicine's Directorate (VMD), as and when appropriate.

  ii. The Animal Research Nexus programme, which Professor Pru Hobson-West is involved in, involves collaboration with individuals from external bodies including NC3Rs and MRC (see https://animalresearchnexus.org/people/pac)

e) School of Biosciences:

  i. Prof Millar and Dr Hudson-Shore (School of Biosciences) have collaboration with the Fund for Replacement of Animals in Medical Experimentation (FRAME; 2019 onwards) to develop and run an annual Training School on Ethics, 3Rs and Experimental Design. Strengthening good research practice at the University the Training School a training school was held at Jubilee Campus in April 2022. A number of University of Nottingham staff and students attended.

  ii. Members of CAB, Prof Millar and Dr Hudson-Shore have also developed a new 'Excellence in Research Practice' Training Work package integrating Research Ethics and Research Integrity training for the BBSRC doctoral training programme (DTP) 2020-2028.

  iii. Members of School are active in a number of Society's that have RE and RI activities, including:

  - The Nutrition Society
  - Society for Applied Microbiology
  - Society for Experimental Biology
  - British Ecological Society
  - British Society of Animal Science (BSAS)
  - European Society of Agriculture and Food Ethics (EurSafe)

  iv. Prof Millar is President of the European Society for Agricultural and Food Ethics (EurSafe).

f) School of Physics and Astronomy:

  i. Profs. Burrage and Fromhold: Met virtually with the IoP Head of EDI to discuss matters relating to, for example, neurodiversity.

  ii. Prof. Fromhold: Through membership of the REF2021 Physics sub-panel, received external training in subconscious and conscious bias and was involved in frequent discussions about research ethics and good EDI practice.

    iii.   Prof. Fromhold: Participated in the reverse mentoring scheme, which was invaluable exposure to ethical and EDI issues experienced by people with protected characteristics.

    iv.   Prof. Gowland: Participated in leading IOPP reviewer training workshops.

g) School of Psychology:

    i.   Jackson continues to serve on the editorial board of Cortex, which is amongst the first few journals of our discipline to make adherence to transparency and openness a requirement for publication.

    ii.   Although working with animals forms a small proportion of the school's activities but we make a significant contribution to promoting best practice at the national level. Cassaday was lead reviewer for the Guidelines for Psychologists Working with Animals the updated version of which was published by the British Psychological Society autumn 2020. Within the institution, Bonardi is currently a member of the Animal Welfare and Ethical Review Body.

    iii.   Jackson currently chairs the Scientific Advisory Board of the Federation of European Societies for Neuropsychology.

h) Sociology & Social Policy: The UoN SSP&Law Criminal Justice Research Centre ran an event that focused on research ethics and ethical conundrums experienced in the field of police research, which was informative and engaging and well-received – thanks to Dr Vicky Kemp.

i) School of Veterinary Medicine and Sciences;

    i.   Dr Richard Lea (Ethics Officer) consults contacts within the Veterinary Medicine's Directorate (VMD), as and when appropriate.

    ii.   The Animal Research Nexus programme, which Dr Pru Hobson-West in involved in, involves collaboration with individuals from external bodies including NC3Rs and MRC (see https://animalresearchnexus.org/people/pac)

j) Libraries:

    i.   Josh Sendall, Associate Director for Research is a member of the UKRI Open Access Policy Implementation Group where he continues to promote the importance of providing a practical and consistent process for the inclusion of research data availability statements for all UKRI-funded journal articles.

    ii.   RLUK (Research Libraries UK) and CILIP (professional libraries association) both have an interest in Research integrity and research ethics through their support for researchers as service users and patrons.

    iii.   UoN Libraries are also a member of the Digital Preservation Coalition which promotes the long-term preservation of the research output

5. *Internal Monitoring and Audit Processes*

As noted earlier in this report, in July 2021, the University published a dedicated **Code of Practice for Research Ethics Committees (CoPREC)**[39]. Whilst the *Code of Research Conduct and Research Ethics* outlines the guiding principles for conducting research, the CoPREC outlines the minimum expectations for the operation of Research Ethics Review Committees and specific guidance on the operation of School, Department or Faculty Research Ethics Review Committees

---

[39]https://uniofnottm.sharepoint.com/:b:/r/sites/ResearchEthicsandIntegrity/CoPREC%20Docs/Code%20of%20Practice%20for%20Research%20Ethics%20Committees%20v1.1%2009%20July%202021.pdf?csf=1&web=1&e=WgpOMG

(RECs) and associated processes, including review criteria. It was designed to ensure alignment of process and governance but also allow discipline-appropriate procedures to be implemented where appropriate and ensures that RECs are always independent in forming their opinions.

The CoPREC was designed to ensure alignment with the principles and standards of the Declaration of Helsinki: Ethical Principles for Medical Research Involving Human Subjects and draws from the joint publication 'Research Ethics Support and Review in Research Organisations' by the UK Research Integrity Office (UKRIO) and the Association of Research Managers and Administrators (ARMA) to support the research community in achieving high standards of research ethics review. It also builds on the UKRI ESRC framework for research ethics; WHO ethical standards and procedures for research with human beings; and the European Commission Ethics for Researchers.

URIEC will work with Faculties and Schools to ensure the implementation of the CoPREC and will evaluate and review the CoPREC on annual basis.

The University Research Integrity and Research Ethics Committee (URIEC) has overall responsibility for monitoring research integrity and ethics. URIEC undertakes an annual monitoring review of all ethics committees operated by Schools and Faculties. The new/current monitoring requires the annual collection of qualitative and quantitative data through direct reports from each of the five faculties and the two international campuses. Each Faculty REC is responsible for managing and reporting on their schools-based RECs. The Head of Research Integrity (Research and Innovation) collects all the relevant reports. These are then reviewed by URIEC, who highlights any issues and makes recommendations for any new policies that may need to be developed, identify training requirements, highlights good practice and areas for development.

6. *Research Misconduct*

6.1. *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 Misconduct[40], Policy on academic misconduct[41] Regulations of Academic Misconduct, Staff Disciplinary Procedure[42], Whistleblowing (Public Interest Disclosure) Code[43], Grievance Procedure[44] and the University of Nottingham Ethical Framework [45].

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

---

[40]
https://uniofnottm.sharepoint.com/:b:/r/sites/ResearchEthicsandIntegrity/Misconduct%20Code/Code%20of%20practice%20on%20handline%20allegations%20of%20research%20misconduct%20v1.1%2017%20Nov%202021.pdf?csf=1&web=1&e=l1BJlv

[41] https://www.nottingham.ac.uk/qualitymanual/assessment-awards-and-deg-classification/pol-academic-misconduct.aspx

[42] https://www.nottingham.ac.uk/hr/guidesandsupport/performanceatwork/disciplinaryprocedures/index.aspx

[43] https://www.nottingham.ac.uk/governance/otherregulations/whistleblowing/index.aspx

[44] https://www.nottingham.ac.uk/hr/guidesandsupport/complaintsgrievanceanddignity/grievance/index.aspx

[45] https://www.nottingham.ac.uk/governance/otherregulations/ethical-framework.aspx

6.2. Anonymised Summary on Investigations into Allegations of Research Misconduct

The University's Code of Practice on Handling Allegations of Research Misconduct 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 promoting and raising awareness of research integrity has increased, and consequently the number of cases on research misconduct investigated have decreased 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 2021 and 31 July 2022**, several complaints were received throughout the period, the majority of which were resolved by mediation before any research misconduct taking place. All the complaints received by the Head of Research Integrity did not fall with the research misconduct remit, as defined in the Code of Practice on Handling Allegations of Research Misconduct and the Concordat to Support Research Integrity. However, complainants were redirected to the appropriate procedures, relevant institutions or advised on the best course of action. It is noted that similar to the previous year, the disputes were mainly around authorship.

- Between **1 August 2021 and 31 July 2022**, only 1 PGR student has been investigated for academic misconduct. This case was due to be heard by an academic misconduct panel in August 2022, but pending the completion of a Dignity related issue.

Reference No.	Staff/student	Funder	Fabrication	Falsification	Plagiarism	Misrepresentation	Breach of duty of care	Improper dealing with allegations	Other	Allegations upheld
n/a	student	n/a	0	0	1	0	0	0	0	0

Formal Investigations between 1 August 2021 and 31 July 2022

6.3. Lessons Learned and Identified Needs

Lessons learned assessment is undertaken after every complaint 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.

Although journals have specific guidelines on activities that qualify named author, and similar to the previous report, it was recognised that continuous awareness raising and clearer communications, for researchers at all levels, are needed in this area. We will be utilising the resources made available by UKRIO[46] to further help engage in raising awareness in this area and aim to incorporate this in research culture activities.

As noted in section 1.2.10., The University's Research Integrity and Research Ethics Committee working with the Pro-Vice Chancellor for Research Knowledge and Exchange and Faculties through the University's Research Committee have agreed and rolled out two new roles (Faculty Research Integrity Advisors and School Research Integrity and Ethics Champions). These two roles now support the promotion of Research Integrity and excellence in research across the schools and ensure awareness of ethical procedures and provide basic guidance to all researchers within the University. They will increase focus around authorship guidance training in the relevant areas.

---

[46] https://ukrio.org/research-integrity-resources/authorship/

7. *Closing statement;*

This annual statement to the Council summarises the actions and activities that the University of Nottingham has undertaken to sustain and further enhance research integrity.

This statement draws a picture of the activities undertaken within the University of Nottingham in 2021-2022 academic year, but by no means a full picture of the commitment of our researchers (students and staff), administrative and professional services, and leadership to uphold the highest standards of rigour and integrity and their dedication.

This statement confirms the University's compliance with the Concordat to Support Research Integrity as stipulated under commitment 5 "*produce a short annual statement, which must be presented to their own governing body, and subsequently be made publicly available, ordinarily through the institution's website*".

8. *Action for the Council*

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