Guidelines on Good Practice in Research

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| Version | Date | Notes |
|---------|----------|--|
| 9.0 | 07 05 25 | Scheduled review in 2024/25. |
| | | The Guidelines have been revised to: |
| | | recognise contributions from the University's Research |
| | | Culture Group. |
| | | refer to the University's Research and Innovation Strategy 2024-2030. |
| | | provide clarity re. joint staff appointments, for example |
| | | with a Norwich Research Park (NRP) institution (A4). |
| | | include Emeritus appointments (A4). |
| | | list the University's research integrity related policies, guidelines and procedures (A5). |
| | | list the professional frameworks and concordats that the |
| | | University is a signatory to (A6). |
| | | mention the online training on 'Research Integrity and |
| | | Ethics' and other online and in person training opportunities |
| | | (A6). |
| | | • refer to the Concordat for the Environmental Sustainability |
| | | of Research and Innovation Practice (A7). |
| | | • introduce the umbrella term 'Trusted Research' and provide signposting to further information (A7). |
| | | • outline responsibilities re. any use of generative AI tools and refer to the <i>Generative AI Policy for Research and Innovation</i> (A7). |
| | | highlight that open research may not always be possible, |
| | | e.g. if it is not in the national interest to share information (B2). |
| | | • include the further requirements of providing details of the |
| | | statistical analyses performed on the data, and making |
| | | associated code openly available under 'Openness' (B2). |
| | | • refer to the Concordat on Open Research Data (B2). |
| | | refer to ensuring transparency when involving generative AI (B3). |

| | • refer to the <i>Guide for Good Supervisory Practice</i> (B4). |
|---|--|
| | refer to the University's Finance Regulations, Polices and |
| | Procedures (B5). |
| | refer to the 2025 updated Concordat to Support Research |
| | Integrity (B6). |
| | • refer to the University's Conflicts of Interest Policy (B6). |
| | mention 'Trusted Research' checks and legislation that |
| | apply to international research (B6). |
| | refer to the online 'Export Control' training delivered by |
| | HEECA (B6). |
| | mention the online training on 'PGR Supervisor Training' |
| | (B10). |
| | refer to the University's Pricing Policy for Research and |
| | Innovation (B12). |
| | refer to the Finance, Planning and Governance (FPG) |
| | Business Partners (B14). |
| | • refer to the University's <i>Conditions of Computer Use</i> (B16). |
| | list also that researchers need to be aware of the |
| | requirements under 'Trusted Research' including the |
| | national security, export and sanctions legislation relevant |
| | to international research (B17). |
| | include 'reproducibility' (C3). |
| | • mention the importance of time-stamping a document, file, |
| | or data (C3). |
| | • refer to the use of pre-print repositories (C10). |
| | • refer to the use of a CRediT statement to describe the key |
| | types of contributions typically made to the production and |
| | publication of research outputs such as research articles |
| | (C16). |
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Background

As a University committed to excellence in the quality of the research our staff and students undertake, it is essential to have guidelines on good practice in research as part of our framework to support the integrity of our research which lies at the centre of the University's vision in its Research and Innovation Strategy 2024-2030: "*To deliver ambitious, high quality and high integrity Research and Innovation, strengthening collaboration and gaining global recognition.*"

These Guidelines serve both as a means of developing and supporting a culture of good practice in research and demonstrating to the organisations the University works with, that it is committed to a culture and environment where high standards of personal and professional conduct are encouraged and expected.

Review

These Guidelines will be reviewed and updated by the University Research Ethics Committee

and University's Research Culture Group, and recommendations will be made to the University Research Executive, and thereafter to Senate before 31st July 2028.

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In this document, the following verbal forms are used:

- "shall" and "must" indicate a requirement;
- "should" indicates a recommendation;
- "may" indicates a permission;
- *"can" indicates a possibility or a capability.*

Part A. The Principles of Good Research Practice

Introduction

- A1 Honesty, openness, transparency, care and respect, accountability, and integrity are vital qualities for any academic researcher no matter what their discipline or level of experience. The University of East Anglia must ensure that all research it supports is carried out in a climate where high standards of personal and professional conduct are encouraged and expected. The University expects all of its staff and students engaged in research to act with the highest standards of integrity irrespective of how their research is funded.
- A2 The term 'research' has been used throughout this document to refer to all aspects of the research process, including but not limited to: outlining or drawing up research questions and hypotheses, preparing applications for funding, protocol design and research methodology, project set up and management, generating data, code and other materials (i.e. 'research data'), data recording and analysis, writing-up, and publishing, and other forms of disseminating results including impact generating activities. It also includes the research element of innovation activities.
- A3 This document provides guidance on the issues involved in the proper conduct of research, and on the standards expected. Whilst detailed aspects of these Guidelines are more applicable to some subject areas or groups of people than others, the principles of good research practice are relevant to all subject areas.
- A4 These Guidelines apply to <u>all</u> researchers:
 - All staff employed by the University (including academic, research and support staff; and joint appointments, for example with another Norwich Research Park (NRP) institution) carrying out research at, or on behalf of, the University (including those on a UEA contract/payroll but based elsewhere, for example at another NRP institution).
 - All students (undergraduate, postgraduate taught, postgraduate research) undertaking research and their supervisors (including students registered at UEA but based elsewhere, for example at an NRP or other partner institution).
 - Any persons with Honorary positions or Emeritus appointments, conducting research at, or on behalf of, the University.
 - Any other individuals carrying out research at, or on behalf of, the University.
 - The University also expects ethical oversight of research undertaken by any institution utilising UEA resources. This includes those using the University as a site for data collection.
- A5 These Guidelines should be read in conjunction with the University's other policies, guidelines and procedures, available to researchers which relate to research integrity issues, and the University's range of Research Ethics Guidance Notes, including but not limited to:
 - Research Ethics Policy (and Ethics Guidance Notes)
 - <u>Ethics Review Appeal Procedures</u>

- Open Access Policy
- <u>Research Data Management Policy</u>
- Policy for Approving the Integrity of UEA Research and Innovation Related Activities and Funding
- Pricing Policy for Research and Innovation
- <u>Procedures for Dealing with Allegations of Misconduct in Research</u>
- <u>Procedures for Investigating Allegations of Research Misconduct Made Against</u> <u>Students</u>
- <u>Trusted Research and Innovation Guidance</u>
- <u>Generative AI Policy for Research and Innovation</u>
- A6 These Guidelines fall within the frameworks and concordats that the University is committed to:
 - Signatory of the <u>Concordat to Support Research Integrity</u> (2013)
 - Supporter of the <u>AllTrials Campaign</u> (2016)
 - Signatory of the <u>Concordat on Open Research Data</u> (2016)
 - Signatory of the Concordat on Openness in Animal Research in the UK (2017)
 - Signatory of the <u>Technician Commitment</u> (2018)
 - Member of the <u>UK ORCID Consortium</u> (2018)
 - Signatory of the <u>Concordat to Support the Career Development of Researchers</u> (2019)
 - Signed up to the <u>Declaration on Research Assessment (DORA)</u> (2020)
 - UEA formally joined the <u>UK Reproducibility Network (UKRN)</u> (2021)
 - Signatory of the <u>Concordat for the Environmental Sustainability of Research and</u> <u>Innovation Practice</u> (2024)

The University has a <u>Research Integrity and Ethics e-Learning Module</u> for staff (mandatory for new academic staff and technicians) across all disciplines and services that provides a foundational understanding of research integrity and ethics to complement the established specialised training in the Schools and the bespoke training provided by RIN. Further training is mentioned in the relevant sections below, and other training opportunities, online and in person, are <u>available</u> (including <u>research culture related training</u>).

Principles of Good Research Practice

- A7 It is important that a culture of honesty, openness, transparency, care and respect, accountability, and integrity in research be fostered and maintained. The University cannot be prescriptive about approaches taken by individuals to solving particular research problems. However, in the conduct of all research, the University expects the following general principles to be understood and observed by all researchers:
 - maintaining open, transparent and honest professional standards;
 - ensuring leadership, organisation and cooperation in research groupings;
 - balancing the allocation of resources to support the University's research commitments at all levels and stages;

- taking special account of the needs of inexperienced researchers;
- showing care and respect for all internal and external research colleagues, and for all participants in research and beneficiaries of research, including humans, animals, the environment and cultural objects;
- planning and conducting research in accordance with the requirements of funders and the University and all relevant codes of practice, legislation and regulatory bodies;
- having regard for the legal obligations of the University and those that have delegated authority to accept such legal responsibility on behalf of the University;
- fully documenting results and any research material used, questioning one's own findings and adopting working practices to promote the reproducibility of research results;
- documenting and pre-registering study designs before data collection, using tools as applicable to make research methods, protocols and equipment open and reproducible when possible;
- ensuring research data are stored, shared, made accessible, preserved and disposed of in an appropriate and responsible manner;
- ensuring the results of the research are disseminated widely, are easily discoverable, and made open access, wherever possible and in line with meeting the other principles, as all research should be as open as possible, as closed as necessary;
- acknowledging honestly the contributions of all those involved in the research including correct attributions to the University, other organisations, and external funders;
- taking appropriate measures to protect intellectual property;
- supporting the highest level of research integrity including being honest about conflict of interest issues;
- following best current professional, clinical and ethical practice;
- understanding not only the University's expectations concerning good research practice and conduct, but also those of the funders of their research;
- delivering research in an environmentally responsible and sustainable way as part
 of our commitment to the <u>Concordat for the Environmental Sustainability of</u>
 <u>Research and Innovation Practice</u>.

The primary responsibility for ensuring that a researcher acts in accordance with these principles in all aspects of their research work, including peer review, lies with the individual.

Any proposed research, whether externally funded or not, needs to be consistent with the University's stated goals of integrity and ethical practice. These are set out in the University's <u>Policy for Approving the Integrity of UEA Research and Innovation Related</u> <u>Activities and Funding</u>, which also provides a procedure to be followed where there are any issues of doubt arising from considerations prior to any approval of activity or acceptance of funding.

'Trusted Research' refers to the need to protect the UK's intellectual property, sensitive research, people and infrastructure from potential theft, manipulation and exploitation.

Researchers undertaking international collaborations, whether funded or informal, must consider the potential implications and risks of sharing information, and actively take steps to mitigate the potential risks. This includes assessing partner suitability as well as complying with UK national security, export and sanctions legislation as relevant.¹

We would expect researchers to consider the following key practices for open research wherever possible:

- the open access publication of research outputs, including being aware of where open access is required;
- the preservation and sharing (under open licence wherever possible) of research data supporting research results;
- the use of digital tools to make research methods, protocols and equipment open and reproducible;
- the use of (open source) programming languages to implement reproducible research and analysis workflows;
- the pre-registration of study designs and use of results-blind reporting mechanisms to increase transparency and counter publication bias;
- the use of preprints and open peer review to accelerate dissemination and increase transparency in the certification process.

The <u>UK Reproducibility Network</u> (UKRN) provides examples of good practice and resources on open research across disciplines.

Researchers must take full responsibility for any use of generative AI tools in their research and any data / information / material they enter into these tools. The University's <u>Generative AI Policy for Research and Innovation</u> details the University processes that UEA researchers using generative AI tools or researching on generative AI tools must adhere to, to ensure that they can engage with, and benefit from, the opportunities of generative AI tools whilst protecting against potential ethical, legal and integrity issues. Undertaking responsible research practices when using these tools is imperative to upholding the integrity of the research process.

Part B. Management of Good Research Practice

Professional Standards

- B1 Honesty. At the heart of all research, regardless of discipline or institution, is the need for researchers to be honest in respect of their own actions in research and in their responses to the actions of other researchers. This applies to all aspects of the research process.
- B2 Openness. While recognising the need for researchers to protect their own research

¹ The <u>National Protective Security Authority (NPSA)</u> has issued '<u>Trusted Research Guidance for</u> <u>Academia</u>'. Further information is available on the RIN portal page for <u>Trusted Research and</u> <u>Innovation</u>.

interests in the process of planning their research and obtaining their results, the University encourages researchers to be as open as possible in discussing their work with other researchers within and outside the University and with the public. This must also be balanced by the need to protect certain types or aspects of research, for example when it is not in the national interest to share, research that involves personal data about research participants, research that might lead to the development of something that is patentable, and other types of research where there are requirements to keep research closed or confidential, or ethical constraints to making research open.

Researchers should consider the publication of protocols and the registration of research on publicly available databases, prior to research commencing. This may be a requirement of regulatory approval. As a supporter of the <u>AllTrials Campaign</u>, the University expects researchers to make empirical results available irrespective of whether they support the initial hypothesis of the research. Even where research is not pre-registered, researchers should be clear in published outputs about the full set of statistical analyses performed on the data, ideally making associated code openly available.

Researchers should contact RIN for advice on releasing results that might affect the potential to protect the research at a later date. Once results have been published, researchers should make available relevant research data to others for appropriate purposes according to the University's <u>Research Data Management Policy</u>.

However, researchers must also take into account legislation affecting the storage and release of data. For example:

The Freedom of Information Act 2000 (FOIA 2000) aims to promote transparency and accountability in the public sector. Under the terms of the Act, individuals have the right to request *any* recorded information that is held by the University. There are situations where information is not required to be released or should not be released due to exemptions. The University, as a public body, is obliged to comply with the Act, and all staff have the responsibility to make themselves aware of their obligations under the Act and report any written information requests that are not 'business as usual' to the University's Information Compliance team.

The Environmental Information Regulations 2004 (EIR 2004) aim to encourage access to environmental information and to promote wide and systematic dissemination of environmental information to the public. Under the terms of the Regulations, individuals have the right to request *any* recorded environmental information that is held by the University. There are situations where information is not required to be released or should not be released due to exceptions. The University is obliged to comply with the Regulations, and all staff have the responsibility to make themselves aware of their obligations and report any written or verbal information requests that are not 'business as usual' to the University's Information Compliance team.

The Data Protection Act 2018 (DPA 2018) and the UK General Data Protection Regulation (UK GDPR) place responsibilities and obligations on the University and individual researchers in the way that personal data about living and identifiable individuals is processed. The DPA 2018 and the UK GDPR give individuals certain rights, including a right of access to their personal data, and the right to be provided with information on how their data will be used. All researchers must follow the seven data protection principles in Article 5 of the UK GDPR when processing personal data, unless an exemption applies, and must ensure they are able to demonstrate their compliance with the principles, for example through keeping appropriate documentation.

Researchers should be aware of the <u>Concordat on Open Research Data</u>, which "help[s] to ensure research data gathered and generated by members of the UK research community is, wherever possible, made openly available for use by others in a manner consistent with relevant legal, ethical and regulatory frameworks and disciplinary norms, and with due regard to the costs involved".

- B3 Transparency. Researchers should ensure transparent and open communication in:
 - declaring potential competing interests;
 - the reporting of research data collection methods;
 - the analysis and interpretation of research data;
 - making research findings widely available, which includes publishing or otherwise sharing negative or null results to recognise their value as part of the research process;
 - presenting the work to other researchers and to the public.
 - declaring any involvement of generative AI in their research.
- B4 Care and respect. Researchers should not be put under any unwarranted pressure to produce results. They must be able to exercise academic freedom in their choices and also accept responsibility for the decisions they make. Workplace bullying and harassment of staff, students or any associated personnel by other staff, students or associated personnel are not tolerated by the University. Several funders have already made strong commitments to tackling bullying and harassment in the research and innovation sector, and RIN (in collaboration with the People and Culture Division) has implemented procedures to address new clauses from some of the University's funders which deem researchers ineligible for funding if they have had claims of bullying or harassment upheld against them. The University is committed to maintaining a working and learning environment that is free from any form of harassment and bullying. The University's *Code of Practice for Staff: Dignity and Respect in the Workplace* sets out how the University intends to create an inclusive working environment and culture where staff are treated with dignity and respect and valued for their diversity.

The University is committed to giving researchers the opportunity and support that they need to reach their potential, and expects all contributions to research to be acknowledged and for new researchers to be integrated into the University's research community. The University's <u>Code of Practice for the Management for Research Staff</u> draws on the <u>Concordat to Support the Career Development of Researchers</u> and has been developed from the UEA Action Plan to support the implementation of the Concordat. For postgraduate researchers, the <u>Guide to Good Supervisory Practice</u> provides guidance to supervisory teams and postgraduate researchers to ensure that a professional relationship is maintained, based on mutual respect and co-operation.

B5 Accountability. Researchers, and in particular those named as Principal Investigators, must

ensure that the research that they are undertaking is consistent with the terms and conditions covered by agreements between the University and the funder, and all relevant codes of practice, legislation and regulatory bodies. This includes, but is not restricted to ensuring that:

- the research programme carried out is as defined in the original proposal to the funder, unless amendments have been agreed in writing;
- the finance is used solely for the research purpose that it was intended and in accordance with the University's <u>Finance Regulations</u>, <u>Policies and Procedures</u>;
- reports are both accurate and produced on time;
- conditions relating to publication and ownership of Intellectual Property are adhered to;
- those exercising authority delegated to them must do so in accordance with all relevant University regulations, policies, procedures and guidance.
- B6 Integrity. The University is fully committed to ensuring that all research undertaken by its staff and students is carried out to the highest standards of research integrity, and that all researchers uphold the principles set out in the <u>Concordat to Support Research Integrity</u>. Overall responsibility for maintaining the highest standards of research integrity at the University rests with the Pro-Vice-Chancellor for Research and Innovation.

All researchers should be aware of their responsibilities in meeting the commitments of the Concordat. These are:

- understanding the expected standards of rigour and integrity relevant to their research, for example the University is a signatory of the San Francisco Declaration on Research Assessment (DORA) and researchers should use research metrics responsibly;
- maintaining the highest standards of rigour and integrity in their work at all times;
- complying with ethical, legal and professional frameworks, obligations and standards as required by statutory and regulatory authorities, and by employers, funders and other relevant stakeholders;
- ensuring that all their research is subject to active and appropriate consideration of ethical issues;
- taking responsibility for keeping their knowledge up to date on the frameworks, standards and obligations that apply to their work;
- collaborating to maintain a research environment that encourages research integrity;
- designing, conducting and reporting research in ways that embed integrity and ethical practice throughout;
- acting in good faith with regard to allegations of research misconduct, whether in making allegations or in being required to participate in an investigation, and taking reasonable steps, working with employers as appropriate, to ensure the recommendations made by formal research misconduct investigation panels are implemented;
- handling potential instances of research misconduct in an appropriate manner;
- declaring and acting accordingly to manage conflicts of interest.

Researchers must be honest about conflict of interest issues, whether real, potential or

perceived, at the earliest opportunity and at all stages of research, for example when applying for funding, when identifying collaborators, and when reporting results. Examples of conflicts of interest include employment (e.g. employment of a family member), financial links to other organisations and financial benefit from commercial exploitation of the research. The University's processes for declaring a conflict of interest are detailed in its *Conflicts of Interest Policy*.

RIN will work with researchers to ensure that where **funded** collaborative research is taking place there are clear statements of the standards and frameworks that will apply to the work, both nationally and internationally. Furthermore, in accepting and/or redistributing funding for research, the University will undertake appropriate due diligence concerning potential funders and collaborators to ensure the integrity of the organisations we undertake research with and on behalf of UEA, including 'Trusted Research' checks to mitigate the potential risks when sharing information, and protect intellectual property, sensitive research and personal data. <u>'Trusted Research' Guidance</u> is available to help researchers engage in safe and secure international collaborations, which may for example require an <u>export licence</u> to do so.

Where research activity is **unfunded or informal**, any UEA researchers undertaking collaborative work must undertake this due diligence in advance to ensure that potential collaborators are safe to work with. For example, researchers may be approached to collaborate on a research output or to participate in data analysis. There is guidance on this from RIN available at <u>Trusted Research and Innovation</u> to assist with the assessment and if in doubt the advice of the Government's Research Collaboration Advice Team (RCAT) can be sought. The risk of entering a hostile collaboration is not just to the institutions involved but can also be a serious personal risk for individuals and must therefore be taken incredibly seriously.

Online Export Control training is available to all UEA staff through the <u>Higher Education</u> <u>Export Control Association's (HEECA) training programme</u>. Please contact RIN (email RIN.reception@uea.ac.uk) to request access to this free online training.

Research misconduct or malpractice is regarded as a serious disciplinary offence. All researchers are encouraged to report cases of suspected misconduct or malpractice and to do so in a responsible and appropriate manner in accordance with the University's *Procedures for Dealing with Allegations of Misconduct in Research*.

Leadership and Organisation in Research Teams²

B7 The University's values (Ambition, Collaboration, Empowerment and Respect) inform the

² Based on the description of <u>Vitae - Realising the Potential of Researchers</u>: What constitutes a research team in one school might be described elsewhere as a research group. Regardless of the terminology used, the key characteristic of a research team is that it comprises two or more people working together in a committed way towards a common research goal. Research teams may include technical and administrative staff and postgraduate research students.

application of the leadership at UEA to guide and facilitate researchers to maintain a high research standard at UEA. Within the University, it is the responsibility of the Vice-Chancellor, Pro-Vice-Chancellors, and Heads of Schools³ (or other equivalent senior officer in non-School units) and their formal delegates⁴ to ensure that a culture is created which allows research to be conducted in accordance with good research practice.

B8 Within a research team, responsibility lies with the Research Team Leader/Research Coordinator (or equivalent). Where there are no research groupings, the responsibilities of Research Team Leader shall fall to the Head of School (or other equivalent senior officer in non-School units), which may be delegated to a nominee such as the Chair of a relevant committee or the School Research Director. For postgraduate research students, this nominee will normally be the School Director of Postgraduate Research. Research Team Leaders should engender a research environment of mutual cooperation, in which all members of a research team are encouraged to develop their skills and in which the open exchange of ideas is fostered. They should take a leadership role in developing and rolemodelling a positive and learning culture within their research teams. Also, they must ensure that appropriate direction of research and supervision of researchers is provided, which in the case of students undertaking research must comply with the University's *Code* of Practice for Research Degrees, which sets out the University's expectations for supervision, and with the UK Quality Code for Higher Education. In the case of Research Staff, this must be in accordance with the Concordat to Support the Career Development of *Researchers.* Responsibilities in conducting research must be clearly allocated and understood. Members of a research project should address any specific questions or concerns about the research project with the Principal Investigator in the first instance.

The Needs of Early Career Researchers and Researchers New to UK Research Culture

B9 Researchers who are new to the academic community or new to the culture of research in the UK may face particular difficulties. Responsibility for ensuring that these new researchers understand good research practice lies with all members of the community, but particularly with Research Team Leaders, or Heads of School (or other equivalent senior officer in non-School units) where there are no Research Team Leaders (or equivalent). Good practice includes the induction of researchers to their new environment and the relevant School and University policies, guidelines and procedures, and the equivalent NBI documentation for postgraduate research students based in NRP institutes.

Training and Supervision of Researchers

B10 All researchers should receive good supervision appropriate to their experience. Researchers must not be put under unwarranted pressure to produce results. Supervision should include all relevant stages of the research process. Research Team Leaders, or Heads

³ For postgraduate research students based in the Norwich BioScience Institutes (NBI), the Head of School may be taken to refer also to the Chair of the NBI Graduate School Executive.

⁴ For postgraduate research students, the delegate will normally be the School Director of Postgraduate Research. For postgraduate research students based in the NBI, there may also be a nominated Institute Director of Postgraduate Research.

of Schools (or other equivalent senior officer in non-School units) where there are no Research Team Leaders (or equivalent), are responsible for ensuring that all new researchers undertake appropriate training in accordance with their specific requirements and the University's *Equality, Diversity and Inclusion Policies*. Online training in supervisory skills (<u>PGR Supervisor Training</u>) is mandatory for all current and prospective supervisors and must be completed every three years in order to continue supervising postgraduate researchers at UEA, in accordance with the UEA <u>Code of Practice for Research Degrees</u>.

Particular requirements regarding supervision apply in the case of postgraduate research students and are set out in the University's <u>Guide to Good Supervisory Practice</u> and in the University's <u>Code of Practice for Research Degrees</u>.

Planning and Conducting Research

- B11 In applying for external funding, researchers must take all reasonable measures to ensure accuracy of information and compliance with <u>University policies and procedures</u>.
- B12 The costing and pricing of any research project must be undertaken in accordance with the University's *Pricing Policy for Research and Innovation*. Any deviations from the Policy must be authorised prior to acceptance of any contracts in line with that set out in the Pricing Policy. The Pricing Policy helps to ensure the financial sustainability of research through appropriate cost recovery for the University. It also ensures that activities are viable through budget availability.
- B13 Contracts and agreements relating to the commissioning, funding and conduct of research, including data sharing, collaboration, equipment and non-disclosure agreements must all be processed through RIN and only signed by those with the appropriate delegated authority to do so on behalf of the University. If in any doubt, RIN will advise on appropriate signatories. The Postgraduate Research Service (PGR) also process some agreements (for example, co-tutelles) and can advise.
- B14 Purchasing and expenditure of funds must be in accordance with the terms and conditions of any grant or contract held for the research and the University's *finance regulations and procedures*. Any further guidance on compliance with the financial regulations in the conduct of research should be sought from RIN or the Finance, Planning and Governance (FPG) Business Partners.
- B15 Researchers need to establish whether ethical approval is likely to be needed for a research project in accordance with the University's <u>Research Ethics Policy</u> and associated <u>Research Ethics Guidance Notes</u>.
- B16 All research that includes the appointment of researchers must be carried out in a manner that complies with:
 - the University's *Equality, Diversity and Inclusion Policies*;
 - the <u>Concordat to Support the Career Development of Researchers;</u>
 - the Concordat to Support Research Integrity;
 - the University's <u>Conditions of Computer Use;</u>

- the Health and Safety at Work Act 1974 and the Regulations approved under this Act;
- the University's <u>Health and Safety Policy</u> and <u>requirements;</u>
- and other University health and safety management documents including those for lone working, travel for business, off campus working, and risk assessments.

School health and safety policies and handbooks should detail local health and safety rules that must also be followed. Advice on health and safety issues should be sought from School Safety Advisers or the University Safety Services.

B17 All members of research groupings should be made aware of the:

- legal and ethical requirements, including the <u>Joint NNUH/UEA Standard Operating</u> <u>Procedures (SOPs)</u>, relating to human participants, animals and personal information;
- requirements on confidentiality of data and publications;
- requirements on open access of research data and publications;
- information legislation including the FOIA 2000 and EIR 2004 as they apply to research;
- appropriate methods of record keeping, data management, including storage, archiving and disposal relevant to the discipline;
- the importance of recognising and reporting unforeseen results or incidents;
- the University's health and safety policies, rules and other health and safety management documents, including those for lone working, travel for business, off campus working, and risk assessments;
- the implementation of the *Nagoya Protocol*;
- all other relevant guidance, codes of practice and regulations related to their work, including the University's research integrity policies, procedures and guidelines. RIN supports informal queries or information on the latter;
- requirements of <u>'Trusted Research'</u>, including the UK's national security, export and sanctions legislation relating to international academic research.

Part C. Research Results

The Need for a Critical Approach

- C1 Researchers must always be prepared to question the outcome of their research. The University expects all research results to be checked before being made public. It is important that research ideas can be challenged and tested once published.
- C2 It is important that researchers or research groupings must not become subject to other pressures such that the normal processes of research inquiry cannot be enforced, for example by constraints imposed by the source of funding of the research. Any pressure to produce results that suit the specific interests of a funder must, of course, be resisted. This is particularly the case where the individual researcher(s) could be perceived to have a conflict of interest, for example where they might have an equity share in the funder, or may hold a position (for example, a Director) or be involved in consultancy with the funder.

Any such conflict of interest, whether real, potential or perceived, must be disclosed at the earliest opportunity to the Head of the School (or other equivalent senior officer in non-School units) or to the Pro-Vice-Chancellor for Research and Innovation if the office holder is involved.

Documenting Results

- C3 Throughout their work researchers must keep clear and accurate records of the procedures followed (e.g. computing code used to prepare and analyse data), of the sources of research material where archives, collections etc. are researched and of the results obtained, including interim results. This is necessary not only as a means of demonstrating proper research practice, including facilitating reproducibility in research, but also in case questions are subsequently asked about the conduct of the research, the results obtained or ownership of the data or results. Proper documenting and storage procedures will minimise cases of allegations of research misconduct where original data have allegedly been lost or cannot be replicated and is also important in ensuring that copyright, a third party's intellectual property rights and confidentiality are not breached. Time-stamping a document, file, or data, assigns a specific date and time to establish timelines and this can be used to provide evidence of that document, file or data existing at a particular time in the past, in case proof of timing is needed.
- C4 It is the duty of the researcher to ensure that their work is compliant with the DPA 2018 and the UK GDPR. Both apply to research that involves any use of personal data, that is, information relating to an identified or identifiable living person. Creating and maintaining documentation that evidences how any data protection risks have been identified and mitigated, and how personal data will be protected throughout the research is an important way to demonstrate compliance with the law. Guidance on how to make a researcher's work UK GDPR compliant should be sought from the <u>University's Information</u> <u>Compliance Team</u>.
- C5 Research data should be managed in line with the data management plan prepared as part of the research grant application, or at the beginning of the research project. In cases where transcripts of interviews are the basis for research, these must be kept according to the procedures in place when ethical approval was given for the research, including any confidentiality clauses. Any sources, for example other published works, archives, and collections, must be accurately recorded and any transcription or data archive rules recorded at the start of the project to ensure consistency. The keeping and maintenance of laboratory notebooks, and other data sources, can also help to ensure that intellectual property is recognised and can be protected.

Storage and Disposal of Data

C6 Research data should be securely stored for an appropriate time in a suitable durable form, in accordance with the Data Management Plan, the University's <u>Research Data</u> <u>Management Policy</u> and funder requirements. The means of data storage (paper, disk, electronic data archive etc.) should be appropriate to the task, and for studies requiring ethical review it must be consistent with the methods set out in the proposal awarded ethical approval. Provision should be made for the automatic back-up of data or software stored on a computer and special attention must be paid to guaranteeing the security of electronic data. Advice should be sought from the <u>University's Information Security Team</u>.

- C7 The University's <u>Research Data Management Policy</u> specifies how long research data should be kept following any associated publication and that metadata should be kept indefinitely. The appropriate timescales and mode of data storage and the process for review in the light of changing technology should be confirmed in writing at the outset of the research programme and captured in a Data Management Plan. Primary research data, in particular, should be openly discoverable and accessible whenever possible.
- C8 Disposal of data and samples should be carried out in accordance with the appropriate internal or external procedures according to the nature of the research data and any ethics committee requirements.

Publishing Results

- C9 The issue of authorship is important in the context of good research practice, and the University expects the matter to be taken seriously. The University expects anyone listed as an author on a paper to have contributed to the writing of and to accept personal responsibility for ensuring that they are familiar with the contents of the paper. Where there is any query about any claim of authorship or acknowledged contribution, researchers should seek advice at the earliest opportunity from the Head of the School (or other equivalent senior officer in non-School units) or to the Pro-Vice-Chancellor Research and Innovation if the office holder is involved. This includes correct affiliation information for all authors, indicating where the research was carried out. UEA authors, including authors who have joint appointments, for example with a Norwich NRP institution, must include UEA as part of their affiliation information. In some cases, authors may need to include multiple affiliations.
- C10 In order to ensure a high standard of publication, researchers should seek an appropriate form of peer review prior to publication; peer review may be provided by the publisher. The use of pre-print repositories for early dissemination of results is encouraged, as part of the wider publication process.
- C11 If an error is found that diminishes the worth of the published results, the researcher should discuss the matter with the lead researcher and notify any co-authors. A correction should be published as soon as possible setting out the basis of the reservation. Where the findings are found to be in serious doubt, a retraction should be applied for speedily.
- C12 The standard position of the University is that research should be published when appropriate and wherever possible. This is a necessary adjunct to making research available to the public and is frequently a condition imposed by funders. Delays in publication should be avoided except, for example, in relation to proprietary information of the University or the funder incorporated in the research results or where journals require amendments or modifications.

Where the University and/or the funder wish to secure patent protection for inventions made in the course of the research, delays in publishing are acceptable to allow patents to be filed (refer to D2). Access to a thesis may be restricted in accordance with the *Consultation and Borrowing of Theses*.

- C13 The published outcomes of research should be promoted and the outputs of research must be made openly available whenever possible. Researchers should follow the requirements set out in the University's *Open Access Policy*, including ensuring that all their research outputs are listed on the University's Current Research Information System, Pure.
- C14 Researchers are encouraged to make their research data openly available for discovery and reuse, whenever this is appropriate for the data, as laid out in the University's <u>Research</u> <u>Data Management Policy</u> and the <u>Concordat on Open Research Data</u>. This especially applies to research data that underpins publications and the analytic techniques used (e.g. codes and algorithms). Researchers are also encouraged to provide appropriate metadata to describe this research data.
- C15 Researchers should have an <u>ORCID</u> identifier; ORCID identifiers should be used to allow unambiguous identification of those involved, including when publishing research publications, research data, and other outputs.

Acknowledging the Role of Collaborators and Other Participants

C16 Any person who participates in a substantial way in conceiving, executing or interpreting a significant part of the relevant research must be given the opportunity to be included as an author of a publication derived from that research. The practice of honorary authorship is unacceptable, i.e. only those who have participated in the research should be listed. The contributions of formal collaborators and all others who directly assist or indirectly support the research should also be properly acknowledged. This applies to any circumstances in which statements about the research are made, including provision of information about the nature and process of the research, and in publishing the outcome. A <u>CRediT statement</u> may be used to describe the contribution of each author. The funders of the research and other collaborating bodies must be acknowledged.

Part D. Exploitation and Protection of Intellectual Assets

- D1 The University recognises there are instances where the potential for exploiting intellectual property (IP) generated by research is important both to improve economic competitiveness and to generate revenue. The potential to exploit IP should be considered at the application and contract stages and certainly before research data are submitted for publication or presented in any other public forum including the internet.
- D2 The ownership, protection and exploitation of IP is governed by the University's <u>Intellectual</u> <u>Property Regulations</u>. Advice from RIN should be sought in all instances where a potential to exploit IP generated by the University or its staff is identified or where data or resources belonging to another organisation are required to conduct the research.

Part E. Professional, Clinical and Ethical Practice

- E1 The University's <u>Research Ethics Policy</u> applies to <u>all</u> researchers as listed in A4. Researchers must conduct research with care and respect for all participants in and subjects of research, including humans, animals, the environment and cultural objects.
- E2 The standards of scientific practice set out in guidelines published by scientific societies and other relevant professional bodies should be observed by researchers.
- E3 Researchers involved in clinical research must comply with:
 - Good Clinical Practice Training appropriate for the research;
 - the <u>Medicines for Human Use (Clinical Trials) Regulations 2004</u>, and <u>Amendment</u> (<u>EU Exit) Regulations 2019</u>;
 - the Health Research Authority's <u>UK Policy Framework for Health and Social Care</u> <u>Research 2017</u>;
 - the Human Tissue Act 2004;
 - the Mental Capacity Act 2005;
 - the Joint NNUH/UEA Standard Operating Procedures.

Particular attention must be given to:

- maintenance of confidentiality;
- informed consent for participation in the research;
- the allocation and agreement of Sponsor responsibilities for designing, managing, financing, conducting and analysing the research between the individual researchers, the University, appropriate NHS Trusts and any other external organisations involved in the research;
- noting and reporting serious adverse events or serious drug reactions in line with regulatory requirements;
- seeking appropriate NHS Research Ethics Committee approval, NHS Research Governance approval (including obtaining a <u>Research Passport</u> where applicable) and/or independent review.

RIN supports queries relating to NHS Health and Social Care research ethics and governance.

- E4 Research must only be carried out when all the necessary approvals, notifications and licences required by University Committees and legislation, through national and local regulatory bodies, are in place. The Research Team Leader/Research Coordinator (or equivalent) or Head of School (or other equivalent senior officer in non-School units) must ensure that the appropriate approvals are identified, obtained and documented prior to the start of the research.
- E5 These are the minimum standards expected of researchers and do not override or replace any professional codes or practices, or those codes or practices governing the terms of any external funding received by researchers to carry out their research work, which must be followed in addition to these <u>Guidelines on Good Practice in Research</u>.

Part F. Research Misconduct

- F1 Responsibility for ensuring that no misconduct occurs rests primarily with individual researchers. Notwithstanding, the University takes seriously any allegation of research misconduct and will investigate any such allegation sensitively and in confidence, in accordance with these *Guidelines on Good Practice in Research* and the University's *Procedures for Dealing with Allegations of Misconduct in Research*. The overarching principles set out in Parts A and B of this Policy will apply to allegations of misconduct in research against a present or past member of staff <u>or</u> a present or past student while registered by the University. However, for a present or past student (provided they have not also been a present or past member of staff of the University), the actions to be taken will follow different Procedures as set out in the *Procedures for Investigating Allegations of Research Misconduct Made Against Students*.
- F2 Any issue relating to potential misconduct in research can be discussed confidentially with the relevant Head of School (or other equivalent senior officer in non-School units). Formal discussion of any other research integrity matters can be undertaken with the Pro-Vice-Chancellor for Research and Innovation.
- F3 A Public Interest Disclosure, where it relates to research misconduct, should be made through the University's <u>Procedures for Dealing with Allegations of Misconduct in Research</u>. This process is analogous with the University's <u>Public Interest Disclosure (Whistleblowing)</u> <u>Policy</u>, tailored explicitly for research misconduct, and aligned with the UK Research Integrity Office expectations.