

# **BI-RES-005 RESEARCH INTEGRITY POLICY**

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Associated policies, procedures and guidance		
This policy should be read in conjunction with:		
Under the research integrity policy framework:		
BI-RES-004 Research Misconduct Policy		
BI-RES-008 Research Data Management Policy		
BI-RES-006 Research Records Retention Policy		
BI-IM-001 Open Access Policy		
Open Data Policy (to follow)		
BI-RES-001 Authorship Policy		
BI-RES-007 Human Research Policy		

BRC-BIO-003 BSU Barrier Integrity Policy BRC-HAS-001 Biosafety Policy BRC-BIO-001 Campus Use of Animals in Research BRC-BIO-002 Campus Use of Animal Tissues in Research Sample Handling Policy (to follow) Laboratory Equipment Maintenance Policy (to follow)

### Other Institute policies:

BI-HR-001 Code of Conduct **BI-HR-008 Conflicts of Interest Policy BI-COR-010** Whistleblowing Policy **BI-COR-007 Fraud & Bribery Policy BI-COR-008 Modern Slavery & Human Trafficking Policy** Learning & Development Policy (to follow) **BI-COR-005 Delegated Authority Policy** Recruitment policy (to follow) **BRC-HAS-001 Biosafety Policy BI-HAS-008** Chemical Safety Policy **BI-HAS-007** Ionising Radiation Safety Policy BI-COR-011 Acceptability of Funders, Customers & Partners Policy **BI-HAS-001** General Health & Safety Policy **BI-KEC-001 Intellectual Property Policy BI-FIN-001** Procurement Policy **BI-FIN-002** Capital Equipment Policy BI-RES-003 Group Leader Starting & Leaving Policy

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# **1. Definitions**

- **"Research Integrity"** Research Integrity means conducting, reviewing and reporting research in a responsible way that allows ourselves and others to have confidence that our research is trustworthy and of the highest quality. It also sets the culture of the Institute as an inclusive, respectful, open and outstanding place to work.
- "Research" Research is to be understood as..."original investigation undertaken in order to gain knowledge and understanding. It includes work of direct relevance to the needs of commerce, industry, and to the public and voluntary sectors; scholarship; the invention and generation of ideas, images, performances, artefacts including design, where these lead to new or substantially improved insights; and the use of existing knowledge in experimental development to produce new or substantially improved materials, devices, products and processes, including design and construction. It excludes routine testing and routine analysis of materials, components and processes such as for the maintenance of national standards, as distinct from the development of new analytical techniques. It also excludes the development of teaching materials that do not embody original research." This is the definition used by the Research Assessment Exercise (Research Assessment Exercise 2008, p. 34). A critical part of the research process is also replication of original findings.
- "Scholarship" Scholarship "is defined as the creation, development and maintenance of the intellectual infrastructure of subjects and disciplines, in forms such as dictionaries, scholarly editions, catalogues and contributions to major research databases." This is the definition used by the Research Assessment Exercise (Research Assessment Exercise 2008, p. 34).
- "Researchers" Any person undertaking research or involved in collecting, generating or creating research data, for or on behalf of the Institute, which shall include but not be limited to staff (including students), visiting students and researchers, Facility Heads and staff, and all groups listed under Section 4: Scope.
- "Employee" Institute employees on Institute or Babraham Institute Enterprise Ltd (BIE) terms and conditions, Institute employees on BBSRC or other terms and conditions, and Research Fellows on Institute terms and conditions.
- "Staff" Employees and Babraham Institute registered PhD students.
- "Individuals" Staff, Research Fellows (honorary), Honorary Members of Faculty, visiting students, visiting researchers and workers (including consultants and secondees), workers provided by a third party / contractors, and Trustees.

# 2. Commitment statement

- 2.1. At the Babraham Institute our mission is to be an international leader in research focusing on basic cell and molecular biology with an emphasis on healthy ageing through the human lifecycle.
- 2.2. The Institute is committed to achieving excellence in all aspects of its research and upholds the commitments outlined in <u>Universities UK Concordat to Support Research Integrity</u> (2019).
- 2.3. The Institute seeks to ensure that there are policies, management systems and procedures in place to maintain a high level of Research Integrity at the Institute. This includes meeting statutory, regulatory, contractual (funder or otherwise) and ethical requirements (both in the UK and internationally), whilst striving for best practice.
- 2.4. The Institute expects its researchers to maintain the highest standards of research integrity, abiding by the principles outlined in this policy. The Institute recognises that only through the endorsement and support of good practice in research at the highest level and implementation through education, training and supervision, can researchers become aware of their individual responsibilities and the collective responsibility they have to their research organisation and the wider research community.
- 2.5. In order to support high levels of research integrity, the Institute promotes Open Science practices, has committed to implementing an Open Science Action Plan as part of the Horizon 2020 ORION project and are signatories of the San Francisco Declaration on Research Assessment (DORA).

# 3. Purpose

- 3.1. Research integrity means designing, conducting, analysing, critiquing and reporting research in a responsible way that allows ourselves and others to have confidence that our research is trustworthy and of the highest quality. It also sets the culture of the Institute as an inclusive, respectful, open and outstanding place to work.
- 3.2. This policy is based on the <u>UK Research Integrity Office's Code of Practice for Research</u><sup>1</sup>, which has been designed to encourage good conduct in research and help prevent misconduct, in order to assist organisations and researchers to conduct research of the highest quality. It provides general principles and standards for good practice in research, applicable to both individual researchers and to the Institute as a whole. The policy is applicable to all Institute research and does not attempt to micro-manage research.
- 3.3. This policy supports the Institute to meet the requirements outlined in the following research integrity guidance:
  - Universities UK Concordat to Support Research Integrity (2019)<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> <u>https://ukrio.org/publications/code-of-practice-for-research/</u>

<sup>&</sup>lt;sup>2</sup> <u>https://universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2019/the-concordat-to-support-research-integrity.pdf</u>

- <u>Research Councils' Policy and Guidelines on the Governance of Good Research</u> <u>Conduct (2015)<sup>3</sup></u>
- <u>BBSRC Safeguarding Good Scientific Practice</u><sup>4</sup>
- Wellcome Good Research Practice Guidelines<sup>5</sup>
- 3.4. The policy is organised in the following sections:
  - Section 5 contains broad principles that define the responsibilities and values in the conduct of research by both researchers and the Institute as a whole.
  - Sections 6 and 7 list standards for good practice in research that researchers and the Institute will comply with and links to more detailed Institute policies in these areas.
  - A one-page Recommended Checklist for Researchers can be found in Appendix 1. This is a non-technical checklist summarising the key points of good practice in research and is applicable to all subject areas. The checklist is based on the more detailed standards in Section 7.
- 3.5. This policy overarches the following research integrity policies:
  - Research Misconduct Policy (BI-RES-004)
  - Research Data Management Policy(BI-RES-008)
  - Research Records Retention Policy (BI-RES-006)
  - Open Access Policy (BI-IM-001)
  - Open Data Policy (to follow)
  - Authorship Policy (BI-RES-001)
  - Human Research Policy (BI-RES-007)
  - BSU Barrier Integrity Policy (BRC-BIO-003)
  - Biosafety Policy (to follow)
  - Campus Use of Animals in Research (BRC-BIO-001)
  - Campus Use of Animal Tissues in Research (BRC-BIO-002)
  - Sample Handling Policy (to follow)
  - Laboratory Equipment Maintenance Policy (to follow)
- 3.6. It also complements other Institute policies, which are noted in relevant places below.

## 4. Scope

- 4.1. This policy applies to all those conducting and supporting Institute research, including:
  - Institute employees on Institute or Babraham Institute Enterprise Ltd (BIE) terms and conditions
  - Institute employees on BBSRC or other terms and conditions
  - Research Fellows on Institute terms and conditions
  - Research Fellows (honorary)
  - Honorary Members of Faculty
  - Babraham Institute registered PhD students
  - Visiting students

<sup>&</sup>lt;sup>3</sup> <u>http://www.ukri.org/about-us/policies-and-standards/research-integrity/</u>

<sup>&</sup>lt;sup>4</sup> <u>bbsrc.ukri.org/about/policies-standards/good-scientific-practice/</u>

<sup>&</sup>lt;sup>5</sup> wellcome.org/grant-funding/guidance/good-research-practice-guidelines

- Visiting researchers and workers, including consultants and secondees
- Workers provided by a third party / contractors
- Trustees
- 4.2. Babraham Institute registered PhD students should also refer to the University's <u>Research</u> <u>Integrity website pages</u><sup>6</sup>, their supervisor(s) and / or the Graduate Tutor for support.
- 4.3. The following should refer to their employer's policies and agreement for working on site, in conjunction with this policy :
  - Honorary Members of Faculty
  - Visiting students
  - Visiting researchers, workers or secondees
  - Workers provided by a third party / contractors
- 4.4. This policy is public facing on the Institute website.

# 5. Institute values & research integrity principles

5.1. The Institute's defined values are:

### Benefit: We make a difference

As a world-leading centre of excellence in life sciences research we work to make discoveries for societal benefit that make a real difference in science, health and policy within the UK and globally.

### Innovation: We extend the boundaries of knowledge

We work at the forefront of creative discovery science, nurturing our staff through development and training, and provide the environment for innovation to thrive.

### Integrity: We are open, honest and inclusive

We work together to uphold the standards expected of us, operating with honesty and responsibility, creating an inclusive and motivating environment, and communicating openly and transparently.

### 5.2. The purpose of these values are:

- To succinctly define what the Institute stands for.
- To establish values that are reflective of how the Institute wants to be perceived.
- To shape what we do and how we act.
- To help Institute staff understand how their work connects to these values.
- 5.3. The following principles set out the responsibilities and commitments relevant to research integrity with reference to the Institute's three core values. Unsurprisingly, many of the principles fall within the Integrity value, but it is important to note that the values do not sit separately from each other but show interdependencies. While some elements of the principles may seem self-evident, and there is some overlap between them, the principles aim to encourage all involved in research to consider the wider consequences of their work

<sup>&</sup>lt;sup>6</sup> <u>https://www.research-integrity.admin.cam.ac.uk/</u>

and to engage critically with the practical, ethical and intellectual challenges that are inherent in the conduct of high quality research, rather than treating this policy as just another document to be followed.

- 5.4. Operating within the overarching Institute values, these principles will act as a guide when implementing and complying with the core standards (sections 6 and 7) and the Recommended Checklist for Researchers in Appendix 1.
- 5.5. **Principle: EXCELLENCE:** Excellence in the Institute's research sits across the Institute's three values: doing rigorous and robust science to advance knowledge and deliver benefit. The Institute and its researchers strive for excellence when conducting research and aim to produce and disseminate work of the highest quality. This policy, its principles and its standards are intended to support these goals.

### 5.6. Value: Innovation

**Principle: TRAINING AND SKILLS DEVELOPMENT/ACQUISITION:** the Institute will provide training and opportunities for development for its researchers, and the necessary resources to enable them to conduct research to the required standards. The Institute will support researchers in identifying unmet needs for training and development. Researchers will ensure that they have the necessary skills, training and resources to carry out research, in the proposed research team or through collaboration with specialists in relevant fields, and report and resolve any unmet needs identified.

### 5.7. Value: Integrity

**Principle: HONESTY:** the Institute works to create and maintain a culture of research that fosters and supports honesty in research, recognising also that this connects into the values of benefit and innovation. Researchers will be honest in relation to their own research and that of others. They will do their utmost to ensure the accuracy of data and results, acknowledge the contributions of others, and neither engage in misconduct nor conceal it.

**Principle: RESPONSIBILITY:** the Institute and its researchers will comply with all legal and ethical requirements relevant to their field of study. They will declare any potential or actual conflicts of interest relating to research and, where necessary, take steps to resolve them.

**Principle: COOPERATION:** the Institute and its researchers promote the open exchange of ideas, research methods, data and results and their discussion, scrutiny and debate, subject to any considerations of confidentiality.

**Principle: ACCOUNTABILITY:** the Institute and its researchers recognise that in and through their work they are ultimately accountable to the general public and will act accordingly. They will ensure that any research undertaken complies with any agreements, terms and conditions relating to the project, and allows for proper governance and transparency. Researchers will follow the requirements and guidance of any professional bodies in their field of research. Researchers who are members of a regulated profession will follow the requirements and guidance of the body regulating their profession.

**Principle: SAFETY:** the Institute and its researchers will ensure the dignity, rights, safety and wellbeing of all involved in research and avoid unreasonable risk or harm to research

subjects, patients, participants, researchers and others. They will report and address any concerns relating to the dignity, rights, safety and well-being of those involved in research. Research will be initiated and continued only if the anticipated benefits justify the risks involved.

# 6. Key responsibilities

### 6.1. The Institute and its researchers will:

- Comply with all legal and ethical requirements and other guidelines that apply to their research. This includes submitting research proposals for ethics review where appropriate and abiding by the outcome of that review. They will also ensure that research projects are approved by all applicable bodies, ethical, regulatory or otherwise. Research will not begin before the appropriate approvals are in place.
- When conducting, or collaborating in, research in other countries, comply with the legal and ethical requirements existing in the UK and in the countries where the research is conducted. Similarly, organisations and researchers based abroad who participate in UK-hosted research projects must comply with the legal and ethical requirements existing in the UK as well as those of their own country.
- Ensure that all research projects have sufficient arrangements for insurance and indemnity prior to the research being conducted.
- 6.2. **Babraham Executive Committee (BEC)** has responsibility for ensuring the overall quality and integrity of research conducted at the Institute, including approval of updates in this policy. BEC delegates responsibility for research integrity on behalf of the Institute to specific departments and functions as outlined in Appendix 1. Under BEC's direction, the Institute will:
  - Ensure that good practice in research forms an integral part of its research strategy and policy;
  - Establish clear policies and procedures that cover the principles of good practice in research (see section 5) and offer detailed guidance on the standards set out in this policy;
  - Ensure that research integrity policies and procedures complement and are in accordance with existing organisational policies, such as those for health and safety, raising concerns at work, management of finances or of intellectual property, and equality and diversity;
  - Make sure that its researchers are aware of these policies and procedures and that all research carried out under the auspices of the Institute complies with them;
  - Foster and maintain a research environment that develops good research practice and embeds a culture of research integrity;
  - Provide training, resources and support to its researchers to ensure that they are aware of these policies and procedures and are able to comply with them;
  - Encourage its researchers to consider good practice in research as a routine part of their work; and
  - Monitor these measures for suitability and effectiveness and review them where necessary.

### 6.3. Institute Strategic Programme (ISP) Leads, group leaders and Facility Heads will

• Ensure compliance with this policy within their areas of work, and that a climate of good scientific practice exists in their research teams, including a commitment to the development of scientific and technical skills.

### 6.4. **Researchers** will:

- Recognise their responsibility to conduct research of high ethical standards;
- Be aware of the Institute's policies and procedures on good practice in research;
- Make sure that their research complies with these policies and procedures, and seek guidance from the relevant Institute team when necessary;
- Work with the Institute to ensure that they have the necessary training, resources and support to carry out their research; and,
- Suggest to the Institute how guidance on good practice in research might be developed or revised.

# 7. Standards for the Institute & its researchers

- 7.0.1 The Institute and its researchers will comply with the following core standards, which should be interpreted in light of the principles in section 5. Each Standard is applicable to, as outlined below:
  - The Institute and researchers;
  - The Institute (and / or named teams); and
  - Researchers.

## 7.1. Leadership & supervision

- 7.1.1. **The Institute and its researchers** will aim to promote and maintain an environment that fosters and supports research of high ethical standards, mutual cooperation, professionalism and the open and honest exchange of ideas. Everyone at the Institute will work together to foster a culture where good conduct in research is promoted and inappropriate conduct is identified and addressed.
- 7.1.2. **The Institute** will provide direction and supervision of research and researchers, setting out clear lines of accountability for the Institute and management of research (see the Delegated Authority Policy; BI-COR-005). The Institute will support supervisors and researchers in meeting the legal and ethical requirements of conducting research. The Institute will encourage the career development of its researchers and provide training and mentoring for new researchers. It will also offer training and support to those charged with the supervision and development of other researchers. The Institute supports the principles of the <u>Concordat to Support the Career Development Researchers</u><sup>7</sup>.
- 7.1.3. **Researchers** involved in the supervision and development of other researchers will be aware of their responsibilities and ensure that they have the necessary training, time and resources to carry out that role, and request support from the HR team (hr@babraham.ac.uk) if required.
- 7.1.4. See the Delegated Authority Policy (BI-COR-005) and Learning & Development Policy (to follow) for further information.

<sup>&</sup>lt;sup>7</sup> <u>https://www.vitae.ac.uk/policy/concordat/full</u>

## 7.2. Recruitment & induction

- 7.2.1. **The HR team** oversees the recruitment of appropriately qualified individuals in accordance with the Recruitment Policy (to follow). High levels of research integrity is an essential requirement for all research roles and applicants may be asked to further evidence this at interview.
- 7.2.2. **Researchers** are provided with the BBSRC Safeguarding Good Scientific Practice guidance during their induction, and supervisors outline expectations and any specific ethical requirements to new starters. Students receive a training module on Good Laboratory Practice during their induction.

## 7.3. Researchers competence, training & mentorship

- 7.3.1. **The Institute** provides training for researchers to enable them to carry out their duties and develop their knowledge and skills throughout their career at the Institute. This will include training in the responsible design, conduct, recording and dissemination of research. The Institute supports researchers in identifying unmet needs for training and development. The Institute provides qualified mentors to assist in the training and career development of new researchers and also provides career development and educational opportunities for researchers who are more established in their careers. As in 6.2.3, the Institute supports the principles of the Concordat to Support the Career Development of Researchers<sup>8</sup>.
- 7.3.2. **The Institute** provides particular support for student researchers to make sure that student researchers understand which standards and organisational policies and procedures they are expected to comply with. Supervisors can help provide students with clarity about what is expected of them.
- 7.3.3. **Researchers** will undergo training in order to carry out their duties and to develop their knowledge and skills throughout their career, repeating training where necessary to ensure that skills are kept up to date. Researchers will identify needs for training when they arise and report them to their line manager or the HR team (<u>hr@babraham.ac.uk</u>). See also Section 7.1.3.
- 7.3.4. See the Learning & Development Policy (to follow) for further information.

# 7.4. Research design

- 7.4.1. **The Institute and its researchers** will ensure that, when designing research projects:
  - The proposed research addresses pertinent question(s) and is designed either to add to existing knowledge about the subject in question or to develop methods for research into it;
  - The design of the study is appropriate for the question(s) being asked and addresses the most important potential sources of bias;
  - The design of the study takes into account best practice relevant to the field, e.g., 3Rs for animal research (Refinement, Reduction and Replacement);

<sup>&</sup>lt;sup>8</sup> <u>https://www.vitae.ac.uk/policy/concordat/full</u>

- The design and conduct of the study, including how data will be gathered, analysed and managed, are set out in detail in a pre-specified research plan or protocol that must be documented;
- All necessary skills and experience will be available to carry out the proposed research, in the proposed research team or through collaboration with specialists in relevant fields;
- Sufficient resources will be available to carry out the proposed research and that these resources meet all relevant standards; and
- Any issues relating to the above are resolved as far as possible prior to the start of the research.
- 7.4.2. **The Institute (where appropriate) and its researchers** will conduct a risk assessment of the planned study to determine:
  - Whether there are any ethical issues and whether ethics review is required;
  - The potential for risks to the Institute, the research, or the health, safety and well- being of researchers and research participants; and
  - What legal requirements govern the research.
- 7.4.3. **The Institute and its researchers** will ensure that, where the design of a study has been approved by ethics (for animal or human research), regulatory or peer review, any subsequent alterations to the design are subject to appropriate review to determine that they will not compromise the integrity of the research or any terms of consent previously given.
- 7.4.4. **The Institute** has set up systems to ensure that when there are risks that proposed research or its results may be misused for purposes that are illegal or harmful, those risks are identified and addressed. The main risks of Institute science are biological, chemical and nuclear, which are managed by the H&S and Security teams under relevant legislation and Institute policies (Biosafety Policy [BRC-HAS-001]; Chemical Safety Policy [BI-HAS-008]; and Ionising Radiation Safety Policy [BI-HAS-007], respectively). Knowledge risks are managed through ethics applications, grant applications and through normal research group structures: group leaders and ISP Leads are available to discuss knowledge risks identified by researchers. The Institute will make these systems known to researchers and provide guidance and support to researchers on projects where such risks are identified.
- 7.4.5. **Researchers** will try to anticipate any risks that the proposed research might produce results that could be misused for purposes that are illegal or harmful. Researchers will report any risks to, and seek guidance from, the appropriate person(s) in their organisation (see 7.4.4) and take action to minimise those risks.
- 7.4.6. **Researchers** will ensure that their research design does not lead to biased outcomes, e.g., consider sex as an independent variable.
- 7.4.7. **Researchers** will be prepared to make research designs available to peer reviewers and journal editors when submitting research reports for publication.
- 7.4.8. Advice on research design can be sought from:
  - The Institute statistician
  - Facility Heads and technical staff
  - Group leaders and ISPG Leads

## 7.5. Collaborative working

- 7.5.1. **The Institute and its researchers** will pay particular attention to projects that include animals, animal tissues, participants, human material or personal data from different countries or where work will be carried out in another country due to the additional legal and ethical requirements and other guidelines that may apply. See also Sections 6.1, 7.7.2 and 7.8.2.
- 7.5.2. **The Institute** will work with partner organisations to ensure the agreement of, and compliance with, common standards and procedures for the conduct of collaborative research, including the resolution of any issues or problems that might arise and the investigation of any allegations of misconduct in research if they occur. See the Acceptability of Funders, Customers & Partners Policy (BI-COR-011) for further information on the Institute's procedures that govern the acceptability of collaborative working.
- 7.5.3. **Researchers** must be aware of the standards and procedures for the conduct of research followed by any organisations involved in collaborative research that they are undertaking. They must also be aware of any contractual requirements involving partner organisations, seeking guidance and assistance where necessary and reporting any concerns or irregularities to the appropriate person(s) as soon as they become aware of them.
- 7.5.4. **Researchers** will try to anticipate any issues that might arise as a result of working collaboratively and agree jointly in advance how they might be addressed, communicating any decisions to all members of the research team. In particular, agreement will be sought on the specific roles of the researchers involved in the project and on issues relating to intellectual property, publication, and the attribution of authorship, recognising that, subject to legal and ethical requirements, roles and contributions may change during the time span of the research.
- 7.5.5. Speak to the Contracts Office to set up a research collaboration agreement in advance of the project start date, or for advice.

## 7.6. Conflicts of Interest

V1.0

- 7.6.1. **The Institute and its researchers** recognise that conflicts of interest (i.e., personal or institutional considerations, including but not limited to financial matters) can inappropriately affect research. Conflicts of interest will be identified, declared and addressed in order to avoid poor practice in research or potential misconduct.
- 7.6.2. **The Institute and its researchers** will comply with the Institute's Conflicts of Interest Policy (BI-HR-008).

# 7.7. Research involving human participants, human material or personal data

- 7.7.1. **The Institute and its researchers** will make sure that any research involving human participants, human material or personal data complies with all legal and ethical requirements and other applicable guidelines.
- **7.7.2.** The Institute and its researchers will comply with the Institute's Human Research Policy (BI-RES-007) and process.

## 7.8. Research involving animals

- 7.8.1. **The Institute and its researchers** will make sure that research involving animals adheres to all legal and ethical requirements and other applicable guidelines. They will consider the opportunities for reduction, replacement and refinement of involving animals in research projects and must refer to the relevant guidance.
- 7.8.2. **The Institute and its researchers** will comply with the Campus Use of Animals in Research Policy (BRC-BIO-001), the Campus Use of Animal Tissues in Research (BRC-BIO-002) and associated policies (e.g., BSU Barrier Integrity Policy [BRC-BIO-003] and Biosafety Policy [BRC-HAS-001]).

## 7.9. Health & Safety

- 7.9.1. **The Institute and its researchers** will ensure that all research carried out under the Institute's auspices, or for which they are responsible, fulfils all requirements of health and safety legislation and good practice. They will bear in mind that certain types of research can present particular issues of health and safety and ensure that all research involving potential hazards to human health or the environment complies with all legal and Institute requirements and other applicable guidelines.
- 7.9.2. **The Institute and its researchers** will comply with the General Health & Safety Policy (BI-HAS-001), relevant sub-policies, rules and guidance.

## 7.10. Laboratory practice

- 7.10.1. **The Institute and its researchers** will comply with the Sampling Handling Policy (to follow).
- 7.10.2. **The Institute** has management systems in place to promote good working practices in its laboratories.
- 7.10.3. **The Institute's Technical Services and Science Facility teams** assure the quality of laboratory facilities and equipment. Further detail can be found in the Laboratory Equipment Maintenance Policy (to follow).
- 7.10.4. **Researchers** will ensure they are appropriately trained in laboratory practice, and use of laboratory facilities and equipment. Advice can be sought from the Technical Services Team (Technical Services <u>Technical.Services@babraham.ac.uk</u>) in the first instance if you are unsure.

## 7.11. Intellectual property

- 7.11.1. **The Institute and its researchers** will ensure that any contracts or agreements relating to research include provision for ownership and use of intellectual property. Intellectual property includes, but is not limited to: research data and other findings of research; ideas, processes, software, hardware, apparatus and equipment; substances and materials; and artistic and literary works, including academic and scientific publications.
- 7.11.2. **The Institute and its researchers** will comply with the Institute's Intellectual Property Policy (BI-KEC-001).

## 7.12. Finance

- 7.12.1. **The Institute and its researchers** will ensure that the terms and conditions of any grant or contract related to the research are adhered to.
- 7.12.2. **The Institute** has policies regarding the purchasing or procurement of materials, equipment or other resources for research (Procurement Policy, BI-FIN-001; and Capital Equipment Policy, BI-FIN-002) and the hiring of staff for research projects (Recruitment Policy; to follow). These policies include statements on the ownership of resources and the rights of researchers to use them. The Institute also has procedures for the monitoring and audit of finances relating to research projects.
- 7.12.3. **Researchers** will comply with Institute policies regarding the use and management of finances relating to research projects. They will cooperate with any monitoring and audit of finances relating to research projects and report any concerns or irregularities to the Finance team (finance@babraham.ac.uk) as soon as they become aware of them.

# 7.13. Collection & retention of data

- 7.13.1. **The Institute and its researchers** will comply with all legal, ethical, funding body and organisational requirements for the collection, use and storage of data, especially personal data, where particular attention must be paid to the requirements of data protection legislation. They will also maintain confidentiality where undertakings have been made to third parties or to protect intellectual property rights. The Institute and its researchers will ensure that research data relating to publications is available for discussion with other researchers, subject to any existing agreements on confidentiality.
- 7.13.2. **The Institute and its researchers** will comply with the Research Data Management Policy (BI-RES-008).

## 7.14. Monitoring & audit

- 7.14.1. **The Institute and its researchers** will ensure that research projects comply with any monitoring and audit requirements. They will make sure that those charged with carrying out such monitoring and audits have sufficient training, resources and support to fulfil the requirements of the role.
- 7.14.2. **The Institute** monitors and audits research projects to ensure that they are being carried out in accordance) with good practice, legal and ethical requirements, and any other guidelines, adopting a risk-based and proportional approach. The Institute has a programme of biennial (internal audits) of research projects sampling a selection of projects (5-10%) at random or as a representative cross-section across the ISPs and Services. External audits are carried out by an auditor from Research Councils UK Audit and Assurance Services Group (AASG).
- 7.14.3. **Researchers** will consider any requirements for monitoring and audit at an early stage in the design of a project.
- 7.14.4. **Researchers** will cooperate with the monitoring and audit of their research projects by applicable bodies and undertake such when required. They will cooperate with any outcomes of the monitoring and audit of their research projects. If they become aware of a

need for monitoring and audit where it is not already scheduled, they will report that need to the QAR team (<u>BI-HS@babraham.ac.uk</u>).

## 7.15. Peer review & research evaluation

- 7.15.1. **The Institute and its researchers** are aware that peer review is an important part of good practice in: the publication and dissemination of research and research findings; the assessment of applications for research grants; and in the ethics review of research projects.
- 7.15.2. **The Institute** encourages researchers to act as peer reviewers for meetings, journals and other publications, grant applications and ethics review of research proposals, and support those who do so. The Institute recognises the obligations of peer reviewers to be thorough and objective in their work and to maintain confidentiality and will never put pressure, directly or indirectly, on peer reviewers to breach these obligations.
- 7.15.3. **Researchers** who carry out peer review will do so to the highest standards of thoroughness and objectivity and recognise and act on any conflicts of interest. They will follow the guidelines for peer review of any organisation for which they carry out such work. See the Conflicts of Interest Policy (BI-HR-008) for further guidance.
- 7.15.4. **Researchers** will maintain confidentiality and not retain or copy any material under review without the express written permission of the organisation which requested the review. They will not make use of research designs or research findings from a paper under review without the express permission of the author(s) and will not allow others to do so. Researchers acting as peer reviewers will declare any relevant conflicts of interest.
- 7.15.5. **Researchers** may, while carrying out peer review, become aware of possible misconduct, such as plagiarism, fabrication or falsification, or have ethical concerns about the design or conduct of the research. In such cases they should inform, in confidence, an appropriate representative of the organisation which requested the review, such as the editor of the relevant journal or chair of the relevant grants or ethics committee.
- 7.15.6. **The Institute** is a signatory of the San Francisco Declaration on Research Assessment (DORA) and thereby commits to the following DORA core principles:
  - Assessing research outputs and other research contributions based on their intrinsic merit
  - Discouraging the inappropriate use of proxies or metrics such as the title or impact factor of the journal in which the work was publish.

Researchers are encouraged to adopt and promote these principles.

## 7.16. Research outputs & open science

### 7.16.1. Open Science commitment

7.16.1.1. **The Institute and its researchers** are committed where possible to making research outputs open to others to access, reuse and distribute without undue limitations in order to uphold important features of research and innovation, such as transparency, openness, verification and reproducibility, across the whole lifecycle of research.

- 7.16.1.2. **The Institute and its researchers** while committed to making all research outputs as widely and freely available as possible will also protect relevant IP.
- 7.16.1.3. **The Institute and its researchers** will comply with the Open Access Policy (BI-IM-001) and Open Data Policy (to follow).

### 7.16.2. Methods (technologies) / data / code / materials

- 7.16.2.1. **The Institute** encourages the use of repositories (including public repositories where possible) for methods, data, code and materials.
- 7.16.2.2. **Researchers** should ensure that materials reported on in publications will be made available to others on request under any appropriate Material Transfer Agreements; these are drawn up by the Contracts Office in consultation with the scientist. Such interactions can provide an independent verification of the quality and accuracy of the work that produced the materials.

### 7.16.3. Pre-prints

7.16.3.1. **The Institute** encourages the use of pre-prints wherever possible. Researchers must note however that pre-prints are considered disclosure so must not be used where there is commercialisation value. Please speak to the Commercialisation team for advice before publishing a pre-print if you are unsure.

### 7.16.4. Publication & authorship

- 7.16.4.1. **The Institute and its researchers** accept their duty to publish and disseminate research in a manner that reports the research and all the findings of the research accurately and without selection that could be misleading.
- 7.16.4.2. **The Institute and its researchers** will comply with the Institute's Authorship Policy (BI-RES-001).
- 7.16.4.3. **The Institute** aims to ensure that sponsors and funders of research: respect the duty of researchers to publish their research and the findings of their research; do not discourage or suppress appropriate publication or dissemination; and do not attempt to influence the presentation or interpretation of findings inappropriately.
- 7.16.4.4. **The Institute** provides training and support to guide researchers in the publication and dissemination of research and the findings of research that involves: confidential or proprietary information; issues relating to patents or intellectual property; findings with serious implications for public health; contractual or other legal obligations; and / or interest from the media or the general public.
- 7.16.4.5. **Researchers** who are discouraged from publishing and disseminating their research or its findings, or subjected to attempts to influence the presentation or interpretation of findings inappropriately, should discuss this the Named Person Responsible for Research Integrity (the Policy Owner, named on the first page) so that the matter can be resolved.

# 7.17. Misconduct in research

- 7.17.1. **The Institute and its researchers** will comply with the Institute's Research Misconduct Policy (BI-RES-004).
- 7.17.2. **The Institute** has defined what it considers to be misconduct in research and has made it known to researchers. The Institute has established and publicised a Research Misconduct Policy (BI-RES-004) to investigate allegations of misconduct in research and ensure that any such allegations are investigated thoroughly and fairly and in a timely manner.
- 7.17.3. **The Institute and its researchers** will also comply with associated policies that complement this Research Integrity Policy and form part of the Institute's research integrity framework, including the Whistleblowing Policy (BI-COR-010), Fraud & Bribery Policy (BI-COR-007) and Modern Slavery & Human Trafficking Policy (BI-COR-008).

# 7.18. Leaving the Institute

- 7.18.1. **Researchers** are aware that, when a researcher or group leaves Institute employment, the transfer of materials and / or data can be negotiated with the Institute Director and senior management. See also the Code of Conduct (BI-HR-001) for further information on leaving procedures.
- 7.18.2. **Group leaders** should refer to the Group Leader Starting & Leaving Policy (BI-RES-003) for further information relevant to their positions.

# 8. Further information

- 8.1. For further information see:
  - UKRIO, to gain access to independent, confidential and expert advice and guidance on any issues relating to good practice and misconduct in research.
- 8.2. This policy will be reviewed regularly to incorporate any changes, legislative or otherwise. The next review date is specified on the cover sheet.
- 8.3. Associated policies, procedures and guidance are listed on the cover sheet. The Policy Owner named on the cover sheet can be contacted with any queries.
- 8.4. This policy may be varied, withdrawn or replaced at any time by the Institute at its absolute discretion.

# **Appendix 1 – Recommended checklist for researchers**

The Checklist lists the key points of good practice in research for a research project and is applicable to all subject areas. More detailed guidance can be found in section 6. A PDF version is available from www.ukrio.org

Before conducting your research, and bearing in mind that, subject to legal and ethical requirements, roles and contributions may change during the time span of the research:

- 1 Does the proposed research address pertinent question(s) and is it designed either to add to existing knowledge about the subject in question or to develop methods for research into it?
- 2 Is your research design appropriate for the question(s) being asked?
- 3 Will you have access to all necessary skills and resources to conduct the research?
- 4 Have you conducted a risk assessment to determine:
  - a whether there are any ethical issues and whether ethics review is required;
  - b the potential for risks to the organisation, the research, or the health, safety and well-being of researchers and research participants; and
  - c what legal requirements govern the research?
- 5 Will your research comply with all legal and ethical requirements and other applicable guidelines, including those from other organisations and/or countries if relevant?
- 6 Will your research comply with all requirements of legislation and good practice relating to health and safety?
- 7 Has your research undergone any necessary ethics review (see 4(a) above), especially if it involves animals, human participants, human material or personal data?
- 8 Will your research comply with any monitoring and audit requirements?
- 9 Are you in compliance with any contracts and financial guidelines relating to the project?
- 10 Have you reached an agreement relating to intellectual property, publication and authorship?
- 11 Have you reached an agreement relating to collaborative working, if applicable?
- 12 Have you agreed the roles of researchers and responsibilities for management and supervision?
- 13 Have all conflicts of interest relating to your research been identified, declared and addressed?
- 14 Are you aware of the guidance from all applicable organisations on misconduct in research?

### When conducting your research:

- 1 Are you following the agreed research design for the project?
- 2 Have any changes to the agreed research design been reviewed and approved if applicable?
- 3 Are you following best practice for the collection, storage and management of data?
- 4 Are agreed roles and responsibilities for management and supervision being fulfilled?
- 5 Is your research complying with any monitoring and audit requirements?

#### When finishing your research:

- 1 Will your research and its findings be reported accurately, honestly and within a reasonable time frame?
- 2 Will all contributions to the research be acknowledged?
- 3 Are agreements relating to intellectual property, publication and authorship being complied with?
- 4 Will research data be retained in a secure and accessible form and for the required duration?
- 5 Will your research comply with all legal, ethical and contractual requirements?

# **Appendix 2 – Schedule of responsibilities**

Detail of the responsibilities is included in the relevant section	n.
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Section	Responsibilities	Owner
6	Overall quality and integrity of research conducted at	Babraham Executive
	the Institute	Committee (BEC)
6	Ensure compliance with this policy within their areas of	Institute Strategic
	work, and that a climate of good scientific practice	Programme (ISP) Leads,
	exists in their research teams, including a commitment	group leaders, Facility Heads
	to the development of scientific and technical skills.	
6	• Recognise their responsibility to conduct research of	Researchers
	high ethical standards;	
	• Be aware of the Institute's policies and procedures on	
	good practice in research;	
	<ul> <li>Make sure that their research complies with these</li> </ul>	
	policies and procedures, and seek guidance from the	
	relevant Institute team when necessary;	
	• Work with the Institute to ensure that they have the	
	necessary training, resources and support to carry out	
	their research; and,	
	<ul> <li>Suggest to the Institute how guidance on good</li> </ul>	
	practice in research might be developed or revised.	
7.1.	Leadership & supervision	HR, Graduate Programme,
		ISP Leads, Group Leaders,
		Line managers
7.2.	Recruitment & induction	HR, Graduate Programme,
		ISP Leads, Group Leaders,
		Line managers
7.3.	Researchers competence, training & mentorship	HR, Graduate Programme,
		ISP Leads, Group Leaders,
		Line managers
7.4.	Research design	Science Policy Committee
		(SPOC), ISP Leads, Group
		Leaders, Line managers,
		Facility Heads and staff,
7 -	Collebourtius useding	Institute Statistician
7.5.	Collaborative working	Contracts Office
7.6.	Conflicts of Interest	Grants Office, Governance Office
7.7.	Research involving human participants, human material	Human Research Support
	or personal data	
7.8.	Research involving animals	AWERB, Named Veterinary
		Surgeon, Biological Support
		Unit
7.9.	Health & Safety	Health & Safety
7.10.	Laboratory practice	ISP Leads, Group leaders
7.11.	Intellectual property	Knowledge Exchange &
		Commercialisation (KEC),
		Contracts Office
7.12.	Finance	Finance

7.13.	Collection & retention of data	Chief Information Officer,
		ISP Leads, Group leaders
7.14.	Monitoring & audit	Quality & Assurance of
		Research
7.15.	Peer review & research evaluation	Grants Office, SPOC, Science
		& Impact Advisory
		Committee (SIAC)
7.16.	Research outputs & open science	-
7.16.1.	Open Science commitment	Open Science Lead
7.16.2.	Methods (technologies) / Data / Code / Materials	ISP Leads, Group leaders
7.16.3.	Pre-prints	ISP Leads, Group leaders
7.16.4.	Publication & authorship	Named Person Overseeing
		Research Integrity (NPORI)
7.17.	Misconduct in research	Named Person Overseeing
		Research Integrity (NPORI)
7.18.	Leaving the Institute	HR, Graduate Programme,
		ISP Leads, Group leaders,
		Line managers