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TECHNOLOGICAL
UNIVERSITY DUBLIN

Code of Conduct for Ensuring Excellence in Research Integrity

Contents

Glossary of Terms

Research and Scholarship[1] is characterised as "creative work undertaken on a systematic basis in order to increase the stock of knowledge of humanity, culture and society and the use of this stock of knowledge to devise new applications."

- It contributes to the stock of human knowledge; gives meaning to isolated facts putting them into perspective through synthesis; applies knowledge through problem-solving; and transforms and extends our understanding/knowledge.
- It must be published, disseminated or made publicly available in the form of assessible research outputs.
- It includes work of direct relevance to the needs of commerce, industry, and to the public and voluntary sectors; 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, pedagogical practices, and processes, including design and construction.

Active Researchers include academic staff, research assistants, research fellows, senior research fellows, research professors and academic-related staff who are *actively* undertaking research as defined above over the previous five year period. This activity is published, disseminated or made publicly available in the form of assessable research outputs, and should be lodged in ARROW (as appropriate). In addition, research active staff are normally currently supervising postgraduate research student(s), and/or are in receipt of competitively obtained funding for research and/or knowledge transfer.

Research Collaboration is the practice whereby individuals work together on a common research project to a common purpose. In this context, active researchers at DIT collaborate with others external to the Institute. Collaborators may be members of the public or from another Higher Education Institution or from commerce, industry, the public, private or voluntary sectors.

The **principal investigator** (**PI**) is the holder of an independent research funding ward and is the lead researcher for the project

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[1] This definition has been approved SLT and is included in the Research Action Plan of 2013

Informed Consent is a process for getting permission before conducting research on a person ie the research participant. An informed consent can be said to have been given based upon a clear appreciation and understanding of the facts, implications, and consequences of an action by the research participant.

Relevant Personnel

The DIT Code of Conduct for Research Integrity applies to:

- All active Researchers (including academic staff, research assistants, research fellows, senior research fellows, research professors and academic-related staff) employed by DIT, including permanent, CID and contract staff;
- Visiting Researchers (including academic staff, research assistants, research fellows, senior research fellows, research professors and research students, visiting DIT from any other National or International institution or agency;
- All graduate research students registered at DIT and their supervisors;
- Other staff involved in the research process (including technical and administrative staff) employed by DIT;
- Any persons with honorary or adjunct positions involved in research within, or on behalf of, DIT;
- Collaborators and sub-contractors from other institutions, government bodies and industry, involved in research within, or on behalf of, DIT;
- All individuals engaged in the setting of research priorities and in the assessment of research at DIT, including examiners.

The term 'researcher' is used throughout the DIT Code to refer to any and all of the above categories, as appropriate.

OCED Descriptions of Types of Misconduct by Researchers.

Core "Research Misconduct"	Research practice misconduct
• Fabrication of data • Falsification of data • Plagiarism FFP normally includes: - Selectively excluding data from analysis - Misinterpreting data to obtain desired results (including inappropriate use of statistical methods) - Doctoring images in publications - Producing false data or results under pressure from a sponsor	- Using inappropriate (e.g., harmful or dangerous) research methods - Poor research design - Experimental, analytical, computational errors - Violation of human subject protocols - Abuse of laboratory animals
Data-related misconduct	**Publication-related misconduct**
- Not preserving primary data - Bad data management, storage - Withholding data from the scientific community NB: The above applies to physical research materials as well	- Claiming undeserved authorship - Denying authorship to contributors - Artificially proliferating publications ("salami-slicing") - Failure to correct the publication record - Including authors without permission
Personal misconduct in the research setting	**Financial, and other misconduct**
- Inappropriate personal behaviour, harassment - Inadequate mentoring, counselling of students - Insensitivity to social or cultural norms	- Peer review abuse e.g., non-disclosure of conflict of interest, unfairly holding up a rival's publication - Misrepresenting credentials or publication record - Misuse of research funds for unauthorised purchases or for personal gain - Making an unsubstantiated or malicious misconduct allegation

Reproduced and amended from OECD publication 'Best practices for ensuring scientific integrity and preventing misconduct.' http://www.oecd.org/sti/scienceandtechnologypolicy/40188303.pdf

1. Introduction

Dublin Institute of Technology (DIT) promotes and promulgates good ethical research and scholarly practice, emphasises integrity and rigour and sustains a culture in which the principles of honesty, openness and fairness are understood and observed. DIT encourages researchers to be as open as possible in discussing and disseminating their work with other researchers and the public. DIT has a responsibility to ensure that all research and scholarly activity carried out by its staff and students meets the highest ethical standards and is committed to ensuring the highest standards of integrity, aligned with basic principles of good research and scholarly practice.

The DIT Code of Conduct for Research Integrity addresses the issues involved in the conduct of research to the highest international standards and according to best practice, and it provides guidance on these specific standards. All research conducted at DIT must be consistent with the principles of the *National Policy Statement on Ensuring Research Integrity in Ireland,* the *European Code of Conduct for Research Integrity* and with Irish law and policy, including licensing requirements, and with this and related policies of DIT. The DIT Code, [to be] approved by the Academic Council of DIT, incorporates the *National Policy Statement on Ensuring Research Integrity in Ireland*, and DIT affirms the commitments contained therein.[2] The DIT Code also incorporates the *European Code of Conduct for Research Integrity*.[3] The DIT Code adopts the definitions contained in the National Policy Statement on Ensuring Research Integrity in Ireland. If any conflict or ambiguity arises between the National Policy Statement on Ensuring Research Integrity in Ireland and the DIT Code, the DIT Code shall prevail. Researchers have a responsibility to ensure that they and all of their collaborators and team-members are aware of Irish law and DIT policy and ensure that all relevant requirements are met.

The European Code of Conduct for Research Integrity specifies four fundamental principles of research integrity that guide researchers in their work. These principles are:

- **Reliability** in ensuring the quality of research, reflected in the design, the methodology, the analysis and the use of resources.
- **Honesty** in developing, undertaking, reviewing, reporting and communicating research in a transparent, fair, full and unbiased way.
- **Respect** for colleagues, research participants, society, ecosystems, cultural heritage and the environment.

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[2] http://www.iua.ie/publication/national-policy-statement-on-ensuring-research-integrity-in-ireland/
[3] http://www.allea.org/wp-content/uploads/2017/05/ALLEA-European-Code-of-Conduct-for-Research-Integrity-2017.pdf

- **Accountability** for the research from idea to publication, for its management and organisation, for training, supervision and mentoring, and for its wider impacts

2. Responsibilities

DIT expects all researchers to work within its Code. The D I T Code of Conduct for Research Integrity sets out general guidance, but it is recognised that principles of good research practice will apply differently in different disciplines, for example, in the biological and social sciences.

A Research Integrity Officer shall be appointed by DIT and will have the functions conferred on him or her under the DIT Code. If a conflict of interest arises such that the Research Integrity Officer (RIO) cannot act in respect of a particular matter under the DIT Code or if for any other reason the Research Integrity Officer cannot act in respect of any particular issue under the DIT Code, the President may appoint an *ad hoc* Research Integrity Officer to deal with the matter.

If researchers have any doubt concerning the applicability of a particular clause of the DIT Code, they should consult with their Head of School, the Director for Research, Enterprise and Innovation Services, the Head of the Graduate Research School, the Chair of the Research Ethics and Integrity Committee or the Research Integrity Officer, as appropriate.

In addition to the DIT Code of Conduct for Research Integrity, researchers should make themselves familiar with any additional guidelines that are relevant to their own discipline; for example, policies relating to Intellectual Property, Conflict of Interest, Data Protection and Research Ethics.

3. Research Misconduct

Research misconduct includes a wide variety of activities which compromise the performance or the outputs of the research. The most common types of research misconduct are:
- *Fabrication* of data i.e. making up results and recording or reporting them.
- *Falsification* of data i.e. manipulating research, materials, equipment or processes, or changing or omitting data or results such that the research is not accurately represented in the research record.

- *Plagiarism* i.e. the appropriation of another person's ideas, processes, results, or words, without giving appropriate credit, including those obtained through confidential review of others' research proposals and manuscripts.

Each of these comprises an attack on the integrity of the research record and, as such, must be vigorously defended against. Fabrication and falsification of data are the most serious offences that can be committed, as the development of knowledge itself is undermined. Plagiarism may be seen as marginally less serious, since the knowledge core is not, in itself, damaged. However, the corrupting effect on the principle of open communication and sharing of knowledge for wider benefit means that repeated or significant plagiarism must be regarded as extremely serious.

While Fabrication, Falsification, and Plagiarism ["FPP"] represent the most serious examples of misconduct, there are also additional types of poor practices which, while not as serious as FFP in individual instances, are probably more widespread and therefore potentially more damaging to the reputation of research and the research community's integrity. These poor practices include but are not confined to:

- *Data-related poor practice* e.g. not preserving primary data, poor data management and/or storage and backup;
- *Publication-related practice* e.g. claiming undeserved authorship, denying authorship to contributors, artificially proliferating publications;
- *Personal behaviours* e.g. inadequate leadership/mentoring of the next generation of researchers and scholars, inappropriate personal behaviour;
- *Financial and other malpractice* e.g. peer review abuse, non-disclosure of a conflict of interest, misrepresenting credentials;
- *Poor research procedures* e.g., harmful, dangerous or unethical research methods

4. Ethical Approval

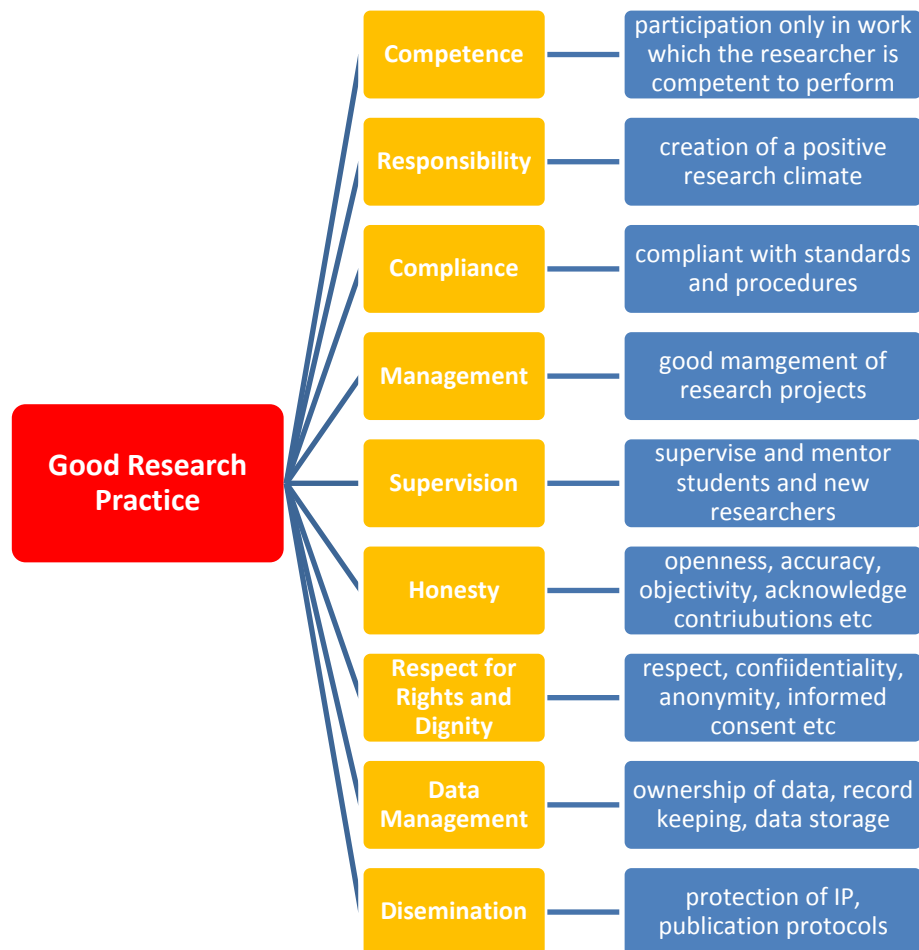All research and scholarly activities, whether funded or not, must be reviewed by the DIT's Research Ethics and Integrity Committee (REIC). This is a self-declaration process and all researchers should ensure that their proposed work has been approved by the REIC before commencement of the work. For externally funded projects, REIC approval is required before funds can be released for the project.

The REIC operates an online application system which allows applicants to upload the details of the proposed work and formally identify the potential ethical issues that arise in connection with the research activities.[4] The REIC meets regularly (3-4 times per semester) and applications should normally be submitted two weeks in advance of a meeting. Decisions of the committee are normally communicated to applicants shortly following the meeting.

5. Principles of Good Research Practice

All researchers at DIT, whatever their discipline, are required to understand, and observe the general principles of good research practice presented in the following sections. The DIT Code provides guidance on the minimum standards expected of all DIT researchers. The lack of mention of particular acts or omissions should not be taken as conclusive in any adjudication on professional conduct.

Good Research Practice		
	Competence	participation only in work which the researcher is competent to perform
	Responsibility	creation of a positive research climate
	Compliance	compliant with standards and procedures
	Management	good mamgement of research projects
	Supervision	supervise and mentor students and new researchers
	Honesty	openness, accuracy, objectivity, acknowledge contriubutions etc
	Respect for Rights and Dignity	respect, confiidentiality, anonymity, informed consent etc
	Data Management	ownership of data, record keeping, data storage
	Disemination	protection of IP, publication protocols

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[4] https://form.jotformeu.com/61817286338363

6. Competence

6.1 Competence is defined as the ability to apply knowledge and skills to achieve intended results.

6.2 Researchers are responsible for actively maintaining professional competence and to be knowledgeable within their areas of expertise.

6.2.1 Researchers must always be mindful of the limits of their own training and expertise. Researchers must not claim any level of competence that they do not possess, and must take all reasonable steps to ensure that their qualifications, capabilities and views are not misrepresented by others. If such misrepresentation takes place, the individual(s) affected must take the necessary steps to correct it.

6.3 Peer review requires that the reviewer/referee be expert in the subject under review, and if researchers consider themselves to be insufficiently expert in an area on which they have been asked to comment, they must make this clear, and are normally expected to return the material without review.

7. Responsibility

7.1 It is the responsibility of the President, Directors, Heads of School, Heads of Research Institutes, Academic Leaders and other relevant senior managers, both academic and support, to ensure that an environment is created which allows research to be conducted in accordance with good research practice.

7.2 The individuals identified in 7.1 are responsible for establishing a research climate of mutual cooperation, in which researchers at all levels are encouraged to develop their skills and in which the open exchange of ideas is fostered.

7.3 All researchers must ensure that all relevant Human Resources policies and procedures are complied with.

7.4 Reasonable accommodation should be afforded to staff or graduate research students who object on grounds of conscience to participation in particular lines of research.

8. Compliance with Standards and Procedures

8.1 Research misconduct is least likely to arise in an environment where good research practice prevails and where there is adequate supervision at all levels.

8.2 It is a responsibility of all DIT staff, including the President, Directors, Heads of School, Heads of Research Institutes, Academic Leaders, Research Centre Managers, and supervisors of researchers to implement and promote principles of good research practice and to ensure adherence to appropriate standards.

8.3 Researchers are required to be aware of and to observe the principles of good research practice as outlined in the DIT Code.

8.4 Researchers should also observe, where relevant, standards published by learned societies and other professional bodies.

8.5 Researchers are expected to be aware of and keep informed of governmental, institutional and any other regulations, standards or policies, including national, transnational (EU) and international legislation, in proposing, conducting and reporting research.

8.6 Researchers are required to comply with any relevant audit or monitoring procedures, whether internal or external. Examples of such procedures include examination of the management of specific research projects, and compliance with the requirements of external sponsors.

8.7 Research protocols take account of, and are sensitive to, relevant differences in age, gender, culture, religion, ethnic origin and social class.

9. Managing Research Projects

9.1 Researchers must take all reasonable actions to ensure compliance with sponsor, institutional, legal, and ethical obligations in managing projects.

9.2 Researchers are expected to familiarise themselves with the terms and conditions of any research contract or agreement entered into by them or by DIT on their behalf.

9.3 Researchers must follow DIT financial procedures, including procurement, and must practise economy in the use of resources.

9.4 Principal investigators and lead supervisors must ensure that projects operate within their allocated budgets and that no penalties are incurred by failure to meet sponsors' requirements (for example, through late submission of reports).

9.5 Principal investigators and lead supervisors must ensure that the stipends and salaries of research personnel are aligned with the relevant pay scales approved by DIT and that all research positions are in line with relevant human resource policies at DIT, including approved recruitment procedures.

9.6 All partners in research collaborations take responsibility for the integrity of the research.

10.   Supervision and Mentoring

10.1 Experienced researchers have an extended responsibility to nurture the appropriate intellectual, technical, ethical and career development of staff, graduate research students and other supervisees.

10.2 Responsibility for ensuring that graduate research students and other new researchers understand good research practice lies with all members of the research community, but particularly with Heads of Research Institutes, Academic Leaders, Research Centre Managers, Heads of School, Principal Investigators, team leaders, grant holders and supervisors.

10.3 Good practice includes mentoring early career researchers in their new environment.

10.4 Supervisors are responsible for supporting the overall progress of their graduate research students and research staff. In the specific context of graduate research students, they must follow good supervisory practice as laid out in the current edition of the Graduate Research Regulations.[5]

10.5 Supervisors must also be familiar with the Irish Universities Quality Board/Quality and Qualifications Ireland 'Good Practice Guide in the Organisation of PhD programmes in Irish Higher Education (IUQB/QQI, 2009)[6] and Ireland's National Framework for Doctoral Education.[7]

10.6 Supervisors must also be familiar the European Universities Association Council for Doctoral Education publications Salzburg Principles (2005), Salzburg Recommendations (2010) and Taking Salzburg Forward (2016).[8]

10.7 DIT will ensure that researchers receive rigorous training in research design, methodology and analysis.

10.8 Training on research integrity must be attended by all researchers, with appropriate attendance records maintained. Training may also involve relevant principles of research design, and other principles set out in the DIT Code.

10.9 Researchers must ensure that all persons who are involved in the conduct of research under their supervision are adequately trained and perform their responsibilities competently.

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[5] http://www.dit.ie/researchandenterprise/graduateresearchschool/currentresearchstudents/
[6] http://www.qqi.ie//Publications/Pages/Good%20Practice%20Guide%20%20In%20the%20Organisation%20of%20Phd%20Programmes%20in%20Irish%20Higher%20Education%20(2009).aspx
[7] http://www.hea.ie/sites/default/files/national_framework_for_doctoral_education_0.pdf
[8] http://www.eua.be/activities-services/news/newsitem/2016/04/28/taking-salzburg-forward-new-eua-cde-recommendations-on-doctoral-education

11. Honesty

11.1 Openness

11.1.1   Researchers must be open and honest about their own actions in research and in their responses to the actions of other researchers. This requirement applies to the whole range of research work, including planning and design, applying for funding, generating and analysing data, writing, publishing results, grant and paper reviewing, and acknowledging the direct and indirect contribution of colleagues, collaborators and others.

11.1.2   While recognising the need for researchers to protect their own research interests in the process of planning their research and obtaining their results, DIT encourages researchers to be aware of IP sensitivities and also be as open as possible in discussing their work with other researchers and with the public.

11.1.3   Once results have been published, DIT encourages researchers to make relevant data and materials available to others on request, provided that such provision is consistent with any ethical approval/consent and intellectual property rights applicable to data or materials.

11.2 Proactive Problem Solving

11.2.1   In the case where policies or contractual terms and conditions are unclear or appear to contradict one another, researchers must take active steps to clarify and resolve the discrepancies.

11.3 Accuracy

11.3.1   Researchers must ensure that all publication and presentation of material arising from research is correct and accurate. If it subsequently becomes clear that these conditions are not met, the researcher must take appropriate steps to correct or retract the information in all outlets where it has appeared. Where appropriate, external agencies including funding agencies must also be informed.

11.4 Objectivity

11.4.1   Researchers must always be prepared to question the outcome of their research. DIT expects research results to be checked before being made public, which may involve repeating the work and/or checking calculations and data. It is important that ideas can be challenged and tested without loss of face. Equally, it is important that researchers or research groups must not be subject to such commercial pressures (e.g. constraints imposed by a funding agency) that the normal processes of academic inquiry cannot take place.

11.5 Acknowledgement of Contribution to the Research

11.5.1 Appropriate assignment of authorship is an important facet of good research practice. Definitive rules for authorship are difficult to formulate and DIT supports the general approach taken by each discipline area. DIT requires that all those listed as authors should have made a significant contribution to the work, are familiar with its content, and can identify their contribution to it. Guidelines are available from the Committee on Publication Ethics (COPE).[9]

11.5.2 The practice of honorary authorship is unacceptable. It is good practice to discuss authorship at the start of collaborative projects, rather than when submitting for publication/presentation. All those who have made a significant contribution to the work should be included as authors. Normally, the ordering of names should reflect the weight of individual contributions. However, it is recognised that there is no uniform convention across disciplines for doing so.

11.5.3 In all aspects of research, the contributions of formal collaborators and all others who supported the research, directly or indirectly, must be properly acknowledged, including the supplier of funding where appropriate. This provision applies to any circumstances in which statements about the research are made, including supplying information about the nature and process of the research, and publishing the outcome.

11.6 Conflict of Interest

11.6.1 A researcher asked to serve as a reviewer/referee must declare any possible conflict of interest, whether real or perceived, such as competitive, collaborative or other close relationship with one or more of the authors under review, or a close professional or commercial interest in the work. If there is any real or perceived conflict of interest, the researcher must not participate further in the review process, and must return the material without review. The researcher may consult with the Research Integrity Officer if any such circumstances arise.

11.6.2 External and Internal Examiners for Transfer, Confirmation and Final Examinations of graduate research students shall declare any interest, relationship or other circumstance which might constitute a conflict of interest, or which might be seen as inappropriate for the role of External Examiner. Failure to do so could lead to retraction of an award if a conflict of interest comes to light at a later date.

11.6.3 All information made available to examiners, both internal and external, and reviewers/referees must be treated in the strictest confidence, and they must not take

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[9] https://publicationethics.org/resources/guidelines

advantage of any information obtained as a result of their role, e.g. either using ideas or material contained therein or presenting the information as their own. In particular, they must not pirate unfunded grant applications, or make use of unpublished work without the author's permission.

11.6.4   It is the policy of DIT that all external examiners should be paid a reasonable fee for the work they undertake and be reimbursed for the expenses they incur in providing their service. However, in no case should examiners, either internal and external and reviewers/referees accept any bribe or inducement.

11.7 Protected Disclosures

11.7.3   DIT takes seriously any allegation of research misconduct. Any member of the Institute, whether staff or student, who believes that an act of research misconduct has occurred or is occurring should bring it to the notice of the Research Integrity Officer.

11.7.4   DIT aims to comply with the Protected Disclosures Act 2014 and within the context of the DIT Code aims to protect any member of the Institute who raises concerns about possible research misconduct.

11.7.5   All allegations of research misconduct or infringements of the DIT Code will be dealt with initially by the Research Integrity Officer.

11.7.6   If a research integrity-related dispute arises between persons to whom the DIT Code applies, the dispute must be referred to the Research Integrity Officer.

12 Respect for the Rights and Dignity of Research Participants

12.1 General Respect

12.1.1   Researchers must have respect for the rights and dignity of all research participants including those who provide samples and/or data for the research, whether qualitative or quantitative or biological.

12.1.2   Researchers who work with human participants must have appropriate regard for the participants' moral and cultural values and those of the community, and avoid or refuse to participate in research which is disrespectful of participants' legal, civil or moral rights.

12.1.3   Researchers must give particular attention to safeguarding the rights and dignity of vulnerable individuals and groups who participate in their research.

12.2 Privacy, Confidentiality and Anonymity

12.2.1 Intrusion into the privacy of participants must be kept to the minimum necessary to fulfil the purposes of the research.

12.2.2 Confidentiality and anonymity are important principles in dealing with data from participants. Confidential means that, where the data is collected from and can be directly linked to a person, the ID is known but is kept secure and private with encryption and limited access. Anonymous means that the data is collected in such a way that it is not possible, through any practical means, to connect that data to the person. Pseudoanonymous means that the data is given, for example, a code number and only a limited number of key researchers have the code to translate the number into the data and it is still possible to connect the data to the person. It is inappropriate to use these terms inter changeably and researchers must ensure that they use the correct terms when working with participants and data is published.

12.2.3 Confidentiality/anonymity (as appropriate) of personal data relating to participants (including data associated with tissue and biological samples) must be protected through implementation of appropriate safeguards. Where participants' identity needs to be retained for matching of data, it must be encoded and the cipher held separately and securely.

12.2.4 Researchers must ensure that they fulfil all legal requirements under the Data Protection Acts 1988 and 2003 and the provisions of the General Data Protection Regulations.

12.3 Informed Consent

12.3.1 Researchers must obtain prior consent from participants, except where the absence of consent is permitted by law or governmental/institutional regulation, or is explicitly approved by the Research Ethics and Integrity Committee.

12.3.2 The form of consent may vary according to the circumstances. However, for it to be valid, the researcher must [usually] ensure that participants:

- Have the capacity to consent;
- Are provided, in language that they can understand, with all information regarding the research that may affect their willingness to participate;
- Have been given sufficient opportunity to discuss and comprehend the risks and benefits of their participation;
- Are aware that participation is voluntary and that they may withdraw at any time;
- Have been assured that not participating or withdrawing will have no effect on his/her subsequent treatment;
- Are not under inappropriate pressure to participate;

- Understand that they may ask questions and will be given answers regarding their participation;

- Have an opportunity to withdraw data relating to themselves;

- Understand that the intention is to publish the outcomes of the research.

12.3.3 Informed consent must be sought in writing, unless alternative means have been approved by the Research Ethics and Integrity Committee.

12.3.4 In circumstances where the participant is legally incapable of providing consent or is a child, the researcher must obtain consent from the participant's legal guardian. For such consent to be valid, the researcher must also:

- Explain to participants in language that they can understand what they are being asked to do;

- Seek their agreement to take part in the research;

- Ensure that their best interests are protected.

12.3.5 Notwithstanding 12.5.4, the Research Ethics and Integrity Committee expect that all participants are treated as individuals and requires assent from participants who are minors. The Research Ethics and Integrity Committee apply the principle that, even if a participant's legal guardian provides consent for a minor to participate, the minor is well within his/her rights to opt out.

12.3.6 Unobtrusive observation raises ethical questions regarding informed consent and invasion of privacy. Researchers must convince the Research Ethics and Integrity Committee that the gain in knowledge justifies the risk to the human dignity of the participants.

12.3.7 It is recognised that, in addition to expenses, financial or other inducements to participate may be necessary in order to carry out some kinds of research. Care must be taken to ensure that any such inducements are modest.

12.4 Avoidance of Harm

12.4.1 Studies should be designed to minimise potential risks and maximise potential benefits to research participants, and ensure that benefits to participants and society outweigh the risks.

12.4.2 Participants must not be selected in such a way that stigmatised/vulnerable groups are targeted for risky research, and privileged groups for potentially beneficial research. Fair selection also requires that, as far as possible, those who bear the risks of research must be in a position to enjoy its benefits.

12.4.3 Research must be conducted to the highest possible health and safety standards, safeguarding research participants, collaborators, and the general public. Research must adhere to current safety practices and legal requirements.

12.4.4 Researchers working with children must comply with legislation e.g. the Children First Act 2015, the Criminal Justice (Withholding of Information on Offences against Children and Vulnerable Persons) Act, 2012 and the National Vetting Bureau (Children and Vulnerable Persons) Act, 2012 and other relevant guidelines e.g. *Children First: National Guidance for the Protection and Welfare of Children* (Department of Children and Youth Affairs, 2011).[10]

13 Data Management

13.1 Ownership of Data

13.1.1 The researcher must, at the outset of the research programme, clarify any issues regarding the ownership of results and of data/samples used or created in the course of the research. Any such issues must be resolved before the research commences.

13.2 Record Keeping

13.2.1 Throughout their work, researchers are required to keep clear and accurate records of research procedures followed and results obtained, including interim results. Doing so is necessary, not only as a means of demonstrating proper research practice, but also in case of subsequent queries about either the conduct of the research or the results obtained. Record keeping is also important for the protection of intellectual property rights.

13.2.2 Laboratory notebooks must be kept, where appropriate, and each key document and any changes should be signed and dated by the researcher.

13.3 Data Storage

13.3.1 Data generated in the course of research must be kept securely in paper or electronic form, as appropriate, and back-up records must always be kept for data stored on a computer. Data must be stored in such a way that permits a complete retrospective audit, if necessary, and records must be monitored regularly to ensure their completeness and accuracy.

13.2.1 DIT expects data to be securely held for a minimum period of seven years after the completion of a research project, in line with general audit requirements. Some funding bodies may require data to be kept for longer periods. It is the responsibility of the Principal

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[10] http://www.dcya.gov.ie/documents/Publications/ChildrenFirst.pdf

Investigator or Supervisor to ensure that data retention meets with the requirements of the funding body in such cases.

13.2.2 If a researcher leaves DIT, for whatever reason, before the required period of data retention expires, they have a responsibility to ensure, before they leave, that the data are securely held by DIT.

13.2.3 If postdoctoral researchers or graduate research students leave DIT, for whatever reason, before the required period of data retention expires, they must leave all research records (for example, laboratory books) with their Supervisor or the Principal Investigator.

13.2.4 DIT and its Researchers will ensure access to data is as open as possible, as closed as necessary, and where appropriate in line with the FAIR Principles (Findable, Accessible, Interoperable and Re-usable) for data management.

14 Dissemination

14.1 Academic Freedom and Protection of Intellectual Property

14.1.1 DIT supports the freedom to publish research findings.

14.1.2 Should external funders exert pressure to suppress results which they perceive to be detrimental to their interests, DIT will take whatever action it deems necessary and possible to support freedom of expression.

14.1.3 In negotiating contracts with external funders, the right to publish the results should be protected. It is the responsibility of the Director of Research, Enterprise and Innovation Services, on behalf of DIT, and not that of the individual researcher, to ensure that adequate terms have been agreed.

14.1.4 There may be occasions when a legitimate request for deferral of publication is made (for example, where an industrial partner wishes to safeguard intellectual property).

14.1.5 DIT expects that the period of deferral should not normally exceed six months.

14.1.6 DIT regards appropriate protection of intellectual property (IP) rights as central to good research practice. Researchers must clarify issues of IP at the outset, particularly in the case of collaborative research, and they should pay due regard to refraining from publication or disclosure until it is clear that any necessary protection has been secured.

14.2 Publication Practice

14.2.1 Under no circumstances may researchers engage in plagiarism, falsification or fabrication of results or piracy. When publishing, researchers must not misrepresent, exaggerate or distort their findings.

14.2.2 Re-publishing substantive parts of one's own earlier publications, including translations, without duly acknowledging or citing the original ('self-plagiarism').

14.2.3 Researchers must make all reasonable attempts to present their research to the academic community through peer-reviewed papers, books, presentations or other suitable media and, where appropriate, to the public. Research of suitable quality should be published and/or made available in a form that is appropriate to the particular discipline concerned and the target audience. Most academic journals give detailed guidance to authors on format.

14.2.4 Where research participants have been involved, it is best practice to inform them of the outcome of the study.

14.2.5 All authors agree on the sequence of authorship, acknowledging that authorship itself is based on a significant contribution to the design of the research, relevant data collection, or the analysis or interpretation of the results.

14.2.6 Authorisation for publication of results must be sought from the Principal Investigator. Authorisation should cover both the content of the publication (integrity of results, adequacy of internal peer review, appropriate protection of intellectual property, appropriate authorship) and the intended place of publication.

14.2.7 Graduate research students must always receive authorisation from their lead supervisor prior to presentation of their research findings through peer-reviewed papers, books, presentations or other suitable media and, where appropriate, to the public.

14.2.8 Research findings must not be disseminated via press releases before they have been peer reviewed, preferably by publication in a peer-reviewed journal or in an authored book, published by a reputable publisher.

14.2.9 While describing research inevitably involves the use of discipline-specific terms, it is always good practice to use as clear and accurate language as possible, without recourse to unnecessary jargon. Clarity is particularly important when communicating with a lay audience.

14.2.10 Researchers must include in their publications a statement declaring any conflicts of interest.

15 Research Integrity Officer

Research integrity disciplinary issues will be dealt with by a Research Integrity Officer (RIO) or a nominated alternate, as defined in Section 2 above. The RIO and his/her alternate are appointed by the President and should both be in senior position in DIT and have significant knowledge and

experience of research. The RIO should not be the Directors of Research, Enterprise and Innovation Services or Human Resources since they may be involved in processing disciplinary procedures later in an RI investigation. It should be noted that this does not preclude either of these Directors in identifying possible cases of research misconduct requiring investigation and notifying the RIO. The RIO and his/her alternate must have the appropriate competence, training and mandate to perform the role, including the authority to resolve conflicts that do not merit a full investigative proceeding.

The term of appointment of a Research Integrity Officer will typically be between 3 and 5 years and will not normally be a paid position or held on a full time basis.

The RIO (and nominated alternate) has the following responsibilities:

- Assisting DIT to put in place appropriate policies regarding adherence to principles of research integrity and a published procedure for the investigation of allegations of research misconduct against either staff or graduate research students, in accordance with relevant staff and student disciplinary policies;
- Engaging with DIT on the provision of RI training for both staff and graduate research students, but not be personally involved in delivering that training;
- Keeping up to date with national and international practice in the area of research integrity/responsible conduct of research and liaising with RIOs from other Research Performing Organisations;
- Assisting DIT in the processing of any instances of allegations of research misconduct against staff or graduate research students, specifically:
  o receiving any allegations of misconduct in research;
  o initiating DITs procedure for investigating allegations of misconduct in research
  o collating the information record of the investigation and subsequently reporting on the investigation with internal contacts and external organisations where appropriate;
  o reporting to the National Forum for Research Integrity, on an annual basis, the number of investigations carried out by DIT, the number upheld, if any, and an overview of the types of misconduct observed.

The RIO will not be involved in deciding whether individual allegations of research misconduct should be upheld. This decision will be made via the DIT's process for investigating allegations of misconduct in research. While the RIO will initiate and coordinate the process, they shall not personally participate in any investigation panels/process nor seek to influence the work or findings of said panels/process.

To allow for cases where the appointed RIO has a potential conflict of interest with the complainant or respondent or is otherwise involved in the case, the RIO will also have a formally nominated alternate to whom allegations can be brought to directly, or be referred by the RIO.

16 Procedure in the Event of Suspected Research Misconduct

In their most serious forms, unacceptable misconduct in research is sanctionable, but at the very least every effort must be made to prevent, discourage and stop such practices through training, supervision and mentoring and through the development of a positive and supportive research environment.

16.1   Complaints of possible infringements of the DIT Code of Conduct for Research Integrity, and requests for the resolution of research integrity-related disputes, should be made in writing and addressed to the Research Integrity Officer.

16.2   Confidentiality will be maintained at all times by all involved, in relation to complaints of possible infringements of the DIT Code of Conduct for Research Integrity

16.3   The Research Integrity Officer will acknowledge receipt of such complaints or requests within five working days and will advise the complainant/requestor of the procedure to be followed.

16.4   Following receipt of a complaint or request, the Research Integrity Officer, together with the Chair of the Research Ethics and Integrity Committee and one other independent person appointed by the RIO for that purpose, will conduct a preliminary review. This review will be conducted in a timely manner and the Research Integrity Officer may seek advice from such persons as s/he or they consider appropriate having regard to the nature of the complaint or dispute.

16.5   While anonymous complaints will not normally be investigated, the Research Integrity Officer may also, at his/her discretion, choose to conduct a preliminary review of anonymous complaints, depending on the seriousness of the issues, the credibility, and the feasibility of confirming the complaint with credible sources.

16.6   If a complaint relates to a person who is not subject to DITs policies and procedures, the Research Integrity Officer may, following consultation with the Office of the Institute Secretary, notify the Gardaí [if appropriate] or other institutions, which have a legitimate, material interest in the outcome of the matter. Depending on the circumstances, the continued use of DIT's premises and facilities by the person who is the subject of the

complaint, may be terminated or curtailed by the Research Integrity Officer at his or her absolute discretion.

16.7 The preliminary review shall be limited to determining whether there is sufficient evidence of research misconduct to proceed with an investigation under the appropriate procedures or whether the complaint or dispute can be resolved locally and informally either by the Research Integrity Officer or within the DIT unit concerned.

16.8 Complaints that are considered to be mistaken, frivolous, vexatious and/or malicious will be dismissed at this stage. If the Research Integrity Officer concludes that a complaint was frivolous, vexatious and/or malicious, the Research Integrity Officer may recommend that action be taken against the complainant under the appropriate DIT disciplinary procedures having regard to the complainant's status as a student or a member of the staff of DIT.

16.9 Following the preliminary review, the Research Integrity Officer may determine that:

- The complaint is not upheld and the matter may be dismissed.
- The complaint is not upheld, but the matter should be dealt with by a nominated person(s).
- The complaint is not upheld under the DIT Code, but the matter should be addressed under another applicable DIT policy or procedure.
- The complaint gives rise to concerns under the DIT Code and should be dealt with using the appropriate procedures. S/he shall refer the complaint to the :
  o Director of Corporate Services in the case of possible action against a member of staff of DIT. For complaints/disputes involving DIT staff, the procedures to be followed are the current Disciplinary Procedures HRP019 as approved by Governing Body.
  o Dean of the Graduate Research School in the case of possible action against a graduate research student registered at DIT. For complaints/disputes involving DIT graduate research students, the procedure to be followed is described in the current edition of the Graduate Research Regulations, as approved by Academic Council

16.10 The Research Integrity Officer will provide the complainant/requestor with a written determination summarising the reasons for the decision reached following the preliminary review.

16.11 There is no right of appeal against the decision of the Research Integrity Officer under the DIT Code. Respondents will have a right of appeal under the appropriate disciplinary procedures in the event that further action is taken thereunder.