Research Integrity and Good Research Practice Checklist for Supervisors of Research Students

This checklist has been designed to assist supervisors of research students at the University of Cambridge to address issues of research integrity and good research practice as part of the supervision process.

All those involved in research need to be aware of and abide by the principles of research integrity set out by the University, funders, regulators, professional association and the law. This checklist seeks to provide an introduction to these principles and encourage broader dialogue between supervisors and students about research integrity and good research practice. Supervisors may also wish to encourage their students to undertake the University's 'Introduction to Research Integrity' training session.

It is recommended that supervisors and their students use this checklist at the start of a student's research and discuss it annually.

Background	Suggested action	Resources and further guidance
Research Integrity		
The University and its major funders support	Introduce the Concordat and the University's	UUK, The Concordat to Support Research
the Universities UK's Concordat to Support	own research integrity resources.	<u>Integrity</u>
Research Integrity.		
	Discuss research integrity, providing a	University research integrity website
The Concordat requires all researchers to	personal and discipline-specific perspective.	
conduct their research according to high		Research integrity leaflet – sets out the
standards of:	Discuss the challenges researchers face	principles to which all research at the
- Hanashi	when working to live up to these standards.	University should adhere and provides
Honesty		guidance on where to seek further
Rigour Transport and a non-constraint		information.
Transparency and open communication		
Care and respect for all participants and		
subjects of research		
Code of Practice for Research Students		
The Code of Practice for Research Students	Highlight the code and discuss its contents,	Code of Practice for Research Students
sets out what students should expect during	noting that research students are expected to	
their study in terms of supervision, support	undertake their research with integrity.	

and assessment, as well as what the		
University expects of research students.		
Good Research Practice		
The University's guidelines on good research	Discuss the guidelines on good research	University guidelines on good research
practice provide an introduction to key issues	practice.	<u>practice</u>
of research integrity at Cambridge.		
Subject-specific and local policies and guid	elines	
Individual departments and faculties will often	Discuss any local or subject-specific policies	Visit your department's website for details of
have subject-specific policies and guidelines	and guidelines with the student and how they	relevant policies and guidelines.
that they expect their members to abide by.	might affect their research.	
Additionally, there are a wide range of codes		
and guidelines developed by professional or		
subject-specific groups that researchers		
should be aware of.		
Funder expectations		
Researchers should also be aware of codes	Introduce any relevant funder codes of	RCUK, Policy and Guidelines on Good
of conduct or guidelines developed by	conduct or guidelines. Discuss what these	Research Conduct
individual funders.	mean in practice.	
		MRC, Good research practice: principles and
Compliance with such codes is often a	Provide any relevant external funding terms	guidelines
requirement of funding.	and conditions.	
		Wellcome Trust, Guidelines on good research
		<u>practice</u>
		ESRC, Framework for Research Ethics
		For further examples see the research
		integrity website or contact your department
		or faculty.
		or idealty.

Plagiarism		
The University provides extensive central and local guidance on plagiarism.	Provide links to University guidance on plagiarism and the University-wide statement.	Good Academic Practice and Plagiarism website
It is the responsibility of all students to read and understand the University-wide statement on plagiarism.	Discuss any queries the student may have.	University-wide statement on plagiarism
Authorship		
Authorship provides credit for an individual's contributions to a study and carries accountability. It is important that researchers are aware of the authorship practices within their own disciplines and any guidelines set by the journals in which they hope to publish. It is recommended that arrangements and responsibilities for the publication of results should be taken into account when planning a	Introduce the University's guidelines on authorship. Discuss any discipline specific requirements and guidance for authorship relevant to the student's area of research. Discuss any plans for publication during the student's studies, including how authorship will be handled.	University Guidelines on Authorship School of Clinical Medicine Code of Practice on Authorship
project and reviewed at appropriate points during the lifecycle of the study.		
Conflict of Interest		
Researchers should declare and manage any real or potential conflicts of interest	Discuss the concept of conflict of interest and how any potential conflicts might be declared.	The University's Good Research Practice Guidelines and Financial Regulations contain further information on the declaration of personal interests.

Discuss whether the student's research will	University Research Ethics Website
	Oniversity Research Ethies Wessite
rail ander any emiliar or legal requirements.	Clinical School Research Governance
If the student's research will use animals	website
,	Website
· ·	University policy on the use of enimals in
····	University policy on the use of animals in
	research and teaching
Services.	
	<u>University Biomedical Support Services</u>
· · · · · · · · · · · · · · · · · · ·	University policy on the ethics of research
•	involving human participants and personal
	<u>data</u>
ethical review and the Human Tissue Act.	
Discuss whether the student's work may	University Material Transfer Agreement
require any licences, permissions or	guidance
agreements and how these should be	
obtained.	University export control webpage
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Introduce and discuss the University of	University of Cambridge Research Data
Cambridge Research Data Management	Management Policy Framework
	require any licences, permissions or agreements and how these should be obtained. Introduce and discuss the University of

Policy Framework.	
	University Data Management Website
Discuss how research data and records	
generated during the research project will be	University Records Management guidance
collected, stored and managed.	
	Clinical School Information Governance
Discuss how data and records will be kept	website
secure, issues of confidentiality and privacy,	
and compliance with the Data Protection Act	University data protection guidance for staff
and Freedom of Information Act.	and students
Discuss plans for archiving and, where	University Freedom of Information Guidance
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to others.	Funders' policies for sharing research data
Discuss any relevant funder terms and	
conditions relating to data collection, storage,	
and sharing.	
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Where applicable, discuss requirements for	
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Discuss whether it is likely that intellectual	Intellectual Property Guidance for Students
•	
	Research Operations Office, Intellectual
Introduce the University's guidance on	Property Rights Guidance
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	Cambridge Enterprise, Inventions, IP and
Office.	licensing
	generated during the research project will be collected, stored and managed. Discuss how data and records will be kept secure, issues of confidentiality and privacy, and compliance with the Data Protection Act and Freedom of Information Act. Discuss plans for archiving and, where applicable, how data will be made accessible to others. Discuss any relevant funder terms and conditions relating to data collection, storage, and sharing. Where applicable, discuss requirements for collecting data from human participants and keeping laboratory notebooks. Discuss whether it is likely that intellectual property will be generated by the project. Introduce the University's guidance on Intellectual Property and the support provided by Cambridge Enterprise and the Research

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	Discuss any third party agreements in place that will govern arrangements for IP generated during the project.	
Health and safety		
It is essential that research students are aware of the health and safety issues raised by their research. The University provides training, help and advice to support researchers in effectively managing health and safety.	Ensure that the student completes any local health and safety induction and any further training relevant to their research. Discuss local health and safety procedures, including the identity of local health and safety representatives. Ensure that the student is aware of emergency procedures and incident reporting. Discuss any specific health and safety issues	University Health and Safety Office University Graduate Safety Course – intended for all new graduate students in science based Departments and Institutions Health and Safety training – details of other health and safety courses. Risk Assessment
	raised by the research project.	
Research misconduct		
All members of the University have a responsibility to report to the Head of the relevant institution any incident of research misconduct.	Introduce the misconduct policy and discuss any queries they may have regarding research misconduct.	Research Misconduct – University policy and guidance
Guidance is available from the University's Research Misconduct policy.		
Training and professional development		
Training is an important part of ensuring that researchers are able to understand and adopt best practice as quickly as possible.	Discuss with the student any training needs relating to their research and professional development or to developing their	Office of Personal and Professional Development – offers training across a broad range of topics.

	understanding of issues of good practice and	
The University offers many courses at local	integrity.	Research integrity training.
and School-level as well as centrally.		

Acknowledgements and further reading

BBSRC, Statement on Safeguarding Good Scientific Practice

Cambridge Enterprise, Inventions, IP and Licensing website

Cambridge University Library, Support for Managing Research Data website

RCUK, Policy and Guidelines on Good Research Conduct

MRC, Good research practice: principles and guidelines

Wellcome Trust, Guidelines on good research practice

Universities UK, The Concordat to Support Research Integrity

University of Cambridge, Biomedical Support Services website

University of Cambridge, Code of Practice for Graduate Students

University of Cambridge, Financial Regulations

University of Cambridge, Good Academic Practice and Plagiarism website

University of Cambridge, Guidelines on Good Research Practice

University of Cambridge, Health and Safety Office website

University of Cambridge, Information Compliance Office website

University of Cambridge, Office of Personal and Professional Development website

University of Cambridge, Policy on the use of animals in research and teaching

University of Cambridge, Policy on the ethics of research involving human participants and personal data

University of Cambridge, Research Integrity website

University of Cambridge, Research Operations Office website

University of Cambridge, School of Clinical Medicine Information Governance website

University of Cambridge, School of Clinical Medicine Research Governance website

University of Oxford, Research Integrity and the Responsible Conduct of Research – Checklist for Research Students and their Supervisors at the University of Oxford