GENERAL PRINCIPLES OF RESPONSIBLE RESEARCH

1.1 INTRODUCTION

Institutions in which research takes place should strongly encourage a research culture that demonstrates:

- Integrity and honesty;
- Respect for human subject participants, animals and the environment;
- Good stewardship of grant or public resources used to conduct research,
- Appropriate acknowledgement of the role of the study team and others in research.
- Responsible dissemination and communication of research results or data.

The respective roles and responsibilities of institutions and researchers in maintaining an environment which champions responsible conduct of research will be discussed here.

1.2 INSTITUTIONS' RESPONSIBILITIES

Establishing responsible conduct of research

Institutions should promote the responsible conduct of research by:

- Advocating awareness of ALL guidelines, policies and legislation related to the responsible conduct of research,
- Earnestly encouraging mutual cooperation with open exchange of ideas between researchers, peers and respect freedom of expression and inquiry,
- Maintaining an environment in which responsible conduct of research and ethical behavior in research is expected.

Establishing good management practices & guidance

In order to encourage and support responsible conduct of research with researchers, good institutional management practices and guidance should be put in place and be readily available. This will promote the quality of research, apart from enhancing the institutions' reputation and that of its researchers, thereby minimizing the risk of harm for all involved.

Guide on good management practices and guidance:-

- Individual institutions should provide researchers an appropriate research
 governance framework in which quality, safety, privacy, risk management,
 financial management and ethical acceptability are assessed. The roles,
 responsibilities and accountabilities of individuals involved in the research should
 be precisely spelt out in the framework.
- While contractual arrangements may impose obligations, obligations from the local law may also arise from relationships between institutions, researchers and

participants. Therefore, the research governance framework should stipulate the compliance with ethics boards, institutional and regulatory authorities (if applicable) regulations, guides and policies governing the conduct of research within the institutions.

- Respective institutions should have readily available documents that help guide conduct, management and good research governance.
- Institutions should have a clear guide or policy on collaborative research projects with other organizations, with agreements to be contracted before a project commences.
- It is imperative for respective institutions to have a well-defined process for receiving and managing allegations of research misconduct.
- There must be a process for regular monitoring of the institutions' performance with regard to these guidelines.

Training of Staff

It is imperative that induction, formal training and continuing education for all research staff, including research trainees, are provided. Training should encompass ethics, research methodologies, confidentiality, data storage and retention of records, as well as regulation and governance. Institutions' policies and guidelines relating to the responsible conduct of research and other sources of guidance should be covered in the training too. Joint induction and trainings with other institutions/ organizations may be deemed necessary or suitable as well.

Advocate mentoring

Effective mentoring and supervision of researchers and research trainees should be advocated within the institutions. This includes advising on research ethics, research designs and methods, and the responsible conduct of research.

Establish a safe research environment

Respective institutions must ensure the establishment of a safe working environment for conducting research. For example, researchers who have on-going research should be granted "protected" time to carry out their research.

1.3 RESEACHERS' RESPONSIBILITIES

Maintaining high standards of responsible conduct of research

Maintaining an environment whereby intellectual honesty and integrity, scholarly and scientific rigor are valued and upheld, should be the researcher's highest responsibility. Researchers should:

Respect the truth and the rights of those affected by their research,

- Manage conflicts of interests so that ethical and scholarly considerations are not compromised due to ambition and personal advantage,
- Adopt methods appropriate for achieving the aims of each research proposal,
- Comply with proper safety and security practices,
- Reference awards, degrees conferred and research publications accurately, including the status of any publications, such as whether it is under review or in the press,
- Foster adoption of responsible conduct of research practices and discourage deviations among colleagues
- Adhere to the policies and procedures stipulated by ethical boards, institutional, funding agencies and regulatory authorities.

Report research responsibly

Researchers should ensure that research data, findings and results are disseminated responsibly. For example, researchers should ensure that all reasonable steps are taken to ensure their findings are accurate and properly reported so that they can rectify any misleading or inaccurate statements about their work when they become aware of it.

Respect research participants

Ethical principles of integrity, respect for persons, justice and beneficence ought to be complied with. Researchers must obtain approval from appropriate ethics boards, regulatory agencies (if applicable) and relevant governing agencies prior to commencement of the research.

Reporting of Research Misconduct

A researcher should ensure that his or her allegations are made in good faith, and are reported in a timely manner and according to the institution's policies and guidelines.

1.4 REFERENCES & ACKNOWLEDGEMENT: GENERAL PRINCIPLES OF RESPONSIBLE RESEARCH

- Australian Code for the Responsible Conduct of Research https://www.nhmrc.gov.au/about-us/publications/australian-code-responsible-conduct-research-2018
- Collaborative Institutional Training Initiative CITI Course in the Responsible Conduct of Research (https://www.citiprogram.org/rcrpage.asp?language=english&affiliation=100)
- 3) Harvard University Research Integrity Office of the Vice Provost for Research Webpage (https://vpr.harvard.edu/)
- 4) Office of Research Integrity Introduction to the Responsible Conduct of Research : Shared Values, Rules of the Road (http://ori.dhhs.gov/education/products/RCRintro/)
- 5) Office of Research Integrity Introduction to the Responsible Conduct of Research: Shared Values, Professional self-regulation (https://ori.hhs.gov/ori-introduction-responsible-conduct-research)
- 6) Office of Research Integrity Introduction to the Responsible Conduct of Research:

 Shared Values, Government regulation (https://ori.hhs.gov/ori-introduction-responsible-conduct-research)
- 7) Office of Research Integrity Introduction to the Responsible Conduct of Research: Shared Values, Institutional policies (https://ori.hhs.gov/ori-introduction-responsible-conduct-research)
- 8) Office of Research Integrity Introduction to the Responsible Conduct of Research:

 Shared Values, Personal responsibility (https://ori.hhs.gov/ori-introduction-responsible-conduct-research)
- 9) Office of Research Integrity Policies Statutes and Regulations (https://ori.hhs.gov/ori-introduction-responsible-conduct-research)
- 10) The European Science Foundation Setting Science Agendas for Europe, Member
 Organization Forum Fostering Research Integrity in Europe December 2011
- 11) The European Code of Conduct for Research Integrity March 2011

- 12) The University of Michigan Medical School Guideline for Responsible Conduct of Research (https://research-compliance.umich.edu/research-integrity/responsible-conduct-research-and-scholarship-rcrs-training)
- 13) The University of Oxford, Research integrity and Ethics, Research Support webpage (http://www.admin.ox.ac.uk/researchsupport/integrity/)
- 14) The University of Pittsburgh University Policies and Procedures Guidelines for Ethical Practices in Research (http://www.pitt.edu/~provost/ethresearch.html)