

NTU Policy on Research Integrity and the Responsible Conduct of Research

Introduction:

The NTU Policy on Research Integrity and the Responsible Conduct of Research has been approved by the Presidents Coordinating Group and the Provosts and Deans Group in 2012.

This updated version is dated [December 2013] and is aligned with the Whistle Blowing Policy and the Framework for Investigation and Disciplinary Proceedings for Faculty and Research Staff, the Academic Honour Code and incorporates the Singapore Statement on Research Integrity, 2010.

All those undertaking research in NTU, at whatever level, whether undergraduate or postgraduate students, technical and research staff or faculty including visiting researchers or collaborators in NTU should make themselves fully aware of the policy as enunciated below together and with the procedures which will take place when an allegation of misconduct is received.

In particular, attention is drawn to the need to subscribe to the values set out in this policy, including the principles and responsibilities of a researcher in the Singapore Statement on Research Integrity, to abide by all the norms of good research practice and ethical behaviour and with the commitment to conduct research with care, rigour, honesty and respect for all and everything involved, which are the marks of good scholarship. It also includes abiding by all other relevant policies, statute and regulations including the NTU Code of Conduct for students (see <http://www.ntu.edu.sg/SAO/Pages/HonourCode.aspx>), the policies set out for the use of animals in research through the Guidelines on the Care and Use of Animals for Scientific Purposes as set out by the National Advisory Committee for Laboratory Animal Research (see <http://www3.ntu.edu.sg/Research2/Grants%20Handbook/NACLAR-guide%20Lines.pdf>) and the NTU Institutional Animal Care and Use Committee – IACUC (see Application Procedure for Animal Research Facility), research involving human participants/subjects – Institutional Review Board (NTU-IRB: see <http://research.ntu.edu.sg/GuidelinesnForms/Pages/default.aspx>), use of controlled drugs, biosafety, Health and Safety, Computer Misuse, Privacy and Conflict of Interest policies.

This also covers the obligations to maintain full and accurate records of research and their storage in NTU, both in hard copy and as electronic records; to ensure that all those concerned or quoted are given appropriate credit and recognition; to respect all matters relating to privacy; and to comply fully with all relevant laws and codes of ethical behavior appertaining to research.

NTU Research Integrity Policy and Procedures

President's Office

Nanyang Technological University

June 2012

Revised December 2013

University Policy

1. *Preamble*

NTU is committed to the pursuit of research excellence and equally committed to the maintenance of the highest standards of integrity and ethical behaviour in all its research endeavours and does not tolerate any departure from these standards. It fully subscribes to the Singapore Statement on Research Integrity and its constituent four principles of honesty, accountability, professional courtesy and fairness and good stewardship and the 14 responsibilities of a professional researcher which is set out in the Singapore Statement on Research Integrity.

Integrity and the responsible conduct of research is the basis of NTU's research activities and is necessary in order to build a relationship of trust between research colleagues (whether they be at NTU or elsewhere), funders and research collaborators. It is also necessary in building trust between NTU research and society at large. Therefore, it is a fundamental obligation of all concerned within NTU's research community whether this be students at undergraduate or postgraduate level or employees (technical and research staff and faculty) or visiting researchers or collaborators to ensure that their actions are of the highest integrity and do not tarnish NTU's reputation. Breaches of these standards are considered as disciplinary matters and all those concerned with research at NTU must accept this obligation. On appointment, all persons involved in research at NTU shall sign a declaration of commitment to the upholding of the highest standards of research integrity.

2. *Applicability and Scope*

This Policy and the associated procedures apply to all individuals directly or indirectly engaged in any research, research-training or research-related grant or cooperative/collaborative agreement at or for NTU. This Policy applies to any person paid by, under the control of, or affiliated with NTU, such as scientists, trainees, technicians and other staff members, students, fellows, guest researchers (including Visiting Professors), and collaborators at NTU or in any research collaboration arrangement. It also covers the supervision of research students and the authorship, especially joint authorship of research papers.

3. *Responsible Conduct of Research*

The responsible conduct of research covers research behaviour in all its aspects and commits the researcher to conduct his research with care, rigour, honesty and respect for all and everything involved and which are the marks of good scholarship and are in accordance with the Singapore Statement on Research Integrity. This covers the obligations to maintain full and accurate records of research and their storage in NTU, both in hard copy and as electronic records (NTU further obliges research output to be stored and maintained at NTU for a minimum period of 10 years after publication or patenting and this also applies to PhD data and laboratory notebooks); to ensure that all those concerned or quoted are given appropriate credit and recognition; to respect all matters relating to privacy; and to comply fully with all relevant laws and codes of ethical behaviour appertaining to research.

4. *Responsibility to Report Research Misconduct*

With these obligations in the conduct of research comes the corollary that there is also an obligation of those concerned to report observed, suspected or apparent misconduct, malpractices and/or non-compliance with the University's codes of conduct and discipline.

Submission of allegations to RIO shall be in writing to the following email address: rio@ntu.edu.sg or in a sealed envelope marked "Confidential" and addressed to:

**Research Integrity Officer
President's Office
Nanyang Technological University
50 Nanyang Avenue**

All employees or other persons in the community of NTU engaged in research should report to the **RIO**, promptly and in good faith any observed, suspected, or apparent Research Misconduct. If any person is unsure whether a suspected incident constitutes Research Misconduct, he may consult the RIO. Each College, School and Institute also has Research Integrity Points of Contact (RIPOCs) who may also be consulted and may offer advice. If the circumstances described by the person do not constitute Research Misconduct, the RIO may refer the person or Allegation to the appropriate office to consider the matter. While Allegations, whether anonymous or not, will be investigated, Complainants are encouraged to identify themselves to provide legitimacy to the Allegations and to facilitate and expedite Investigations. At any time, a member of the NTU community may have confidential discussions and consultations with the RIO about concerns of possible Research Misconduct and will be counselled about appropriate procedures for reporting Allegations.

Cooperation with Committees of Inquiry and Investigations

All NTU employees have a duty to cooperate with the RIO and other employees or officers of NTU or other persons engaged by NTU in the review of Allegations and the conduct of Investigations and Preliminary or Committee of Inquiries. The employees have an obligation to provide relevant evidence to the RIO or other persons authorised by NTU in relation to Investigations and Preliminary or Committee of Inquiries.

5. *Mentoring and Training*

NTU is committed to the development of and provision of education and training on the needs of responsible conduct of research and on research integrity and ethical behaviour. Faculty members are also encouraged to join such courses in order to be able to provide mentoring to their junior colleagues. All faculty and research staff on appointment to NTU as well as all PhD students will be required to sign a declaration that they will abide by NTU's research integrity policy and the Singapore Statement on Research Integrity.

Singapore Statement on Research Integrity

Preamble: The value and benefits of research are vitally dependent on the integrity of research. While there can be and are national and disciplinary differences in the way research is organized and conducted, there are also principles and professional responsibilities that are fundamental to the integrity of research wherever it is undertaken

Principles

Honesty in all aspects of research

Accountability in the conduct of research *Professional courtesy and fairness* in working with others *Good stewardship* of research on behalf of others

Responsibilities

- 1. Integrity:** Researchers should take responsibility for the trustworthiness of their research.
- 2. Adherence to Regulations:** Researchers should be aware of and adhere to regulations and policies related to research.
- 3. Research Methods:** Researchers should employ appropriate research methods, base conclusions on critical analysis of the evidence and report findings and interpretations fully and objectively.
- 4. Research Records:** Researchers should keep clear, accurate records of all research in ways that will allow verification and replication of their work by others.
- 5. Research Findings:** Researchers should share data and findings openly and promptly, as soon as they have had an opportunity to establish priority and ownership claims.
- 6. Authorship:** Researchers should take responsibility for their contributions to all publications, funding applications, reports and other representations of their research. Lists of authors should include all those and only those who meet applicable authorship criteria.
- 7. Publication Acknowledgement:** Researchers should acknowledge in publications the names and roles of those who made significant contributions to the research, including writers, funders, sponsors, and others, but do not meet authorship criteria.
- 8. Peer Review:** Researchers should provide fair, prompt and rigorous evaluations and respect confidentiality when reviewing others' work.
- 9. Conflict of Interest:** Researchers should disclose financial and other conflicts of interest that could compromise the trustworthiness of their work in research proposals, publications and public communications as well as in all review activities.
- 10. Public Communication:** Researchers should limit professional comments to their

recognized expertise when engaged in public discussions about the application and importance of research findings and clearly distinguish professional comments from opinions based on personal views.

11. Reporting Irresponsible Research Practices: Researchers should report to the appropriate authorities any suspected research misconduct, including fabrication, falsification or plagiarism, and other irresponsible research practices that undermine the trustworthiness of research, such as carelessness, improperly listing authors, failing to report conflicting data, or the use of misleading analytical methods.

12. Responding to Irresponsible Research Practices: Research institutions, as well as journals, professional organizations and agencies that have commitments to research, should have procedures for responding to allegations of misconduct and other irresponsible research practices and for protecting those who report such behaviour in good faith. When misconduct or other irresponsible research practice is confirmed, appropriate actions should be taken promptly, including correcting the research record.

13. Research Environments: Research institutions should create and sustain environments that encourage integrity through education, clear policies, and reasonable standards for advancement, while fostering work environments that support research integrity.

14. Societal Considerations: Researchers and research institutions should recognize that they have an ethical obligation to weigh societal benefits against risks inherent their work.

The Singapore Statement is also available in 20 other languages including Bahasa Melayu, Bahasa Indonesia, Mandarin and Tamil, which may be downloaded from the Statement web site at;

www.singaporestatement.org