NUS CODE & PROCEDURES ON RESEARCH INTEGRITY
(FOR ACADEMIC & RESEARCH STAFF)

Maintenance of Research Integrity

1. The University is committed to maintaining the highest standards of ethics and research integrity. It is a fundamental responsibility of faculty, staff and students to adhere to absolute intellectual honesty and to ensure that the reputation of the University for scholarly integrity is preserved.

2. Research integrity includes the rigour, care and accountability that are the hallmarks of good scholarship, and is not merely the avoidance of wrongdoing. All faculty, staff and students engaged in research should maintain the highest ethical standards. This includes but is not restricted to:

   (a) maintaining the highest possible quality in research procedures and processes;
   (b) carrying out open publication and discussion, where applicable;
   (c) supervising research appropriately;
   (d) maintaining accurate and detailed research records of procedures and results, sufficient to allow others to repeat the work.
   (e) assigning appropriate credit and responsibility for research and publications;
   (f) complying with all applicable laws, rules and codes of conduct

Research Misconduct

3. Research Misconduct (defined below) by faculty, other staff or students is unacceptable. It is the responsibility of all members of the University community to adhere to strict standards of integrity in their research and to report acts of misconduct when they are known or suspected to have occurred. It is the responsibility of faculty, supervisors and Principal Investigators of research to monitor carefully the research under their supervision and to subject their research procedures and findings to rigorous evaluation.

4. “Research Misconduct” is defined as fabrication, falsification, plagiarism or other wrongdoing in proposing, designing, performing,
recording, supervising or reviewing research, or in reporting research results.

5. Research Misconduct includes but is not limited to the following practices:

(a) **Dishonesty in reporting results**: includes fabrication of data, improper adjustment of results, gross negligence in collecting or analysing data, and selective reporting or omission of conflicting data for deceptive purposes, or otherwise tampering with the research record. Failure to disclose conflicts of interest is also a breach of this Code. The “research record” is the record of data or results and includes, but is not limited to, research proposals, laboratory records (both physical and electronic), progress reports, abstracts, theses, oral presentations, internal reports, and journal articles.

(b) **Deliberately misrepresenting research**: includes misrepresenting the progress of research, falsely claiming priority by willfully ignoring prior relevant reports in the research literature, knowingly publishing material that will mislead readers, e.g. misrepresenting data, adding names of other authors without permission, excluding a major collaborator as co-author without his/her agreement, or including authors who did not contribute significantly to the research.

(c) **Plagiarism**: includes taking credit for someone else’s work and ideas, using others’ results or methods without attribution, deliberately omitting acknowledgement of significant assistance received from others, copying the writing of others without proper acknowledgement, and otherwise falsely taking credit for the work or ideas of others, or appropriating their intellectual property.

(d) **Breach of trust**: includes taking or releasing ideas or data which were shared with the legitimate expectation of confidentiality, e.g. use of confidential results without permission from a previous employer, and using ideas from others’ grant proposals, award applications, reports, manuscripts or presentations.

(e) **Violation of regulations and failure to comply with applicable ethical codes**: failure to obtain approvals required for work governed by regulations or legislation, e.g. approvals required from the NUS Institutional Review Board (“IRB”) and under other bioethics requirements, the NUS Institutional Animal Care and Use Committee (“IACUC”) or the Office of Safety, Health & Environment (“OSHE”), failure to observe the conditions set by any relevant authority, failure to disclose significant conflicts of
interest, or other failure to comply with the applicable ethical codes. Failure to comply with the requirements of journals and conferences when submitting papers (e.g. falsely certifying that a paper is original material when it has substantially been published elsewhere) is also an offence under this section.

(f) **Misuse of human research subjects, human tissue or other human materials**: includes failure to protect the health, safety, privacy or confidentiality of research subjects or material donors, or other failures to follow the requirements of the IRB.

(g) **Interfering with the research of others** includes stealing, deliberately damaging or disposing of research materials, equipment or products of research.

(h) **Misuse of research funding**: includes failure to spend research funds in ways consistent with the goals stated in the relevant funding documents and/or failure to maintain clear and proper records of expenditure, or submission of duplicate or overlapping grant applications to agencies without full disclosure to these agencies.

(i) **Failure to report observed instances of Research Misconduct**: includes covering up or otherwise failing to report breaches of this Code by others.

(j) **Retaliation**: taking punitive action against an individual for having reported alleged breaches of this Code.

(k) **Making frivolous and baseless allegations of breaches of this Code by others**.

(l) **Failing to cooperate with a Research Integrity Officer or others involved in an inquiry** (see paragraph 8 below).

6. Research Misconduct does not include honest error or honest differences in interpretations or judgments of data that are inherent in the scientific and creative process and which are normally corrected through further research and scholarship.

**Consequences of Research Misconduct**

7. Research Misconduct by staff is grounds for disciplinary action. If there is fabrication or falsification in a published or submitted paper, report or other research record, every author may be held liable. Research misconduct by students will be handled under Statute 6 of the University, but staff may be held responsible for such misconduct as per section 2(c) above.
Handling Allegations of Research Misconduct

8. The University shall appoint Research Integrity Officers ("RIO(s)") who shall be persons experienced in research, widely respected by the academic community and familiar with the operations of the University and/or other world-class universities. An RIO shall be responsible for assessing allegations of Research Misconduct and determining when such allegations warrant inquiries, and for overseeing formal inquiries.

Reporting Suspected Research Misconduct

9. Allegations that an investigator (i.e. any person who is engaged in the design, conduct, or reporting of research at or for the University) has engaged in Research Misconduct can be made by any individual in person, or in writing in a sealed envelope, signed and marked "strictly confidential" to the Office of Deputy President (Research & Technology) ("Office of DP(R&T)") who will usually assign an RIO to make an initial examination of the case, normally within 10 calendar days. The RIO should disclose any conflicts of interest to the DP(R&T). Anonymous allegations will not normally be considered unless compelling evidence is presented. Other University officials should refer any allegations made to them to the Deputy President (Research & Technology) ("DP(R&T)"). The individual who is alleged to have committed research misconduct will be referred to as the Respondent hereinafter. The RIO, the DP(R&T), and other University officials involved in the examination of any allegation should maintain confidentiality of information (to the maximum extent possible) regarding the complainant, Respondent or other affected individuals.

Initial Examination of Allegation

10. The RIO assigned to examine an allegation shall determine if it is:
   (a) about Research Misconduct and within the purview of this Code;
   (b) covered by another University policy;
   (c) about a practice that does not constitute Research Misconduct; or
   (d) clearly groundless.

11. Groundless Allegations: If the RIO believes that an allegation is clearly groundless, he/she shall prepare and maintain a memorandum separate from the Respondent’s personnel file and shall inform the complainant and the DP(R&T) of the decision not to proceed. In such a case, the Respondent does not normally need to be informed of the allegation. If the RIO believes that the allegation was made in bad faith (as defined in para 20(d) below) the case may be referred to the appropriate University authorities.
12. The DP(R&T) should be notified by the RIO of the determination. If the RIO determines that the allegation is of serious misconduct as described in this code, then the RIO will set up a formal inquiry (“Inquiry”); if the misconduct is deemed by the RIO to be less than serious, then the RIO will examine the possibility of informal resolution.

13. Multiple Policies Involved: If an allegation gives rise to investigative responsibilities under more than one University policy, the RIO handling the allegation shall consult with the other appropriate administrative offices such as the IRB, OSHE, the IACUC, and/or Internal Audit, to coordinate a consistent and effective review of the facts under this Code and related University policies and to avoid duplication of inquiries.

14. The RIO should normally complete the actions described in paragraphs 10-13 within 21 calendar days of the allocation of the case to him/her. An extension of this deadline may be requested from DR(R&T).

Inquiry

Initiating an Inquiry

15. Actions: The RIO who has decided to proceed with an enquiry, shall take the following actions:

(a) Ensure the Security of Evidence: This may include making arrangements to seize laboratory records, financial records or other relevant material or, in serious cases, to suspend the Respondent from the University or the relevant part of it until inquiries are completed. It shall be a disciplinary offence under this Code to obstruct these or other actions of an RIO. The DP(R&T) shall provide the RIO with a standard operating procedure to be followed.

(b) Advise the Office of Legal Affairs that an Inquiry will be Mounted: Throughout the process of handling an Inquiry, the RIO and members of the Inquiry Committee shall consult with the Office of Legal Affairs, as needed, for advice and to ensure compliance with this Code and other codes of the University.

(c) Appoint an Inquiry Committee: Within 14 calendar days of being requested to set up an Inquiry, the RIO in consultation with the DP(R&T), shall appoint a committee consisting of 3 or more members (which may include individuals from outside the University as needed) with appropriate expertise (“Inquiry Committee”). The RIO shall appoint the chair of the committee. The members of the Inquiry Committee should disclose any conflicts of interest to the RIO. Staff members or others with major conflicts of interest should not be appointed to the Inquiry
Committee. The RIO will provide the Inquiry Committee with instructions for carrying out the Inquiry. The committee members should certify in writing that they will maintain confidentiality of information to the maximum extent possible at all times. They should obtain the same undertaking from other persons they may wish to consult.

(d) Identify Funding Sources: The RIO shall identify all relevant research grants and funding agencies involved in the research that is the subject of the Inquiry. Funding agency requirements for timely notification shall be followed.

(e) Notify Interested Parties: Immediately after appointing an Inquiry Committee, the RIO shall provide written notification of the nature of the allegation, the appointment of the Inquiry Committee, and its membership to the Respondent and others with a need to know, usually including the Complainant and the Respondent’s Dean and Head of Department. The DP(R&T) shall brief the President and Provost as needed. If required by law or agency requirements, or by a relevant contract or funding agreement, or if in the judgment of the RIO it is appropriate, then the RIO shall inform the external agencies or sponsors that an Inquiry is being undertaken, after consultation with the DP (R&T) and the Office of Legal Affairs. An external institution shall, in general, be notified only if the RIO has reason to believe that the alleged Research Misconduct occurred at that institution, or if the Respondent has a joint research project with that institution and that project is the subject of the complaint, or if the Respondent has a joint appointment at that institution.

16. Time Limit: The entire Inquiry process shall normally be completed within 90 calendar days following the appointment of the Inquiry Committee. Any extension of this time limit requires the approval of the DP (R&T), must be documented in the final Inquiry Committee report (see paragraph 18(d) below), and should comply with any applicable requirements of external funding agencies or sponsors.

Responsibilities of the Inquiry Committee

17. The Inquiry Committee shall conduct its proceedings and inform itself in such manner as it thinks fit.

18. The Inquiry Committee shall normally take the following actions:

(a) Fact-finding: Examine relevant research and/or financial records and materials thoroughly and in depth and conduct sufficient interviews and fact-finding to determine whether or not the allegation is substantiated by the preponderance of the evidence;
(b) **Interviews**: Interview the complainant, the Respondent (but see paragraph 19 below) and other key witnesses with respect to the allegation.

(c) **Obtain Response of Respondent**: Provide an opportunity for the Respondent to respond to the allegation, both in writing and during one or more interviews; and

(d) **Prepare a Report**: Prepare a report of its findings, normally within 60 calendar days of the date of its appointment. The Inquiry Committee shall consult the Office of Legal Affairs before presenting its report.

19. The termination of a Respondent’s employment at the University, by resignation or otherwise, or his/her failure or refusal to give oral or written information to the Inquiry Committee will not prevent the Inquiry from proceeding, but these facts must be noted in the Inquiry Committee report.

**Report of the Inquiry Committee**

20. The written Inquiry Committee report shall include the names and titles of the committee members and other experts, if any, consulted by the Inquiry Committee; the allegation and the individual(s) named; the funding sources for the research; the procedures followed by the Inquiry Committee to arrive at its findings; from whom relevant information was obtained; a list of the research or financial records reviewed; summaries of any interviews; and a finding

(a) that serious Research Misconduct attributable to the Respondent has occurred, as supported by the preponderance of the evidence, or

(b) that the Respondent engaged in questionable practices that are not deemed to be serious Research Misconduct, or

(c) that there is insufficient evidence to reach a conclusion, or

(d) that the allegation is without substance. In this last case, the report shall also contain a finding as to whether the allegation was made in bad faith (i.e. made with reckless disregard for or willful ignorance of facts or made falsely with malicious intent), where the available information supports such a conclusion.
Finalizing the Report of the Inquiry Committee

RIO Review

21. The responsible RIO shall review the report within 14 calendar days of its receipt to ensure that:

- the Inquiry Committee has completed its assignment;
- the report provides sufficient information to justify the Inquiry Committee’s findings;
- The RIO shall continue to ensure the confidentiality of the report at this point of time

22. The RIO should determine if the Inquiry process has been sufficiently broad and thorough. For this to be the case, the Inquiry Committee must have examined all relevant documentation, interviewed the complainant, the Respondent (but see paragraph 19 above), and other individuals with key information, and secured appropriate expertise to thoroughly evaluate the evidence. The RIO should consult the Office of Legal Affairs and any relevant external agency or expert. If the report is inadequate in any respect, the RIO shall request modifications or revisions.

Revisions by Inquiry Committee

23. If the report has been referred back to the Inquiry Committee for modification or revision, the Inquiry Committee shall submit a final, signed report, within 14 calendar days of such request. If additional time is needed to revise the report or conduct further inquiries, then the Inquiry Committee shall request an extension of time from the RIO.

Determination by the RIO

24. If the report is still not conclusive, the RIO shall write a separate report. Within 7 calendar days of completion of the report, and in consultation with the Office of Legal Affairs, the RIO shall conclude whether Research Misconduct has been established and submit this conclusion with the report to DP(R&T).

Notifications and Actions

25. Upon receipt of the final Inquiry Committee report and after consultation with the Office of Legal Affairs, the DP(R&T) shall take whichever of the following actions are appropriate:

(a) Notification of Respondent: The DP(R&T) shall provide the Respondent with the Inquiry Committee report and the conclusion of the RIO as to whether Research Misconduct has occurred. The Respondent may comment in writing within 14
calendar days of his/her receipt of the Inquiry Committee report and such response shall be made part of the record of the Inquiry.

(b) **Notification of Interested Parties:** The DP(R&T) may, at his/her discretion, provide individuals previously notified of the Inquiry with a written summary of the Inquiry Committee’s findings and the DP(R&T)’s determination of the case as follows:

(c) **Determinations:**

(i) **Finding that an Allegation Lacks Substance:** If the DP(R&T) accepts an Inquiry Committee finding that the allegation was without substance, then he/she shall, in consultation with the Respondent and the Office of Legal Affairs as needed, make reasonable efforts to notify appropriate individuals and organizations of the outcome of the Inquiry. Any written responses to these efforts shall be placed in the record of the Inquiry. If the DP(R&T) accepts a finding that the allegation was made in bad faith, then the DP(R&T) may refer the case to the appropriate University authorities for disciplinary action against the complainant.

(ii) **Finding of Violations Other Than Serious Research Misconduct:** If the DP(R&T) accepts the finding that Research Misconduct probably did not occur, but that the Respondent may have violated other University policies, then the DP(R&T) may refer such possible violations in a separate summary memorandum to the appropriate University officer and/or the Respondent’s supervisor for action or discipline. If appropriate, such information may be considered in the applicable performance review process.

(iii) **Finding that there was Research Misconduct.** After receiving a final report from an Inquiry Committee containing a finding of Research Misconduct, and having made a determination that Research Misconduct has occurred, the DP(R&T) shall notify the Respondent, the Provost and the President with the recommendation that disciplinary action be taken in accordance with the process stipulated in *Staff Disciplinary Procedures (HR 088/07).* The report of an Inquiry Committee under this Code shall constitute the report of the Committee of Inquiry required under the Staff Disciplinary Procedures.
Discipline

26. The Provost shall inform the DP(R&T) in writing of the disciplinary action taken with respect to the Respondent.

Process for Appeal of Finding of Inquiry Committee

Timing and Grounds for Appeal

27. The Respondent may challenge a finding that there was Research Misconduct and/or the action recommended by the Disciplinary Committee, by appealing to the President within 30 calendar days of the date of the decision of the Disciplinary Committee. Grounds for appeal against the finding of Research Misconduct are limited to the following:

- substantial relevant evidence was not uncovered and is now available;
- procedures described in this code were not properly followed;

28. The President shall determine whether to:
   (a) Accept the recommendation of the DP(R&T) and the Disciplinary Committee and, if so, shall inform the RIO, Office of DP (R & T), the Respondent and the Complainant in writing of the decision.
   (b) Dismiss the case on the grounds that the appeal has sufficient merit, and provide in writing the bases of his/her decision; or
   (c) Recommend to the DP(R&T) to refer the case back to an RIO for further Inquiry.
   (d) Accept the conclusion that there was Research Misconduct but impose a lesser penalty than that proposed by the Disciplinary Committee.

29. The DP(R&T) shall notify any appropriate funding agency and affiliated institutions and any other appropriate persons (e.g. journal editors) of the final outcome. At this time, the public may be notified if it is deemed appropriate.

Records

30. Records of each allegation and Inquiry shall be maintained in a secure form by the Office of DP(R&T) for at least 5 years.
Approval

31. This Code was adapted with permission from the University of California San Diego's “Integrity of Research Policy and Procedures” (3/1/2006).