

FACULTY OF BIOLOGICAL SCIENCES
UNIVERSITY OF NIGERIA (FBS-UNN)



RESEARCH POLICY

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Research policy statement

SECTION 1- GENERAL

1.1 DEFINITIONS

For purposes of this policy, unless otherwise stated, the following definitions and abbreviations shall apply:

1.1 Research Staff For the purposes of this policy, the term “research staff” shall include all staff members who have a contractual obligation to carry out scientific research and development activity, as well as innovation at FBS-UNN. They are professionals who are principally engaged in the conception or creation of new knowledge, products, processes, methods and systems and also in the management of the projects concerned. This category of staff shall include:

1.1.1. The Dean (or Associate Dean for Research and Development).

1.1.2. All cadres of lecturers and research scientists, viz.:

1.1.2a. Professors,

1.1.2b. Associate Professors,

1.1.2c. Senior Lecturers, and

1.1.2d. Lecturers I & II,

1.1.2e. Assistant Lecturers

1.1.3. All cadres of Laboratory Technologists and Technicians, viz:

1.1.3a. Laboratory Orderlies,

1.1.3b. Assistant Laboratory Technologists and Technicians,

1.1.3c. Laboratory Technologists and Technicians,

1.1.3d. Senior Laboratory Technologists and Technicians,

1.1.3e. Principal Laboratory Technologists and Technicians

1.1.3f. Chief Laboratory Technologists and Technicians;

1.1.4. All other categories of individuals involved in research at FBS-UNN but not considered to be the FBS-UNN’s staff members, such as;

1.1.4a. Visiting Research Scientists (including visiting professors),

1.1.4b. Post-Doctoral Fellows,

1.1.4c. Students-on-Attachment

1.1.4d. Research Students

1.1.4e. Adjunct Research Scientists

1.1.4f. Research Contractors

The term “Research Staff” shall however not include staff whose obligations are limited to administration and would not normally include staff on limited term contracts where the employment is not primarily for the purposes of research.

1.2. FBS-UNN	Faculty of Biological Sciences, UNN
1.3. Dean	The Dean of FBS-UNN
1.4. A-Dean	Associate Dean Research
1.5. Prof	Professor
1.6. AP	Associate Professor
1.7. SL	Senior Lecturer
1.8. LT	Lecturer I & II
1.9. A-L	Assistant Lecturer
1.10. VRS	Visiting Research Scientist
1.11. Post-Doc	Post-Doctoral Research Fellows
1.12. Adj. RS	Adjunct Research Scientist/ Adjunct Lecturer
1.13. Board	FBS-UNN’s Board
1.14. R&D Committee	FBS-UNN Board’s standing Committee on Research and Development issues
1.15. FSL	FBS-UNN’s Selection Committee
1.16 Laboratory Technologists and Technicians	Laboratory Technologists and Technicians are persons whose main tasks require technical knowledge and experience in one or more fields of engineering, physical and life sciences or social sciences and humanities. They participate in R&D by performing scientific and technical tasks involving the application of concepts and operational methods, normally under the supervision of researchers. Equivalent staff perform the corresponding R&D tasks under the supervision of researchers in the social sciences and humanities.
1.16. Research	For the purposes of this document, “Research” shall broadly be understood as original investigation undertaken in order to gain knowledge and understanding. It shall include work of direct relevance to the needs of commerce, industry, and to the public and voluntary sectors; scholarship;

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 and processes, including design and construction.

In short, “Research” shall include:

- The creation of new knowledge and/or
- The use of existing knowledge in a new and creative way such as to develop new concepts, methodologies and understandings. This could include the synthesis and analysis of previous research to the extent that it is new and creative

More specifically, “Research”, at FBS-UNN, shall essentially consist of “scientific research” and “experimental development” (R&D), comprising creative work undertaken on a systematic basis in order to increase the stock of knowledge, and the use of this stock of knowledge to devise new applications for the Nigerian Science and Technology Industry.

The term Research, at FBS-UNN shall cover three sets of scientific and technological activities, as follows:

- 1.16a. **Basic research.** Experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundation of phenomena and observable facts, without any particular application or use in view.
- 1.16b. **Applied research.** Original investigation undertaken in order to acquire new knowledge. This, unlike basic research, is, however, directed primarily towards a specific practical aim/solution or objective.
- 1.16c. **Experimental development.** Systematic work, drawing on existing knowledge gained from research and/or practical experience, which is directed to producing new materials, products or devices, to installing new processes, systems and services, or to improving substantially those already produced or installed. This will include pilot plant activities like the development and improvement of product and process prototypes, evaluation of new hypotheses, development of new product formulae, establishment of new finished and improved product specifications, design of special equipment and structures required by a new process, preparation of operating instructions or manuals on new processes, feedback R&D, etc.

The following activities shall however be excluded from the definition of research:

- i. The routine testing and routine analysis of materials, components, products, processes, atmospheres etc., as distinct from the development of new analytical techniques.

- ii. Maintenance of national standards, equipment maintenance and calibration, QMS processes, the calibration of secondary standards and routine testing and analysis of materials, components, products, processes, soils, atmosphere, etc.).
- iii. The development of teaching materials that do not embody original research
- iv. Scientific and technical information services;
- v. General purpose or routine data collection;
- vi. Feasibility studies (except into research and experimental development projects);
- vii. Commercial, legal and administrative aspects of patenting, copyright or licensing activities;
- viii. Routine computer programming, systems work or software maintenance

1.2 PREFACE

The Faculty of Biological Sciences, UNN (FBS-UNN), recognises that:

- i. Commitment to good research conduct lies at the heart of an effective research enterprise and system.
- ii. High standards of research integrity underpin the quality and reliability of research outcomes generated as well as of the decisions made in the light of those outcomes.
- iii. The quality of FBS-UNN's scientific and technological research output has a direct relationship to the attainment of the University of Nigeria's mandate and vision of becoming an international centre of excellence in Science and technology research and development and innovation.

As a result, the Faculty of Biological Sciences, UNN, (FBS-UNN) makes an unwavering commitment to seek, at all times, to achieve and maintain the highest standards of research conduct with regard to good research and development practice and the handling of potential scientific/research misconduct. As significant contributor to innovation in and the growth and development of scientific Research and development and innovation in Nigeria, FBS-UNN undertakes to make research integrity the cornerstone of all of its Research and Development activities. To this end, FBS-UNN has adopted a body of principles, encapsulated in this document, as **institutional framework** to guide and govern the good management and conduct of scientific research and development to achieve the desired goals and standards. FBS-UNN's expects all its research employees, including all cadres of Lecturers/Research Scientists, Technicians, Visiting Research Scientists, Post-Doctoral Fellows, Research Students and Students-on-attachment, Research Support Staff, Research Managers and Administrators, to perform their required research obligations according to the principles set out in this institutional framework, and to work with due respect for one another within a supportive and open environment. In addition, FBS-UNN's Employees have a duty to recognise ethical standards governing their particular professions.

The criteria, set out in this document, have been designed painstakingly to ensure that:

- 1.2.1. All research and development activities, at FBS-UNN, are conducted to the highest levels of integrity, clarity and good management, including appropriate research design and frameworks, to ensure that findings are robust, accurate, valid and defensible.
- 1.2.2. Researchers, at all times, adhere to the highest level of research ethics, in line with requirements set out by national and international regulatory bodies, professional and regulatory research guidance and research ethics frameworks issued in appropriate sections of this document.
- 1.2.3. Conflicts, in research and development practice, are minimized, by clearly setting out the research administrative structures as well as the relationships between scientists employed at different levels of FBS-UNN's research structure.
- 1.2.4. Research and development activities are conducted in an ethical and professional manner ensuring validity and accuracy in both the collection and reporting of data.
- 1.2.5. The responsibilities of individuals employed at various levels in FBS-UNN's scientific research and development structures are clearly defined.

1.2.6. No part of this document shall be a substitute for or supplant personal accountability.

The Criteria embodied in this document have been designed to support the achievement of FBS-UNN's Mission and Values of being a leading international centre of excellence in Science and Technology Research and Development. For maximum understanding, the Criteria embodied in this document should be read in conjunction with FBS-UNN's other relevant policy documents. The Criteria may also be reviewed periodically as need or situations may dictate/determine.

1.3 PURPOSE

The following constitute the main purposes of this document:

- 1.3.1. To clearly set out the general standards for the establishment and maintenance of good scientific research and development conduct and practice at FBS-UNN, as well as specifies FBS-UNN's Board's expectations.
- 1.3.2. To establish a common understanding of expectations and responsibilities relating to research in FBS-UNN's laboratories, thereby promoting best quality and highest levels of integrity in the work and interactions in the laboratories and helping to promote scientific excellence.
- 1.3.3. To establish a common understanding and responsibilities relating to research by FBS-UNN's research and development staff employed at different levels.
- 1.3.4. To establish a common understanding of what constitutes unacceptable research conduct at FBS-UNN.
- 1.3.5. To provide guidelines for reporting and investigating allegations of research misconduct at FBS-UNN.
- 1.3.6. To define and clarify the respective responsibilities of the various structures of FBS-UNN, including the Board and its committees, FBS-UNN's Management structures etc., in fostering and safeguarding the highest possible standards of research at FBS-UNN
- 1.3.7. To reduce ambiguity and arbitrariness in FBS-UNN's research and development processes.
- 1.3.8. To encourage hard work, resourcefulness, enhanced productivity and excellence in FBS-UNN's research and development output.

1.4 ORGANISATIONAL SCOPE

This is a FBS-UNN-wide policy and shall apply to all of FBS-UNN's Research Staff, irrespective of rank and designation.

1.5 PRINCIPLES

The Criteria embodied in this document are underpinned by the values encapsulated in FBS-UNN's Mission, Vision and Values statements (see FBS-UNN's Strategic Plan).

The conduct of research inquiry and the transmission of technological knowledge are central and complementary functions of FBS-UNN. They can be carried out effectively only if FBS-UNN researchers are guaranteed certain freedoms and accept corresponding responsibilities. To achieve these values, the following principles shall apply:

- i. FBS-UNN and its Research Staff shall comply with all legal and ethical requirements and other guidelines that apply to the institution's research activities. This shall include submitting research proposals for ethical review, where applicable, and abiding by the outcome of such a review. FBS-UNN and its Research Staff shall also ensure that all research projects are approved by all applicable National and International bodies, ethical, regulatory or otherwise.
- ii. When conducting, or collaborating in, research in other countries, FBS-UNN and its Research Staff shall comply with the legal and ethical requirements existing in Nigeria and in the countries where the research is conducted. Similarly, organisations and researchers based abroad who participate in FBS-UNN-hosted research projects shall comply with the legal and ethical requirements existing in Nigeria, as well as those of their country.
- iii. FBS-UNN, through the Office of the Dean and respective Heads of Departments, shall ensure, at all times, that all research projects have sufficient arrangements for insurance and indemnity prior to the research being conducted.
- iv. All of FBS-UNN's Research and Development processes **shall demonstrate conformance to the highest standards of scientific research and development practice;**
- v. All of FBS-UNN's Research and Development staff **shall take personal responsibility for maintaining the highest standards of scientific research integrity and excellence in their scientific research and development work;**
- vi. All Heads of Departments, Laboratories, research mentors and supervisors **have special responsibilities towards ensuring that the highest scientific research standards are applied, at all times, to the research and development activities of FBS-UNN.**
- vii. **All Heads of FBS-UNN Research Laboratories will generally be research scientists who have attained the minimum rank of Senior Lecturer** in the relevant discipline.
- viii. **All Heads of FBS-UNN's Research Programmes shall normally be research scientists who have attained the minimum rank of Senior Lecturer.**
- ix. **All Heads of FBS-UNN's Research Projects shall normally be research scientists who have attained the minimum rank of Senior Lecturer.**
- x. All Heads of FBS-UNN's Research Areas shall normally be research scientists **who have attained the minimum rank of Professor.**

All FBS-UNN Research Staff are expected to read this document and to abide by it. Copies of the Research Policy **shall routinely be made available** to all new members of staff, as a guiding document. If a member of staff, at any time, believes that he/she is being required to act in a way which is in breach of the principles contained in this document, or has a concern about the conduct of others, he/she has responsibility to raise the matter through his/her line management or, where appropriate, directly with the Head of Department, FBN-UNN research Ethics Committee or Dean, who is responsible for overseeing and directing this process.

Other staff involved in scientific work at FBS-UNN not funded by the institution, but which involves publications or reports to external bodies, will also be expected to comply with the spirit of this Research Policy document, and any good scientific practice requirements specifically notified to FBS-UNN by the funding agency or external recipients of the work. These obligations shall apply equally to all FBS-UNN employees, research contractors, hired research staff (including part-time/short contract staff, post-docs, research students, visiting research scientists, adjunct research scientists etc.), and collaborators from other institutions (including Universities and other research organisations).

SECTION 2: POLICY AND GUIDELINES ON GOVERNANCE OF GOOD RESEARCH CONDUCT

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2.1. Introduction

2.1.1. The Faculty of Biological Sciences, UNN, resolves to be an honest and ethical institution in the way in which it conducts its business and discharges its responsibilities. FBS-UNN aims to promote and support a culture in which high standards of personal and professional conduct in research and development activities are expected and achieved. As a corollary, FBS-UNN will oppose research misconduct and will take appropriate and robust action in instances of research misconduct or fraud.

2.1.2. FBS-UNN expects those engaged in research and development to act with the highest standards of integrity whether they are employees of FBS-UNN, students-on-attachment, visiting post-graduate students or scientists, adjunct researchers, or research contractors, and irrespective of the source from which their posts or research is funded, whether this is internal or external to FBS-UNN.

2.1.3. FBS-UNN also expects these standards to be maintained by all individuals engaged in FBS-UNN business, in particular, those involved in setting of research priorities and in the assessment of research.

2.1.4. FBS-UNN Board's Policy and Guidelines on Governance of Good Research Conduct has been designed to encourage good conduct in research and help prevent misconduct, in order to assist FBS-UNN and its research faculty to conduct research of the highest quality. It provides general principles and standards for good practice in research, applicable to all individuals involved in research. All research staff members (including all categories of research scientists, technicians, research managers and administrators) are expected to abide by the principles set out in this policy. FBS-UNN's Policy and Guidelines on Governance of Good Research Conduct shall be applicable to all research and development subject areas and shall not attempt to micro-manage research. The intention of FBS-UNN Board's Policy and Guidelines on Governance of Good Research Conduct is that researchers and research teams and units within FBS-UNN, as well as FBS-UNN research collaborators, may use the principles and standards outlined in this document as guiding principles and standards to inform the management and conduct of research.

2.1.5. The Policy and Guidelines on Governance of Good Research Conduct covers areas of good practice in research, drawing upon existing international good research practice principles and standards for addressing good conduct and misconduct in research. Detailed guidance is given on core standards for good practice in research.

2.1.6. The Policy and Guidelines on Governance of Good Research Conduct complements FBS-UNN's existing and forthcoming policies, such as those for Safety, health and environment (SHE), consultancy, raising concerns at work, management of finances, intellectual property, etc., and does not seek to replace them. Use of the benchmarks contained in this document can assist FBS-UNN research scientists and teams in fulfilling the requirements of regulatory, funding and other relevant bodies, and ensure that important issues have not been overlooked.

2.1.7. FBS-UNN's Dean (or Associate Dean for Research and Development) shall ensure that good practice in research and development forms an integral part of FBS-UNN's strategy and policy.

2.1.8. FBS-UNN's Dean (and Associate Dean for Research and Development) shall have the responsibilities to ensure that there is an institutional policy (as well as guidelines) on good research practice and that this policy (and the associated guidelines) complement and are in accordance with relevant existing organizational policies, such as those for safety, health and environment (SHE), raising concerns at work, management of finances or of intellectual property, conflict of interest and commitment at work, consultancy, etc.

2.1.9. FBS-UNN's Dean (or Associate Dean for Research and Development) shall have the responsibility to ensure that FBS-UNN's Research Staff are aware of these policies (all the Research Policies) and procedures and that all research is carried in compliance with them.

2.1.10. FBS-UNN's Dean (or Associate Dean for Research and Development) shall have the responsibility to arrange for the provision of training, resources and support to FBS-UNN's Research Staff to ensure that the latter are aware of these policies and procedures and are able to comply with them.

2.1.11. FBS-UNN's Dean (or Associate Dean for Research and Development) shall ensure that good practice in research becomes a key integral part of the work of every Research Staff at FBS-UNN.

2.1.12. FBS-UNN's Dean (or Associate Dean for Research and Development) shall have the responsibility to ensure that these measures are monitored for suitability and effectiveness and to initiate their review where necessary.

2.1.13. FBS-UNN's Research Staff shall:

- 2.1.13a. recognise their responsibility to conduct research of high ethical standard;
- 2.1.13b. make themselves aware of FBS-UNN's policies and procedures on good practice in research;
- 2.1.13c. ensure that their research complies with these policies and procedures, and seek guidance from the appropriate office when necessary;
- 2.1.13d. work with FBS-UNN to ensure that they have the necessary training, and resources and support to carry out their research; and

- 2.1.13e. suggest to FBS-UNN, through their line supervisors, the Dean (or Associate Dean for Research and Development), how guidance on good practice in research might be developed, revised or improved on.
- 2.1.14. The Policy and Guidelines on Governance of Good Research Conduct is organized as follows:
 - 2.1.4a. Section 2.2 contains the broad Principles which define the responsibilities and values in the conduct of research by both research scientists and research teams.
 - 2.1.4b. A one-page “Recommended Checklist” for Research scientists can be found on the inside of the front cover. This is a non-technical checklist summarizing the key points of good practice in research. The Checklist is based on the more detailed Standards given in section 2.3.
 - 2.1.4c. Section 2.3 lists Standards for good practice in research that research scientists and teams should comply with. The Standards apply to all disciplines of research at FBS-UNN but may be expanded upon, as needs may arise, to offer more detailed guidance for certain types of research.
- 2.1.15. The FBS-UNN Policy and Guidelines on Governance of Good Research Conduct sets out the institution’s approach to the establishment and maintenance of good research conduct as well as specifies FBS-UNN Board’s expectations with respect to the standards of good research conduct. In particular this document:
 - 2.1.6a. Sets standards of good research practice, with associated guidelines;
 - 2.1.6b. Specifies and describes unacceptable research conduct;
 - 2.1.6c. Provides guidelines for reporting and investigating allegations of research misconduct;
 - 2.1.6d. Clarifies the respective responsibilities of the Research Scientists, Research Supervisors and the different Research and Development structures in fostering and safeguarding the highest possible standard of research conduct.

2.2. Good Research Conduct: Scope and expectations

2.2A. This document is relevant to all individuals involved in research, irrespective of the subject of research, entry route into research or any other consideration. The principles and guidelines apply in particular to the following:

- 2.2.1. All Research Staff and teams
- 2.2.2. All Research Support Staff,
- 2.2.3. All cadres of Laboratory Technicians, and
- 2.2.4. All other categories of individuals who may be involved in research at FBS-UNN, including:
 - 2.2.4i. Visiting Research Scientists,
 - 2.2.4ii. Post-Doctoral Fellows,
 - 2.2.4iii. Students-On-Attachment,

- 2.2.4iv. Research Students,
- 2.2.4v. Adjunct Research Scientists.
- 2.2.4vi. Research contractors/consultants
- 2.2.4vii. All Research Managers and Research Administrators
- 2.2.4viii. All members of FBS-UNN's Board, Board Committees, Board and Management Panels and Committees contributing to FBS-UNN's peer review procedures.

2.2B. FBS-UNN's Research Staff are expected to observe the highest standards of integrity, honesty and professionalism and to embed good practice in every aspect of their work, including the interpretation and presentation of research results, contributions to the peer review process and the training of new research staff and students as well as the conduct of the research itself. Overall, Research Staff are expected to be guided by the following principles:

2.2.5. EXCELLENCE: FBS-UNN Research Staff are expected to strive for excellence when conducting research and aim to produce and disseminate work of the highest scientific research quality.

2.2.6. HONESTY: FBS-UNN is expected to work to create and maintain a culture of research that fosters and supports honesty in research. Research Staff are expected to be rigorous and honest in relation to their own research and that of others. Research Staff are expected to do their utmost to ensure the accuracy of data and results, acknowledge the contributions of others, and neither engage in misconduct nor conceal it.

2.2.7. INTEGRITY: Research Staff are expected to comply with all legal and ethical requirements relevant to their fields of study. They are expected to declare any potential or actual conflicts of interests relating to research and, where necessary, take steps to resolve them.

2.2.8. CO-OPERATION: FBS-UNN and its Research Staff shall promote the open exchange of ideas, research methods, data and results and their discussion, scrutiny and debate, subject to any considerations of confidentiality. All research proposals, research methods and results shall, subject to appropriate confidentiality in relation to personal or commercially protected information, be open to scrutiny and debate.

2.2.9. ACCOUNTABILITY: FBS-UNN and its Research Staff shall recognise that in and through their work, they are ultimately accountable to the general public and the Federal Republic of Nigeria and therefore act accordingly. FBS-UNN Research Staff shall ensure that any research which is undertaken complies with any agreements, terms and conditions relating to the project, and allows for proper governance and transparency. Research Staff are expected to follow the requirements and guidance of any professional bodies in their field of research. Research Staff who are members of regulated professions must follow the requirements and guidance of the body regulating their profession.

2.2.10. TRAINING AND SKILLS: FBS-UNN shall provide training and opportunities for the development of her Research Staff, and the necessary resources to enable them to conduct research to the required standards. FBS-UNN shall support its Research Staff in

identifying unmet needs for training and development. Research Staff are expected to ensure that they have the necessary skills, training and resources to carry out research, in the proposed research teams or through collaboration with specialists in relevant fields, and report and resolve any unmet needs identified.

2.2.11. SAFETY: FBS-UNN and FBS-UNN's Research Staff shall ensure the dignity, rights, safety and wellbeing of all involved in research and avoid unreasonable risk or harm to research subjects, patients, participants, Research Staff, and others. Research Staff and supervisors have the responsibility to report and address any concerns relating to the dignity, rights, safety and well-being of those involved in research. Research should be initiated and continued only if the anticipated benefits justify the risks involved. Overall, FBS-UNN shall expect its Research Staff to demonstrate utmost respect for life, the law and the public good in all their research undertaking.

2.2.12. INFORMATION: FBS-UNN shall provide the platform to enable its research staff to keep abreast or Inform themselves of developments in the relevant subjects and disciplines. To this end, FBS-UNN shall work to ensure that the institution's library and access to relevant electronic scientific/research information are kept up-to-date. On their side, FBS-UNN Research Scientists shall have the responsibility to ensure that they are informed of relevant developments in their areas of research.

2.2C. For the achievement and maintenance of the highest research standard at FBS-UNN, the Institution shall demonstrate, at all times, a commitment to the principles of good research conduct. This commitment shall be reflected throughout FBS-UNN and reinforced through a specific programme of skills development. It is the responsibility of FBS-UNN's Dean (or Associate Dean for Research and Development), and the institution's Professors and Heads of Research Departments and Laboratories to foster a climate which allows research to be conducted in accordance with good research practice, as well as to ensure there are procedures in place to deal effectively and fairly with allegations of misconduct. The Dean (or Associate Dean for Research and Development) and all the senior research supervisors (including all Professors and HoDs of Research Departments and Laboratories) must ensure appropriate direction of research and supervision of Research Staff (and research students). It is also the responsibility of the Dean (and Associate Dean for Research and Development) to ensure that Research Staff are aware of all relevant legislation, published guidance and FBS-UNN's own policies and procedures regarding good research conduct. It is the responsibility of individual researchers, research managers and support staff to work in accordance with the standards set. Heads of Departments/Laboratories shall all have a duty to ensure compliance with the Policy and Guidelines within their areas of responsibility. FBS-UNN shall draw attention to the POLICY AND GUIDELINES ON GOVERNANCE OF GOOD RESEARCH CONDUCT in its induction processes for newly appointed staff, visiting students and students-on-attachment, and all other individuals working in research and development at the institution. Principal investigators and supervisors of research projects/programmes shall ensure total compliance with the POLICY AND GUIDELINES ON GOVERNANCE OF GOOD RESEARCH CONDUCT.

2.2D. Breach of the POLICY AND GUIDELINES ON GOVERNANCE OF GOOD RESEARCH CONDUCT or failure to comply with the provisions therein contained shall constitute grounds for action to be taken by FBS-UNN, including possible application of UNN's disciplinary procedures.

2.2E. Research Staff who are in doubt about the applicability of the provisions of the POLICY AND GUIDELINES ON GOVERNANCE OF GOOD RESEARCH CONDUCT, or about the appropriate course of action to be adopted in relation to it, shall be expected to seek advice from their appropriate project and program supervisors, Heads of Department/Laboratory or the appropriate Professor in the first instance. Ultimate responsibility for interpretation of the Code resides with the Dean (or Associate Dean for Research and Development).

2.3. GUIDELINES ON THE PROMOTION OF GOOD RESEARCH CONDUCT

The following are the characteristics of good research conduct and Practice:

Maintenance of professional standards including proper and accurate documentation of results; questioning of one's own research findings; attribution and appropriate and honest acknowledgement of the work of others;

- Leadership and co-operation in research groups;
- taking into account the legitimate, professional needs of new researchers;
- securing and storing primary data;
- Compliance with required practice in relation to ethics, health and safety, intellectual property rights, consultancy and codes of practice for research, as detailed below:

2.3.1 HEALTH, SAFETY AND ENVIRONMENT.

Organisational and Departmental Levels: FBS-UNN recognises that a safe, healthy and clean work environment is critical to safeguarding the welfare of its Research Staff and other employees as well as achieving the institution's vision of becoming an international centre of excellence in food technology research and development. As a result, the institution shall commit itself to the following:

- 2.3.1.I.** To ensure that all research and development activity is carried out in a safe and comfortable workplace condition, in accordance with established National and international occupational Health, Safety and Environment standards, including Nigeria's Occupational Health and Safety Laws.
- 2.3.1.II.** To cultivate a culture of appreciation for and compliance with the said standards, through organized education of its Research Staff and other employees.
- 2.3.1.III.** To promote efficiency and reduce losses in research and development activities by continuously improving staff awareness of their health and safety to promote productivity
- 2.3.1.IV.** To promote environmental conservation and conduct its research and development activities in an environmentally friendly manner.
- 2.3.1.V.** To ensure that all risks regarding illness, injury and environmental degradation such as dust, fire, mechanical accidents and chemical spills that could affect this goal are identified and removed where possible, or reduced if not possible to remove, and then controlled;

- 2.3.1.VI.** To Plan and commit to continually improve in terms of occupational health, safety and environmental management and performance to such an extent that incidents are minimised, ensuring that both employees and members of the public are unlikely to be placed in unnecessary and unacceptable risk situations;
- 2.3.1.VII.** To cause the establishment and monitoring of occupational health, safety and environmental objectives within all its departments and laboratories on a regular basis;
- 2.3.1.VIII.** To develop and implement a system to ensure that a high level of legal compliance with applicable occupational health, safety and environmental legislation and other international and national requirements and standards, including all relevant laws relating to Occupational Health and Safety, Waste Management, Atmospheric Pollution (Prevention), Water is achieved;
- 2.3.1.IX.** To make available realistic financial resources to ensure that all occupational health, safety and environmental objectives and requirements of this policy are achievable;
- 2.3.1.X.** To ensure that at all times FBS-UNN has a Safety, Health and Environment (SHE) policy and that this policy is implemented and maintained by all levels of management and employees (including all category of Research Staff);
- 2.3.1.XI.** To ensure that all of FBS-UNN's research departments and laboratories develop safety, health and environment handbooks detailing local safety rules which must be obeyed during research activities.
- 2.3.1.XII.** To ensure that FBS-UNN's SHE policy is reviewed annually by Management, and the institution's SHE Committee to ensure that it remains effective, appropriate and continuously improves occupational health, safety and the environment at FBS-UNN.
- 2.3.1.XIII.** To ensure that FBS-UNN's SHE policy and all applicable occupational health, safety and environmental documentation is communicated and made available to all employees and visitors by way of training, communication articles, general information and discipline.

B. Project and Programme Levels.

- 2.3.1.XIV.** Project, programme and research area supervisors, heads of research departments and laboratories, as well as the Dean (or Associate Dean for Research and Development) shall have the responsibilities to ensure that clear guidelines detailing safety, health and environment rules for the respective projects, programmes, departments/laboratories etc. are put in place and observed.
- 2.3.1.XV.** Research Group Leaders shall have a duty of care to all those involved in their research, whether as subjects/participants or as part of the research team. This duty of care shall include ensuring that those involved in the research are fully aware of all the risks and dangers in advance of their involvement.
- 2.3.1.XVI.** Heads of Research Departments and Laboratories shall have the responsibility to ensure that both the broad institutional and the local safety, health and environment rules are observed within their departments/laboratories.

- 2.3.1.XVII.** Research techniques shall not violate established professional ethics pertaining to the health, safety, privacy, and other personal rights of human beings or to the infliction of injury or pain on animals
- 2.3.1.XVIII.** Heads of Research Departments and Laboratories shall ensure that all research laboratories, including the pilot plants and test beds of the institution, are equipped appropriately with:
- a) Working fire extinguishers
 - b) Fire blankets
 - c) Working sprinkler systems
 - d) Appropriate and working eyewash stations
 - e) Working safety showers
 - f) Approved safety glasses for both laboratory workers and visitors
 - g) Appropriate protective clothing and other material, including autoclave gloves, gas masks etc.
- 2.3.1.XIX.** Heads of Research Departments and Laboratories shall have the added responsibility of establishing comprehensive safety training programmes, including researcher training and routine periodic inspection of safety equipment and laboratory facilities, and to cooperate in any inspections by FBS-UNN personnel or by external agencies.
- 2.3.1.XX.** Material safety data sheets shall be prepared by each of FBS-UNN's research laboratories and made available to every research staff working within the respective laboratories.
- 2.3.1.XXI.** The Dean (or Associate Dean for Research and Development) shall have the responsibility to ensure that every project clearly specifies the potential safety, health and environment risks as well as the measures put in place to ensure that safety, wellbeing, health of the Research Staff.
- 2.3.1.XXII.** The Dean (or Associate Dean for Research and Development) shall ensure that Research is initiated only if the anticipated benefits justify the risks involved.
- 2.3.1.XXIII.** Research staff (of all cadre) shall demonstrate utmost respect for life, including the safety and health of everyone, including that of Research Staff, research subjects, patients, participants and any others, and the environment and the public good.
- 2.3.1.XXIV.** Research Staff and supervisors shall have the responsibility to report and address any concerns relating to the dignity, rights, safety and well-being of those involved in research.
- 2.3.1.XXV.** Research Team Leaders (Principal Investigators) and Heads of Research Laboratories/Departments shall be responsible for training members of teams in appropriate health and safety procedures for their particular research area/laboratories, and for management of those procedures in the laboratory or other workplace. For projects requiring special safety procedures, it shall be the responsibility of the research team leader or principal investigator to ensure that staff

are made fully aware of the risks and are trained on appropriate safety and handling measures.

2.3.2. PURCHASING AND EXPENDITURE FOR RESEARCH.

- 2.3.2.I.** The purchase of research materials and expenditure of research funds (including the hiring of staff for research project, procurement of equipment or other resources) shall be in accordance with FBS-UNN's respective established procedures, such as FBS-UNN's Standard Operating Policies and Procedures for Procurement, FBS-UNN's Financial Policies and Procedures and FBS-UNN's Career Path Development and related human resources policy documents.
- 2.3.2.II.** FBS-UNN shall, in addition to the above, issue guidelines regarding the purchase or procurement of materials, equipment or other resources for research and the hiring of staff for research projects. These guidelines shall include statements on the ownership of resources and the rights of Research Staff to use them.
- 2.3.2.III.** The purchase of research materials and the expenditure of research funds, for externally funded projects shall, in addition to the conditions in 2.3.2i above, observe the terms and conditions of the grant or contract held for the research.
- 2.3.2.IV.** FBS-UNN shall ensure that the terms and conditions of any grant or contract related to any research are adhered to.
- 2.3.2.V.** FBS-UNN shall put in place procedures for the monitoring and audit of finances relating to research projects.
- 2.3.2.VI.** Research Staff shall comply with FBS-UNN's guidelines regarding the use and management of finances relating to research and development projects. They (Research Staff) shall be expected to co-operate with any monitoring and audit of finances relating to research projects and report any concerns or irregularities to the Dean (or Associate Dean for Research and Development), as soon as they become aware of such.
- 2.3.2.VII.** Advice on compliance with FBS-UNN's Financial Policies and Procedures and Standard Operating Policies and Procedures for Procurement should be sought from the Finance Manager's or Head of the institution's purchasing and supplies unit, as appropriate.
- 2.3.2.VIII.** As a general principle, **over-expenditure** of a research project shall not be permitted. FBS-UNN however recognizes that, occasionally, there may be circumstances which might justify a temporary over-expenditure of a restricted research project, to allow continuity of research activities. For such instances, a **Research Over-Expenditure Policy** has been developed as a component of the Research Policies. This **Research Over-Expenditure Policy** defines the circumstances under which research over-expenditure may be allowed, as well as the procedures to be followed for requesting for, authorizing and monitoring such approved over-expenditure.

2.3.3 PROFESSIONAL STANDARDS.

- 2.3.3.I.** A culture of professionalism towards research shall be fostered and maintained at FBS-UNN.
- 2.3.3.II.** Regardless of their discipline, FBS-UNN research staff shall adopt and promote in others high standards of personal conduct, and be honest and ethical with regard to their own actions, and in their responses to the actions of other researchers.
- 2.3.3.III.** The adoption of a professional approach to Research shall apply to the whole range of research work, including methodological and experimental design, the generation and analysis of data, application for funding, the publication of results, and the appropriate acknowledgement or attribution of the direct and indirect contributions of colleagues, collaborators and others.
- 2.3.3.IV.** **Plagiarism, deception, infringement of intellectual property, and the fabrication or falsification of results shall be regarded as serious professional misconduct and may result in FBS-UNN invoking disciplinary procedures, including dismissal.**
- 2.3.3.V.** The FBS-UNN **Ethical Code for Research** and the **Conflict of Interest and Commitment Policy** shall help guide Research Staff to maintain the highest levels of professional standards in the conduct of their research.
- 2.3.3.VI.** FBS-UNN's Research Staff and other research collaborators (including visiting research scientists, adjunct research scientists, post-doctoral research fellows, students-on-attachment, research students etc.) have the responsibility to familiarize themselves with these policies. Research Staff are expected to declare and manage any real or potential conflicts of interests related to their research work.
- 2.3.3.VII.** FBS-UNN encourages its Research Staff to report cases of suspected misconduct and to do so in a responsible and appropriate manner.
- 2.3.3.VIII.** Research Staff, and in particular those named as principal investigators, grantholders or research group leaders, shall ensure that the research they undertake is consistent with the terms and conditions, as defined by the sponsoring body and/or covered by agreements between FBS-UNN and the Sponsor. This includes, but is not restricted to, ensuring that the research programme carried out is as defined in the original proposal to the sponsor, unless amendments have been agreed in writing; that finance is used solely for the purpose that it was intended; that reports are accurate and produced on time and that conditions relating to publication and ownership of intellectual property are adhered to.
- 2.3.3.IX.** A significant component of Research Group Leaders' duty of care to all those involved in their research, whether as subjects/participants or as part of the research team. shall be:
- a) Protecting the confidentiality of research subjects and participants unless consent has been attained to reveal their identity or any other confidential information; and
 - b) Ensuring appropriate informed consent is obtained properly, explicitly and transparently.
- 2.3.3.X.** Research Staff shall be expected to be honest about conflict of interest issues, whether real, potential or perceived, when reporting results.

2.3.4 LEADERSHIP AND SUPERVISION. The creation of a sound research climate is essential to good research practice.

2.3.4.I. In FBS-UNN and within every research group, responsibility for creating a sound research climate shall lie with the Dean (or Associate Dean for Research and Development), as well as with the various group leaders, including the various research area coordinators, programme leaders, and project leaders.

2.3.4.II. Group leaders and other senior researchers shall have the responsibility to create a research environment of mutual co-operation, in which all research staff shall be encouraged to develop their skills and in which the open exchange of research ideas shall be fostered.

2.3.4.III. Research group leaders at various levels shall also ensure that appropriate direction of research and supervision of research are provided.

2.3.4.IV. Research group leaders shall be aware of their obligations to all staff and other individuals working as part of the research team. At least annually, each research group leader shall review intellectual and tangible property rights and responsibilities (e.g. for management of data in all media, for proper authorship attribution, etc.), with all members of the group under his or her direction, including staff, students-on-attachment, postdocs, visiting research scientists, adjunct research scientists, and research contractors. Each member shall have the right to know who is sponsoring the research and supporting his or her salary or stipend.

2.3.4.V. On an individual level, the best interests of each research team member shall be of utmost and particular concern. FBS-UNN is committed to demonstrate support and appreciation for its Research Staff. To that end, Research Team Leaders shall be encouraged to provide staff development opportunities and, if possible, a mentor relationship for those in their group.

2.3.4.VI. FBS-UNN, through the office of the Dean (or Associate Dean for Research and Development), shall provide direction and supervision of research and Research Staff, by setting out clear lines of accountability for the organisation and management of research.

2.3.4.VII. FBS-UNN, through the office of the Dean (or Associate Dean for Research and Development), shall support research supervisors and Research Staff in meeting the legal and ethical requirements of conducting research.

2.3.4.VIII. FBS-UNN, through the office of the Dean (or Associate Dean for Research and Development), shall encourage the career development of FBS-UNN's Research Staff as well as arrange for the training and mentoring of new researchers.

2.3.4.IX. FBS-UNN, through the office of the Dean (or Associate Dean for Research and Development), shall also be responsible for facilitating training and support of those charged with the supervision and development of other Research Staff.

2.3.4.X. Research supervisors, including Principal Investigators and project/programme leaders, shall have the responsibility of ensuring that they have

the necessary training, time and resources to carry out their assigned role, and request support if needed.

2.3.4.XI. Research misconduct is least likely to occur in an environment where good research practice (e.g. documentation of results, peer review of research, regular discussion and seminar) is encouraged and where there is adequate supervision at all levels. Research group leaders/Principal Investigators shall be expected to put in place best practices in their research groups.

2.3.4.XII. Newly employed Research Staff may often face particular difficulties. Responsibility for ensuring that these and all other new researchers understand good research practice shall lie with all members of FBS-UNN community, but particularly with the research group leaders/Principal Investigators, the respective R&D heads of department, the senior Research Staff and the Dean (or Associate Dean for Research and Development). Good practice shall include “mentoring” of less experienced Research Staff in their new environment.

2.3.4.XIII. FBS-UNN’s Research Staff supervising postgraduate students shall be expected to provide good supervision. These Research Staff shall not be expected to place the said student(s) under unwarranted or unsupervised pressure to produce results at any cost. As a guide to such Research Staff a **Postgraduate Supervision Policy** has been developed. Staff supervising or intending to supervise postgraduate students shall be expected to familiarize themselves with the contents of this policy.

2.3.5. DATA COLLECTION AND RETENTION/SAMPLES/EQUIPMENT.

2.3.5.I. FBS-UNN and its Research Staff shall comply with all legal, ethical, funding body and organisational requirements for the collection, use, storage and disposal of data, especially personal data, where particular attention shall be paid to the requirement for data protection legislations and regulations. FBS-UNN and Research Scientists shall, in addition, maintain confidentiality where undertakings have been made to third parties or to protect intellectual property rights.

2.3.5.II. At the outset of every research project/programme, there shall be clarity as to the **ownership** and **use** of, where relevant:

- a) Data and samples used or created in the course of the research
- b) Results of the research
- c) Patient questionnaires
- d) Equipment paid for by sponsors.

2.3.5.III. Research staff shall abide by FBS-UNN policies regarding intellectual property and the collation and retention of research data. This includes all other guidelines provided by FBS-UNN’s Information Technology (IT) Department with respect to data management as well as all other codes of practice that may from time to time be developed by FBS-UNN’s Board in relation to the protection and exploitation of intellectual property rights.

- 2.3.5.IV.** FBS-UNN shall have in place procedures, resources (including physical space) and administrative support to assist Research Staff in the accurate and efficient collection of data and its storage in a secure and accessible form.
- 2.3.5.V.** All research data (including records of the procedures followed and the results obtained, including interim results) shall be recorded clearly, accurately (where appropriate, signed and dated by the Investigator) and in a durable and auditable form, with appropriate references, so that it can be readily recovered. This shall be necessary not only as a means of demonstrating proper research practice, but also in case questions are subsequently asked about either the conduct of the research or the results obtained.
- 2.3.5.VI.** All the methods for gathering, analysing, managing and retaining data shall be considered at the early stages of project design. Project proposals shall only be approved if the methods for gathering, analysing, managing and retaining data are duly and adequately described.
- 2.3.5.VII.** Research Staff shall keep clear and accurate records of all procedures followed and all approvals granted during the research process, including records of interim results obtained as well as of the final research outcomes. This is necessary not only as a means of demonstrating proper research practice, but also in case questions are subsequently asked about either the conduct of the research or the results obtained. As in the United States of America, properly maintained notebooks may be used in evidence when establishing ownership of inventions under the "first to invent" patenting system.
- 2.3.5.VIII.** Data and other records generated in the course of or related to research shall be kept securely in paper or electronic format, or both, as appropriate. Back-up records shall always be kept for data stored on a computer. FBS-UNN shall consider a minimum of ten years, from the end of a project, to be an appropriate period for research data retention. Where the retention period stipulated by an act of parliament, a funding agency, publisher guideline, or professional or discipline requirements are different, FBS-UNN shall adopt whichever is the longer retention period.
- 2.3.5.IX.** FBS-UNN and Research Staff shall comply with any subject-specific requirements for data retention, as in the case of certain projects such as that of research based on clinical samples or relating to public health and biomedicine, where longer storage may be required to allow for long-term follow-up to occur. For certain externally funded projects, such as those funded by certain professional bodies and research councils, longer periods of data retention may be required.
- 2.3.5.X.** Research data shall be kept in a form that will enable retrieval by a third party, subject to limitations imposed by legislation, FBS-UNN's regulations and general principles of confidentiality.
- 2.3.5.XI.** The control of both FBS-UNN and Government-owned equipment is mandatory under FBS-UNN's externally sponsored contracts and grants as well as under FBS-UNN's policy. Research Leaders or Principal Investigators shall be responsible for securing all necessary approvals for the purchase of the equipment, as well as for the proper tagging, inventory, and disposal of equipment.

- 2.3.5.XII.** Ordinarily, it shall be the duty of every Principal Investigator (research group leader) in any research project to ensure that the project is compliant with the current National regulations relating to Data Protection and to ensure that copyright, a third party's intellectual property rights and confidentiality are not breached. Advice on compliance with the extant Data Protection Act should be sought from the Institution's legal adviser through the office of the Director of Research and Development.
- 2.3.5.XIII.** Where another person or authority other than a project's Principal Investigator is responsible for the storage and disposal of data such a person or authority should be clearly specified before or at the commencement of the project.
- 2.3.5.XIV.** The responsibilities and procedures for the storage and disposal of samples (including compliance with the requirements of any ethics committee) shall be made clear at the commencement of any project. Any research collaboration agreement relating to the research shall contain clauses describing any necessary arrangements.
- 2.3.5.XV.** Research Staff shall have the responsibility to report any changes in the direction of sponsored research to the sponsor or any other relevant body. Best practice would be to discuss any change in direction of the research with the sponsor prior to its implementation. **FBS-UNN's Model Collaboration Agreement** shall provide a mechanism for handling this process.
- 2.3.5.XVI.** Specific arrangements shall be made to protect the security of research data where there is a contractual or ethical requirement to do so.
- 2.3.5.XVII.** In general, research requires openness but confidentiality provisions relating to publication may apply in circumstances where FBS-UNN or the Research Staff have made or given confidentiality undertakings to third parties or confidentiality is required to protect intellectual property rights.
- 2.3.5.XVIII.** Prior disclosure of the nature of research or the findings of research shall not be made where this might invalidate any commercial property rights that could result. It is the obligation of every Research Staff member to ascertain whether confidentiality provisions apply to a specific project. On the other hand, it shall be the responsibility of the Dean (or Associate Dean for Research and Development) to inform Research Staff of their obligations with respect to these provisions.
- 2.3.5.XIX.** The deletion or destruction of research data and samples, either because of the expiry of the agreed period of retention or for legal or ethical reasons, shall be in accordance with all legal, ethical, research funder and organisational requirements and with particular concern for confidentiality and security.
- 2.3.5.XX.** Any issues that might arise relating to intellectual property shall be referred to the Office of the Dean (or Associate Dean for Research and Development) (or to that of the Director of Technology Transfer and Investment Promotion, if the latter is established and becomes operational).
- 2.3.5.XXI.** Provision shall be made by the respective Heads of R&D departments and Principal Investigators for automatic back-up of all electronic stored data.

2.3.5.XXII. All research data and materials collected/stored by Research Staff for studies originating at FBS-UNN shall remain the property of FBS-UNN, unless subject to a third-party agreement.

2.3.5.XXIII. Staff shall not be permitted to remove primary data/samples and research records when leaving FBS-UNN. Copies may be taken, only with written permission from the office of the Dean (or Associate Dean for Research and Development).

2.3.5.XXIV. Ownership of data/samples and records used by visiting research students shall be subject to the sources and associated agreements for use, collection and storage.

2.3.5.XXV. Even if the individuals responsible for generating data relocate, FBS-UNN shall still have access to the data and maintain its right to such data. Guidance on appropriate timescales and data storage shall be the responsibility of the Research Group Leader/Principal Investigator, and shall be confirmed in writing at the outset of the research programme.

2.3.5.XXVI. Data

2.3.6 PUBLICATION AND AUTHORSHIP.

2.3.6.I. The dissemination of knowledge is one of FBS-UNN's objectives.

2.3.6.II. FBS-UNN and its Research Staff shall disseminate research findings in a manner that reports the research and all the findings of the research accurately and without selection that could be misleading.

2.3.6.III. Every publication emanating from FBS-UNN shall report research and research findings accurately.

2.3.6.IV. FBS-UNN shall provide training and support to guide Research Staff in the publication and dissemination of research and the findings of research that involves:

- a) Confidential or proprietary information;
- b) Issues relating to patients or intellectual property;
- c) Findings with serious implications for public health;
- d) Contractual or other legal obligations; and/or
- e) Interest from the media or the general public.

2.3.6.V. Research Staff shall address issues relating to publication and authorship, especially the roles of all collaborators, early during the design of a project, recognizing that, subject to legal and ethical requirements, roles and contributions may change during the time span of the research. Decisions on publication and authorship shall be agreed jointly and communicated to all members of the research team.

2.3.6.VI. Every publication emanating from FBS-UNN shall contain acknowledgement to all who have made a significant contribution to the relevant research, who are not authors.

- 2.3.6.VII.** Minimum requirements for authorship of publications shall be restricted to those cases where the contributors and collaborators have made a significant/or substantial intellectual or practical contribution to the work, in the:
- a) Conception and design of the project;
 - b) Execution of the project; or
 - c) Analysis and interpretation of data; and/or
 - d) drafting or critically revising the article in a manner which contributes to its interpretation
- 2.3.6.VIII.** Any person who fulfills the criteria for authorship shall not be excluded from the submitted work, without their express written permission
- 2.3.6.IX.** Authorship shall not be allocated to honorary or “guest” authors (i.e. those that do not fulfill criteria of authorship).
- 2.3.6.X.** Acquisition of funding, collection of data, general supervision of the research group, provision of technical assistance or materials by themselves, shall not justify authorship.
- 2.3.6.XI.** No person who has contributed to the acquisition of funding, or the collection of research data, shall be intentionally excluded from its analysis or interpretation for the purpose of authorship.
- 2.3.6.XII.** All others who contributed to the work and who are not authors, shall be recognised by being named in footnotes or in the Acknowledgement section, and their specific contribution and role in the work shall be fully acknowledged. Individuals and organisations providing access to facilities, samples or reference collections shall be fully acknowledged.
- 2.3.6.XIII.** Anyone who is listed as an author of any work shall take public responsibility for that work and ensure its accuracy. Such a person shall also be able to identify their contribution to such work.
- 2.3.6.XIV.** Any person who has not participated in a substantial way in the conception, execution or interpretation of a significant part of the relevant research shall not be included as an author of a publication derived from that research.
- 2.3.6.XV.** Research Staff shall owe it a duty to clearly acknowledge all sources used in their research and seek permission from any individuals if a significant amount of their work has been used in the publication.
- 2.3.6.XVI.** Research Staff shall adhere to any conditions set by funding or other bodies regarding the publication of their research and its findings in open access repositories within a set period.
- 2.3.6.XVII.** Research Staff shall declare any potential or actual conflicts of interest in relation to their research when reporting their findings or in publications.
- 2.3.6.XVIII.** The submission of the same set of research findings to more than one potential publisher at any given time (i.e. duplicate submission) or publishing the findings in

more than one publication without disclosure and appropriate acknowledgement of any previous publication (i.e. duplicate publication) shall be deemed unacceptable and to be in breach of good research practice.

2.3.6.XIX. Research staff who are discouraged from publishing and disseminating their research or its findings, or subjected to attempts to influence the presentation or inappropriate interpretation of findings, shall report and discuss this with the Director of Research and Development or the Managing Director, as appropriate, so that the matter can be resolved.

2.3.6.XX. Confidentiality agreements to protect intellectual property rights may be agreed between FBS-UNN, the Research Staff and a sponsor of the research. Wherever such agreements limit free publication and discussion, limitations and restrictions shall be agreed explicitly.

2.3.6.XXI. Where research that has not been subjected to peer review is privately reported, Research Staff shall be under obligation to disclose fully the unpublished status of the work and the peer-review mechanism to which it will be subjected.

2.3.6.XXII. Research Staff shall ensure that published reports, statistics and public statements about research activities and performance are complete, accurate and unambiguous.

- a) In the event that Research Staff become aware of unintentional misleading or inaccurate statements about their work, such Research Staff shall be under obligation to correct the record as soon as possible

2.3.6.XXIII. Publication of the same material translated into different languages shall be acceptable, provided that the original source is fully acknowledged. Republication of control data (rather than performing new control experiments) shall not be acceptable unless a full justification is provided and approved by a journal editor.

2.3.6.XXIV. All press releases by Research Staff shall be reviewed by the research teams and discussed with the Dean (or Associate Dean for Research and Development) before they are released to the media. All FBS-UNN research collaborators shall be apprised of this principle.

2.3.7 CONFLICTS OF INTEREST.

2.3.7.I. FBS-UNN recognises that conflicts of interests (i.e. personal or institutional considerations, including but not limited to financial matters) can inappropriately affect research.

2.3.7.II. FBS-UNN shall have a clearly written and accessible conflict of interest policy and commitment, addressing conflicts of interest, including providing guidance for Research Staff on how to identify, declare and address conflicts of interests.

2.3.7.III. FBS-UNN, through the office of the Dean (or Associate Dean for Research and Development), shall ensure that Research Staff understand the importance of

recognizing, disclosing and addressing conflicts of interest in the conduct and reporting of research.

- 2.3.7.IV.** In the instance of a conflict of interest being identified in a project, FBS-UNN shall decide whether or not this conflict of interest is a type and severity that poses a risk of fatally compromising the validity or integrity of the research, in which case FBS-UNN and its Research Staff may not proceed with the particular research, or whether the conflict of interest can be adequately addressed through declarations and/or special safeguards relating to the conduct and reporting of the research.
- 2.3.7.V.** FBS-UNN shall trust in the integrity of individual Research Staff members to disclose any situation that could lead to real or apparent conflict of interest.
- 2.3.7.VI.** Conflicts of interest must be identified, declared and addressed in order to avoid poor practice in research or potential misconduct.
- 2.3.7.VII.** FBS-UNN's shall institute a requirement for an annual certification of compliance and disclosure of potentially conflicting relationships.
- 2.3.7.VIII.** FBS-UNN shall comply with the requirements of its conflicts of interest and commitment policy, as well as with any external (including National and International) requirements relating to conflicts of interest, such as those of funding bodies.
- 2.3.7.IX.** The Dean (and Associate Dean for Research and Development), as well as other senior Research Staff, shall ensure that they are aware of potential or actual conflicts of interests at the institutional level and disclose these when they arise so that they can be addressed.
- 2.3.7.X.** Situations which arise during the year in which outside obligations have the potential for conflict with the Research Staff member's allegiance and responsibility to FBS-UNN shall require a prompt ad hoc disclosure.
- 2.3.7.XI.** Research Scientists shall comply with FBS-UNN's policy for addressing conflicts of interests, as well as any relevant external requirements relating to conflicts of interests, such as those of funding bodies. This shall include making full disclosure of any potential or actual conflicts of interests relating to their research.
- 2.3.7.XII.** Conflict of interest includes, but is not restricted, to personal or close family affiliation to or financial involvement with any organisation sponsoring or providing financial support for a project undertaken by a researcher.
- 2.3.7.XIII.** Disclosure of a potential conflict of interest in research shall be made by Research Scientists to their line supervisors, including project supervisor, head of research department/laboratory or other appropriate person, including the programme/research area leader, the Dean (or Associate Dean for Research and Development), or any other appropriate person, office or organ which may be identified at any time by FBS-UNN. Such organs may include any ethics committee which reviews their research. Disclosure of conflicts of interests may also be made at research meetings when reporting research findings, in publications or via the annual completion of the Declaration of Interests Form.
- 2.3.7.XIV.** Research Staff shall agree to abide by any direction given by FBS-UNN or any relevant ethics committee in relation to a conflict of interest.

2.3.7.XV. Conflicts of interest (including actual, perceived and potential conflicts of interest) shall be disclosed as soon as Research Staff become aware of them.

2.3.8 RESEARCH DESIGN

Proper research design is at the heart of research integrity. Overall, FBS-UNN's Research Scientists shall ensure the following when designing projects:

- 2.3.8.I.** That the proposed project addresses pertinent question(s) and that the design of the study is appropriate for the question being asked and addresses the most important sources of bias;
- 2.3.8.II.** That the design and conduct of the study, including how data will be gathered, analysed and managed, are set out in detail in a pre-specified research plan or protocol;
- 2.3.8.III.** That all the necessary skills and experience will be available to carry out the proposed research, in the proposed research team or through collaboration with specialists in relevant fields;
- 2.3.8.IV.** That sufficient resources will be available to carry out the proposed research and that these resources meet all relevant standards;
- 2.3.8.V.** That any issues relating to the above are resolved as far as possible prior to the start of the research;
- 2.3.8.VI.** That Research Staff, and FBS-UNN (where appropriate) shall conduct a risk assessment of the planned study to determine:
 - a) Whether there are any ethical issues and legal requirements.
 - b) The potential for risks to FBS-UNN, the research, or health, safety and well-being of Research Staff and participants. Research Staff shall report any risks to their manager or other appropriate person within FBS-UNN, and take action to minimise them.
- 2.3.8.VII.** Where the design of a study has been approved by ethics, regulatory or peer review, Research Staff shall ensure that any subsequent alterations to the design are subject to appropriate review to ensure that these do not compromise the integrity of the research or any terms of consent previously given.
- 2.3.8.VIII.** FBS-UNN shall set up systems to ensure that when there are risks that proposed research or its results may be misused for purposes that are illegal or harmful, those risks are identified and addressed. Such systems shall be made known to and guidance and support shall be provided to Research Staff on projects where such risks are identified to prevent misuse and ensure good practice.
- 2.3.8.IX.** FBS-UNN Research Staff shall be expected to anticipate that a proposed research project might produce results that could be misused for purposes that are illegal and harmful. In such instances, Research Staff shall report such risks to, and seek guidance from, the Dean (or Associate Dean for Research and Development), and take action to minimize those risks.

2.3.8.X. Research Staff shall be prepared to make research designs available, when necessary, to peer reviewers and journal editors when submitting research reports for publications.

2.3.9 SUBMITTING PROPOSALS.

2.3.9.I. Principal Investigators shall prepare and submit research proposals for all new FBS-UNN projects. Such project proposal, in addition to being scientifically sound and ethical, shall contain a detailed description of the proposed project, including (but not limited to):

- a) An introduction/research background, including an extensive but focused literature review on the project and its significance.
- b) A section on the detailed methodology to be employed during the project, including a profound understanding of the costs (budgets and other resources), timelines and risks associated with the study, and the plans for reducing such.
- c) Hypothesis(es) and expected outcomes of the research

2.3.9.II. All research proposals developed for funding by FBS-UNN Research Staff shall remain the exclusive property of FBS-UNN. Even if the individuals responsible for generating the research proposal relocate, FBS-UNN shall still maintain its right and ownership to such a proposal.

2.3.9.III. Research Staff responsible for generating a research proposal at FBS-UNN shall not use such proposal in a new institution, except given express written permission to do so by the Dean (or Associate Dean for Research and Development)FBS-UNN.

2.3.9.IV. In applications for funding (both internally and externally), the proposed Principal Investigators/project leaders shall take all reasonable measures to ensure accuracy of information and compliance with FBS-UNN required procedures.

2.3.9.V. A project/programme shall not be allocated resources, except its proposal has been reviewed and approved by the appropriate organ. Such approval shall be communicated in writing to the Project Group Leader by the Dean (or Associate Dean for Research and Development).

2.3.10 Peer Review

2.3.10I. Peer review is an important part of good practice in: the publication and dissemination of research and research findings; the assessment of applications for research grants; and in the ethics review of research projects. FBS-UNN encourages its Research Staff to act as peer reviewers for grant applications, journals, other forms of publications and ethical reviews.

2.3.10II. FBS-UNN shall support Research Staff involved in peer review and

2.3.10III. FBS-UNN shall encourage its Research Staff to act as peer reviewers for meetings, journals and other publications, grant applications and ethics review of research proposals, and support those who do so.

2.3.10IV. FBS-UNN shall recognise the obligations of peer reviewers to be thorough and objective in their work and to maintain confidentiality. As a result, FBS-UNN shall not, either directly or indirectly, pressurize such staff to breach their obligations.

2.3.10V. FBS-UNN's Research Staff involved in peer review shall be expected to do so to the highest standards of thoroughness and objectivity. They shall be expected to follow the guidelines for peer review provided by the organisation or body for which they carry out such work.

2.3.10VI. Research Staff involved in peer review activities shall be expected to maintain confidentiality and not retain or copy any material under review without the express written permission of the author(s) and shall not allow others to do so. Research Staff acting as peer reviewers shall be expected to declare any relevant conflicts of interest, should they arise.

2.3.11 MONITORING AND AUDIT

2.3.11.I. In order to ensure that research projects are conducted ethically, safely, legally and in compliance with approved protocols, and institutional policies and procedures, including the Policy and Guidelines on Governance of Good Research Conduct, FBS-UNN shall institute and maintain, at all times, a Research Projects and Programmes Monitoring and Audit Policy and guidelines.

2.3.11.II. The objectives of FBS-UNN's Research Projects and Programmes Monitoring Audit programme shall be as follows:

- a) To review the manner in which research is conducted, and to detect, correct and prevent potential and existing problems;
- b) To raise awareness of requirements and promote Research Staff accountability;
- c) To ensure that the conduct of research does not compromise the integrity of results.
- d) To ensure that the conduct of research is proceeding according to approved protocols, including applicable guidelines and standard operating procedures (SOPs) for the collection, recording and storage of data and reporting of results.
- e) To ensure that the use and procurement of project resources are according to institutional policies and guidelines; and,
- f) To improve the levels of research compliance and productivity as well as raise the quality of research governance, and the quality and reliability of research output.

2.3.11.III. Yearly projects monitoring and auditing programme shall be put in place by FBS-UNN's Management, through the office of the Dean (or Associate Dean for Research and Development).

2.3.11.IV. A quarterly report of the research projects monitoring and audit programme shall form an integral part of Dean's (or Associate Dean for Research and Development) report to both the Board's Selection Committee and the Board.

- 2.3.11.V.** All of FBS-UNN's research projects shall, on a yearly basis, be monitored and audited to ensure that they comply with any monitoring and audit requirements.
- 2.3.11.VI.** Projects shall be monitored and audited to ensure that they are being carried out in accordance with good practice, legal and ethical requirements and any other guidelines.
- 2.3.11.VII.** Any requirements for monitoring and audit shall be considered and identified at an early stage of proposal development.
- 2.3.11.VIII.** Research Staff shall be required to co-operate with any monitoring and audit undertaken by, or on behalf of, an applicable body.
- 2.3.11.IX.** Research Staff members who become aware of a need to monitor or audit a project where none is planned, shall report the need to Dean (or Associate Dean for Research and Development).
- 2.3.11.X.** Research Staff shall co-operate with the outcomes of any monitoring or audit of their research projects.
- 2.3.11.XI.** FBS-UNN's Research Projects and Programmes Monitoring and Audit Policy and Guidelines shall apply to both FBS-UNN staff and all individuals involved in research at FBS-UNN.

2.3.12 *JOINT OR COLLABORATIVE RESEARCH*

- 2.3.12.I** FBS-UNN shall encourage its Research Staff to engage in collaborative research with researchers from sister National or international research institutions and universities and businesses or industry organisations, where the partnership shall serve to complement and expand the existing research capabilities of the institution.
- 2.3.12.II** To help guide the process for the establishment and maintenance of joint and collaborative research ventures between its Research Staff and researchers from other institutions, FBS-UNN shall put in place, and at all times, maintain a written Collaborative Research Policy and Guidelines.
- 2.3.12.III** For all joint and collaborative research ventures between FBS-UNN's Research Scientists and researchers from partner organisations, FBS-UNN shall require a formal written agreement between the partner institutions on the management of such a joint research project prior to the project's commencement.
- 2.3.12.IV** FBS-UNN's Research Staff who are involved in formal collaborative or joint research ventures/projects shall have the obligations to apprise themselves of, and comply with, all the policies and guidelines and written agreements affecting the project.
- 2.3.12.V** Management of research data and materials in such collaborative or joint research projects shall be consistent with FBS-UNN's policies and guidelines on data and materials management.
- 2.3.12.VI** Due to the additional legal, ethical and other requirements and guidelines that may apply, FBS-UNN and Research Staff shall pay special attention to projects which include participants from different countries or institutions, or where work will be carried out in different countries or institutions.

2.3.12.VII FBS-UNN shall work with partner institutions to ensure agreement of, and compliance with, common standards and procedures for the conduct of collaborative research, including the resolution of any issues or problems that might arise and the investigation of any allegations of misconduct in research if they occur.

2.3.12.VIII Research Staff shall be aware of the standards and procedures for the conduct of research followed by any organisations involved in collaborative research that they are undertaking. They shall also apprise themselves of any contractual requirements involving partner organisations, seeking guidance and assistance where necessary and reporting any concerns or irregularities to the Director of Research and Development as soon as they become aware of them.

2.3.12.IX In establishing research collaborations, FBS-UNN Research Staff shall be very mindful of FBS-UNN's policies and guidelines and ensure that research partners and their employing institutions are aware of and able to meet the required standards of research conduct.

2.3.12.X Research Staff shall anticipate any issues that might arise as a result of working collaboratively and agree jointly in advance on how they might be addressed, communicating any decisions to all members of the research team.

2.3.12.XI Written agreement shall be sought on the specific roles of research team members involved in the project and on issues relating to intellectual property rights, publication, material transfer, and the attribution of authorship, recognizing that, subject to legal and ethical requirements, roles and contributions may change during the time span of the research. This is particularly important in relation to the provenance of intellectual ideas and ownership of research outcomes as well as the specific conditions under which these may be shared.

2.3.12.XII When conducting, or collaborating in, research in other countries, FBS-UNN Research Staff shall be obligated to comply with the legal and ethical requirements existing in Nigeria and in the countries where the research is conducted.

2.3.12.XIII Research Staff shall bear in mind differences between civil, legal and often financial positions of national and foreign research collaborators and participants and must be aware of laws or regulations which can affect the conduct of their research in other countries. In particular, specific consideration shall be given to the following:

- a) Whether the research could be carried out reasonably well in the other country (ies);
- b) That the characteristics and culture of the country do not diminish the Research Staff's respect for the rights and interests of participants involved;
- c) The relevance of the study to the needs of the community in which it is carried;
- d) Ethics review, if required, and where possible, shall be performed in both Nigeria and the host country.

2.3.13 Research Involving Animals

2.3.13.I FBS-UNN shall establish and maintain systems, including a policy and a set of guidelines, to ensure the ethical, regulatory and peer review of research projects involving animals. Such a system shall include:

- a) mechanisms to make sure that such research projects have been approved by all applicable bodies, ethical, regulatory or otherwise;
 - b) mechanisms, including monitoring and audit systems to ensure that the treatment of and the manner in which animals are in research in the projects conducted by the institution's Research Staff, conforms to the best ethical, legal practices.
- 2.3.13.II** Research Staff shall only consider the use of animals in research in instances where they have no alternatives.
- 2.3.13.III** Where FBS-UNN Research Staff are associated with research involving the use of animals, such research shall be conducted by suitably qualified individuals under license, and in adherence to all legal and ethical requirements and other guidelines, including the ARRIVE guidelines.
- 2.3.13.IV** When conducting, or collaborating in, research in other countries, FBS-UNN's researchers shall comply with the legal and ethical requirements existing in Nigeria and in the country where the research is being conducted. Similarly, organisations and researchers based abroad who participate in FBS-UNN-hosted research projects shall comply with the legal and ethical requirements existing in Nigeria as well as those of their own country.
- 2.3.13.V** FBS-UNN, through the office of the Dean (or Associate Dean for Research and Development), shall ensure that all Research Staff are aware of the above systems and have access to all relevant guidance and legal and ethical frameworks.
- 2.3.13.VI** Research Staff shall submit research projects involving animals for review by all relevant ethics committees and abide by the outcome of such review. They shall also ensure that such research projects have been approved by all applicable bodies, ethical, regulatory or otherwise before commencement of such projects.
- 2.3.13.VII** Research Staff shall be under obligation to report their concerns to the office of the Dean (or Associate Dean for Research and Development), if and when they consider that animals used in research are subject to unreasonable risk or harm.

2.3.14. MISCONDUCT IN RESEARCH

- 2.3.14.I** FBS-UNN shall develop and maintain, at all times, a Policy on Research Misconduct and Unacceptable Research Conduct which shall be made available to all the institution's Research Staff.
- 2.3.14.II** FBS-UNN recognises that the spectrum of inappropriate behaviour is wide, ranging from minor misdemeanours which may happen occasionally and inadvertently, to significant acts of misappropriation or fabrication. Poor research practices, such as weak procedures, inadequate documentation of procedures, or inadequate record-keeping, might only require further training or development rather than formal disciplinary action, and are normally a matter solely for the employer. As a result, FBS-UNN's Policy on Research Misconduct and Unacceptable Research Conduct shall include the definition of what the institute shall consider to be research misconduct, which shall include but will not be limited to:

- a) Fabrication or the creation of false data or other aspects of research, including documentation and participant consent;
- b) Falsification or the inappropriate manipulation and/or selection of data, imagery and/or consents;
- c) Misrepresentation of data and/or interests and/or involvement, such as:
 - i) Misrepresentation of data, for example suppression of relevant findings and/or data, or knowingly, recklessly or by gross negligence, presenting a flawed interpretation of data;
 - ii) Undisclosed duplication of publication, including undisclosed duplicate submission of manuscripts for publication;
 - iii) Misrepresentation of interests, including failure to declare material interests either of the researcher or of the funders of the research;
 - iv) Misrepresentation of qualifications and/or experience, including claiming or implying qualifications or experience which are not held;
 - v) Misrepresentation of involvement, such as inappropriate claims to authorship and/or attribution of work where there has been no significant contribution, or the denial of authorship where an author has made a significant contribution;
- d) Plagiarism or the misappropriation or use of others' ideas, intellectual property or work (written or otherwise), without acknowledgement or permission; and
- e) Failures to follow accepted procedures or to exercise due care (whether knowingly, recklessly or by gross negligence) in carrying out responsibilities for:
 - i) Duty of care or avoiding unreasonable risk or harm to:
 - Humans;
 - Animals used in research; and
 - The environment
 - ii) The proper handling of privileged or private information on individuals collected, including disclosing improperly the identity of individuals or groups involved in research without their consent, or other breach of confidentiality.
 - iii) Placing any of those involved in research in danger, whether as subjects, participants or associated individuals, without their prior consent, and without appropriate safeguards even with consent; this includes reputational danger where that can be anticipated
 - iv) Not taking all reasonable care to ensure that the risks and dangers, the broad objectives and the sponsors of the research are known to participants or their legal representatives, to ensure appropriate informed consent is obtained properly, explicitly and transparently
 - v) Not observing legal and reasonable ethical requirements or obligations of care for animal subjects, human organs or tissue used in research, or for the protection of the environment

- vi) Improper conduct in peer review of research proposals or results (including manuscripts submitted for publication); this includes failure to disclose conflicts of interest; inadequate disclosure of clearly limited competence; misappropriation of the content of material; and breach of confidentiality or abuse of material provided in confidence for peer review purposes
- f) Improper dealing with allegations of misconduct:
 - i) Failing to address possible infringements including attempts to cover up misconduct or reprisals against whistle-blowers;
 - ii) Failing to deal appropriately with malicious allegations, which should be handled formally as breaches of good conduct

This document therefore concentrates on entirely unacceptable types of research conduct. Individuals involved in research must not commit any of the acts of research misconduct specified here.

- 2.3.14.III FBS-UNN shall produce maintain, and make available to all its Research Staff a procedure and set of guidelines for investigating allegations of research misconduct and ensure that any allegations of misconduct are investigated very thoroughly and fairly and in a timely manner.
- 2.3.14.IV FBS-UNN shall establish a research misconduct investigating committee, who shall have the responsibility to investigate all allegations of research misconduct.
- 2.3.14.V The names of members of FBS-UNN's research misconduct committee shall be made known so that these can be contacted by Research Staff and external organisations, such as journals, other institutions, and external individuals with any concerns regarding the conduct of research.
- 2.3.14.VI FBS-UNN shall have the responsibility to ensure that members of the research misconduct committee, who conduct investigations receive the necessary training, resources and support to fulfil the requirements of their role.
- 2.3.14.VII FBS-UNN shall be obligated to make it clear to Research Staff that:
 - a) any misconduct in research is unacceptable and should be reported
 - b) Research Staff who have been found to have committed misconduct in research will be subject to disciplinary proceedings, including possible dismissal;
 - c) Where Research Staff are members of a regulated profession (e.g. medical, engineering, law, etc), cases of serious misconduct in research will be referred to the body regulating their profession
- 2.3.14.VIII FBS-UNN shall also be obligated to inform Research Staff that Research Staff who are found not to have committed misconduct will be supported and appropriate steps taken to restore their reputation and that of any relevant research project(s).
- 2.3.14.IX FBS-UNN shall support those who raise concerns about the conduct of research in good faith and *not* penalize them. This support should, however be, in accordance with FBS-UNN's policy on raising concerns or "whistle blowing".

- 2.3.14.X Research Staff shall have the responsibility to know what constitutes misconduct in research and report any suspected misconduct through the relevant procedure of FBS-UNN, as soon as they become aware of it.
- 2.3.14.XI Research Staff shall recognise that good practice in research includes reporting concerns about the conduct of research and shall be obligated co-operate with any investigation of misconduct in research when investigated.
- 2.3.14.XII Research Staff shall work with FBS-UNN to support those who raise concerns in good faith about the conduct of research and those who have been exonerated of suspected misconduct.

Appendices and references

APPENDIX 1

RECOMMENDED CHECKLIST FOR GOOD RESEARCH PRACTICE (CODE OF PRACTICE FOR RESEARCH) FOR RESEARCH STAFF

The purpose of the following checklists is for promoting good practice and preventing misconduct in the research activities conducted by FBS-UNN research staff. The Checklist lists the key points of good practice in research for every FBS-UNN research project and shall be applicable to all research subject areas at FBS-UNN.

1. CHECKLIST 1. BEFORE CONDUCTING RESEARCH:

Research scientists and groups should bear in mind that, subject to legal and ethical requirements, roles and contributions may change during the time span of the research. The following constitute the key pertinent questions that every research staff or group should address before conducting any research:

- 1.1. Does the proposed research address pertinent question(s)?
- 1.2. Is the proposed research designed either to add to existing knowledge about the subject in question or to develop methods for research into it?
- 1.3. Is the research design appropriate for the question(s) being asked?
- 1.4. Will the researcher/research team or group have access to all necessary skills and resources to conduct the research?
- 1.5. Has a risk assessment been conducted to determine:
 - 1.5a. Whether there are any ethical issues and whether ethics review is required;
 - 1.5b. The potential for risks to the organisation, the research, or the health, safety and well-being of researchers and research participants; and
 - 1.5c. What legal requirements govern the research?
- 1.6. Will the research comply with all legal and ethical requirements and other applicable guidelines, including those from other organisations and/or countries if relevant?
- 1.7. Will the research comply with all requirements of legislation and good practice relating to health and safety?
- 1.8. Has the proposed research undergone any necessary ethics review (see 1.5a above), especially if it involves animals, human participants, human material or personal data?
- 1.9. Will the research comply with any monitoring and audit requirements?
- 1.10. Is the Researcher/Research team in compliance with any contracts and financial guidelines relating to the project?
- 1.11. Has an agreement been reached relating to intellectual property, publication and authorship?
- 1.12. Has an agreement been reached relating to collaborative working, if applicable?
- 1.13. Have the roles of researchers and responsibilities for management and supervision been agreed?
- 1.14. Have all conflicts of interest relating to the proposed research been identified, declared and addressed?

- 1.15. Is the researcher/research team aware of the guidance from all applicable organisations on misconduct in research?

2. CHECKLIST 2. WHEN CONDUCTING RESEARCH:

The key pertinent questions that every research staff or group should address when conducting research are as follows:

- 2.1. Is the researcher/research team following the agreed research design for the project?
- 2.2. Have any changes to the agreed research design been reviewed and approved if applicable?
- 2.3. Is the researcher/research team following best practice for the collection, storage and management of data?
- 2.4. Are agreed roles and responsibilities for management and supervision being fulfilled?
- 2.5. Is the research project complying with any monitoring and audit requirements?

3. CHECKLIST 3. WHEN FINISHING A RESEARCH PROJECT:

- 3.1. Will the research and its findings be reported accurately, honestly and within a reasonable time frame?
- 3.2. Will all contributions to the research be acknowledged?
- 3.3. Are agreements relating to intellectual property, publication and authorship being complied with?
- 3.4. Will research data be retained in a secure and accessible form and for the required duration?
- 3.5. Will the research comply with all legal, ethical and contractual requirements?

FBS-UNN wishes to acknowledge the use of the following documents in the development of the Code of Practice for Research.

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