



**NIGER DELTA UNIVERSITY**  
**WILBERFORCE ISLAND, BAYELSA STATE.**

**REPORT OF COMMITTEE**

**ON**

**RESEARCH POLICY**

**MAY 2014**

## PREFACE

An institutional research policy enables an institution to state its research philosophy and define its research mission. In such a document, the institution generally presents its organizational structure, states what support is provided for research and defines key concepts in its research activities. The adoption of a research policy provides stability to activities while they are in progress and encourages research development within an institution, and more broadly, the University network.

A research policy promotes the integration of research into all the institution's activities. It demonstrates an institution's commitment to research and innovation activities. It creates a favourable environment for carrying out research projects and encouraging the involvement of stakeholders and external bodies (funding agencies, partners or sponsors).

Universities and other tertiary institutions in recent times are constantly being called upon to intensify their research activities and make significant contributions to advance knowledge and technology. In responding to these demands, Niger Delta University fully supports the integration of research activities into all aspects of teaching and community services in its environment.

To actualize its institutional research objectives therefore, the University set up a Committee to develop the Niger Delta University Research Policy Manual.

The membership of the Committee are:

- |                                 |                    |
|---------------------------------|--------------------|
| 1. Prof Osarome Tawari          | - Chairman         |
| 2. Prof Adeniyi Olu Obi         | - Member           |
| 3. Prof Joseph C. Igbeka        | - Member           |
| 4. Prof Olanrewaju R. Omobuwajo | - Member           |
| 5. Dr Allen A. Agih             | - Member/Secretary |

The term of reference of the Committee was to develop an institutional research policy for Niger Delta University.

The one key problem that has contributed to low research output in the University was the absence of a research policy to direct research activities in the institution. The Committee therefore embarked on the task of developing a policy document for the University, in order to provide guidelines for the formulation, development and execution of research, manage funding and generally promote research culture in the University.

The Research Policy in line with the National Science, Technology Innovation Policy of the Federal Government which aims to drive research in every sector of the country was presented at the 112<sup>th</sup> meeting of Senate held on the 26<sup>th</sup> May, 2014. An emergency meeting of Senate (113<sup>th</sup>) was again convened solely to consider the draft policy on the 10<sup>th</sup> June, 2014. Senate thereafter constituted a Ten-Man Committee to examine the document and modify, where necessary, and make recommendations to it.

The final draft of the Policy was approved by Senate at its 115<sup>th</sup> meeting held on the 30<sup>th</sup> July, 2014.

It is our hope and expectation that the Research Policy will direct and guide research activities in the University. We also hope that Government Agencies, Companies and other parastatals both within and

outside Nigeria will take advantage of this research policy to build research interests with the University for the development of man and the society.

Professor Humphrey A. Ogoni  
Ag Vice Chancellor

## **EXECUTIVE SUMMARY**

The Research Policy of the Niger Delta University is made up of eight chapters. Each chapter is devoted to specific issues of the policy.

Accordingly, chapter one discusses some general concepts of the policy; such as the Philosophy, Mission, Vision and Objectives of the University. It provides an overview of teaching and research activities in Niger Delta University. Research framework, major principles of research activities in the University, types of research activities, possible research grants and the benefits of the research policy are discussed in this chapter.

Chapter two outlines the research management structure in the University. The scope of the policy, research responsibilities of the individuals and various Committees and their membership are expatiated.

Policies on integrity in research are considered in chapter three. The chapter defines research integrity and expectations from every researcher and group members. It outlines and gives specific guidelines on conflict of interest in research, procedure for reporting, investigating and sanctioning misconduct in research.

Chapter four outlines the policy on Intellectual Property (IP), wherein the objectives, definitions of terms, scope and other issues relating to IP are highlighted. Some basic concepts pertaining to IP are defined. Specific guidelines are given as to the rights of individuals, other bodies such as companies and the University.

Chapter five set out the policy on ethics involving research on human subjects. In this chapter, scope and responsibility, concepts relating to ethics involving research on human subjects are defined. Ethical guidelines concerning the use of human subjects are provided.

Chapter six outlines the policy on ethics on use of animals. Guidelines on the care and handling of animals in teaching and research are provided. Also, issues on Animal Rights are carefully defined with reference to the Nigerian Law.

Chapter seven details the policy on the use of hazardous materials. Such issues as transportation of dangerous goods, rules on purchase and acquisition of hazardous materials are clearly outlined. Other areas covered are chemical safety protocols, hazardous waste collection and disposal, and the operational responsibilities for the various units and personnel involved in research.

The last chapter provides general guidelines on finance/ funding, procedures for procurement of equipment, retirement procedures and qualification of the Procurement Officer.

Appendix 1 is a template of all the elements of a research proposal applicable to the Niger Delta University.

## **CHAPTER ONE: INTRODUCTION**

### **1.0 Preamble**

A research policy promotes the integration of research into all activities of an institution. It demonstrates the institution's commitment to research and innovation activities and creates a favourable environment for carrying out research projects, encouraging the involvement of all stakeholders (internal and external) bodies in projects. In such a document, the institution presents its organizational structure, states what support is provided for research and defines key concepts in its research activities.

In recent years, there is growing evidence that universities and other tertiary institutions are being encouraged to intensify their research activities to boost their learning environment and make more meaningful contributions to national development. Niger Delta University (NDU) is responding to these changes by supporting the integration of research activities into teaching and community service and establishing its own institutional research policy.

### **1.1 NDU Mission, Vision and Objectives**

#### **1.1.1 Establishment and Incorporation**

A law for the establishment of the Niger Delta University and for other matters connected therewith was enacted on 15th May, 2000 part of which reads as follows:

There is hereby established the Niger Delta University (hereafter in this Law referred to as "the University") which shall be constituted in accordance with the provisions of this Law.

The University shall be a body corporate with perpetual succession and a common seal which can sue and be sued in its corporate name.

#### **1.1.2 Philosophy**

The philosophy of the University is to create a Centre of excellence directed towards the design of well-articulated programmes that could produce creative and innovative human resources.

#### **1.1.3 Mission**

To strive to maintain an international reputation for high quality scholarship, research, and academic excellence for the promotion of the socio-cultural and economic well-being of mankind.

#### **1.1.4 Vision**

To create a centre of excellence defined by well-articulated programmes that will produce creative and innovative minds.

#### **1.1.5 Objectives**

The objectives of the University are to:

- i. encourage the advancement of learning and to hold out to all persons without distinction of race, creed, sex or political conviction the opportunity of acquiring a higher and liberal education;
- ii. provide courses of instruction and other facilities for the pursuit of learning in all its branches, and to make those facilities available on proper terms to such persons as are equipped to benefit from them;
- iii. encourage and promote scholarship and conduct research in all fields of learning and human

- endeavour;
- iv. relate its activities to the social, cultural and economic needs of the people of the Niger Delta region, Nigeria and humanity;
  - v. assist in the industrial and other development programmes through consultancy services, the Centre for Niger Delta Studies, and related activities;
  - vi. produce academic, professional and technical manpower of various levels needed for essential development;
  - vii. produce academic, professional and technical teachers for development programmes; and

### **1.2 Teaching and Research Activities at NDU**

The primary activity of faculty and staff at NDU is providing high-quality technical, specialized and general university education at the tertiary level to graduate and undergraduate students. Broadly, in-house research activities can enrich the teaching and learning for faculty, staff and students. Research activities enrich our understanding of learning processes.

The University encourages a broad spectrum of research and creative activity of the highest possible quality, from basic to applied, across the full range of academic disciplines. The University is committed to advance knowledge, educate students, and to serve the socio-economic and other needs of society.

In furtherance of these goals, eligible University faculty and other approved University personnel may submit proposals to sponsors for support. Sponsors can be external organizations such as federal, state, local, foreign, and other government entities, private industry, foundations, educational institutions, and charitable organizations. In addition, the University itself acts as a sponsor in its capacity as administrator of intra-University programmes under its auspices which award funds on a competitive basis to projects for research, training, or public service.

### **1.3 Research Framework at NDU**

To show its commitment to expanding research opportunities, the University produced this document as a necessary structure to continuously support faculty in their research endeavours. Accordingly, a framework for the development, ethical review and adoption of research projects is part of this document in line with best practice.

In this framework, one of the most important aspects is the establishment of the office of the Institutional Development Service (IDS) headed by a Director. A major function of the IDS is to guide research and administer external funding. When developing a research project, researchers can make use of the resources of the IDS office to find funding sources and develop their applications and proposals.

The Institutional Research Policy is to be implemented by the Innovation, Research and Development Committee (IRDC). This committee is responsible for applying the policy. Once a research project is developed, it is submitted by the researcher through the relevant departments, faculties and services concerned to the Research and Ethics Board (REB) for ethical approval. Thereafter, it is forwarded by the REB to IRDC for final approval: The approved copy is deposited with the University Research Committee (URC) for implementation. A copy is equally forwarded to IDS for information. The URC has general oversight functions over research policy. It is also the appellate body for all matters pertaining to all research activities in the University.

#### **1.4 Major Principles of Research Activities at NDU**

The following are the major principles guiding research activities at our University:

- i. Academic research at Niger Delta University shall adhere to established standards of academic integrity and research ethics with strong focus on honesty, accountability, openness, fairness, consistency and generosity, rigour, transparency, independence, confidentiality, impartiality, participation and continuous improvement;
- ii. All research shall strive to contribute to the University's academic environment, increase our knowledge-base and/or enhance the classroom experience;
- iii. All research will be conducted in a manner that will maintain the academic reputation of the University ;
- iv. Scholarly research shall make a contribution to the researcher's academic field;
- v. Contract research shall enhance our knowledge-base and create learning opportunities for NDU Students;
- vi. Research conducted for the sole purpose of advancing the interests of a corporation shall not be permitted at Niger Delta University; and
- ix. All research shall be sensitive and responsive to the University's social and ecological environment.

#### **1.5 Types of Research Activities**

Research activities conducted in Niger Delta University fall into two globally recognized categories namely, pure and applied research.

**1.5.1 Pure Research** –Research activities that seek to develop knowledge within one or more academic disciplines. This refers to either pure basic research or strategic basic research. Pure basic research is experimental and theoretical work undertaken to acquire new knowledge without looking for long-term benefits other than the advancement of knowledge. Strategic basic research is experimental and theoretical work undertaken to acquire new knowledge directed into specified broad areas in the expectation of useful discoveries.

**1.5.2 Applied Research** – research that uses theories, principles and methods to solve practical problems. This is original work undertaken primarily to acquire new knowledge with a specific application in view. It is undertaken to determine possible use for the findings of basic research or to determine new ways of achieving some specific and predetermined objectives.

Experimental developmental –is systematic work, using existing knowledge gained from research or practical experience, that 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.

In addition to the above, the following categories which can be pure and applied in nature are also undertaken.

**1.5.3 Creative-** Any research activity that is an essential process or artistic discipline that directly fosters the creation of artistic works. This research must address clear research questions, offer theoretical contextualization within the relevant fields of inquiry, present a well – considered methodological approach and lead to substantially improved insights. The research and resulting artistic works must meet peer standards

**1.5.4 Technological** – Research activities that apply scientific knowledge to the development of new technical applications or methods as well as the development of technical products and processes to be transferred to the market place. The use of existing knowledge in experimental development to produce new or substantially improved materials, devices , products and processes, including design and construction.

**1.5.5 Institutional** – Research conducted by the University to understand its services and profile its student population. This may include research on university practices, enrolment patterns as well as the analysis of pre and post students patterns at the university and in the labour market. Programmes – research conducted in order to evaluate, modify and develop pre- university and career programmes. This type of research also includes the analysis of related labor markets and industry needs.

**1.5.6 Student Life** – Research conducted by the University to assess student needs, student activities and student integration.

**1.5.7 Pedagogical** – any research conducted to directly improve the learning environment at the university. The focus of this research is on the learning process, but includes research on curriculum and course development. This can include basic and applied research conducted by faculty as well as research in the use of educational technology.

**1.5.8 Contract** – The University enters certain contracts to carry out research projects for outside agencies when it is convinced that the project is an appropriate University activity, that conditions of space, etc. are adequate and that there are competent faculty personnel available and interested in undertaking the work. No one is compelled to take up such a work and in general the time which the regular member of the faculty gives to the work is that which would normally be available for study and research.

## **1.6 Sources of Funding**

The under-listed are also a broad classification of research activities based on the sources of funding:

**1.6.1 Contract:** Research and development projects that are funded by a company, government ministry or organization. These projects require a formal agreement between the University, the principal researcher and the external body.

**1.6.2 Externally-Funded:** Research projects that are supported by one or more external funding sources and administered by the University. These projects require a formal agreement between the University, the principal researcher and the external body.

**1.6.3 Externally-Administered:** Funded research projects that involve NDU faculty but are administered by and granted to another institution. Such projects are subject to the policies of the institution administering the research grant and do not require approval from Niger Delta University unless required by the granting body or agency.

**1.6.4 Independent:** Research activities that are conducted locally or in collaboration with external agencies for which no funding has been solicited or obtained. Approval of the project is required when the researcher will be representing him/herself as a faculty member at Niger



Delta University.

**1.6.5 Internally-Funded:** Research projects that are funded using University funds or other University mechanisms of support, including release time.

## **1.7 Research Grants**

**1.7.1 University Research Grants:** Grants given by the University to individual researchers or multidisciplinary groups after due process from the departmental research committee to assessment by the University Research Committee.

**1.7.2 Government Grants:** Grants which can be obtained from government agencies by researchers.

**1.7.3 Fellowships and Scholarships:** these could be internally or externally sourced.

Developmental Grants: These may be obtained from foundations, Industry or from individuals

**1.7.4 Foundations:** Public and private foundations and not for profit corporations provide support for research and scholarly projects

## **CHAPTER TWO: RESEARCH MANAGEMENT STRUCTURE**

### **2.0 Preamble**

NDU's Research Policy document describes the role that research plays in the activities of the institution and provides a framework for its administration, regulation and dissemination. The purpose of the document is to synthesize all stakeholders' collective vision of research activities and to proffer broad principles, frameworks and guidelines within which all research activities are to be conducted in the University. This document is both a policy statement on and a guide to the research process within our university community.

### **Scope and Objectives of Institutional Research Policy**

#### **2.1 Introduction**

The primary goal of the policy is to advance institutional development by encouraging the integration of research into the mission and activities of the University. The objective is to create an environment that supports researchers by enabling them to continually develop skills and knowledge in their respective fields of research.

The policy, therefore, serves as an institutional development tool that outlines the scope, guiding principles and organizational framework for research at Niger Delta University. Further, the policy details the mechanisms of support available for research activities and provides guidelines regarding internal procedures when developing a research project. Finally, the policy outlines our standards of ethics, integrity and excellence in all research conducted at the University.

##### **2.1.1 Scope of the Policy**

This policy applies to all activities related to research projects conducted by or involving members of the Niger Delta University community. The term Niger Delta University community refers to all faculty, staff and students associated with the University. Any student enrolled in any programme, whether full or part-time, is governed by the standards established in this policy except with regards to the Policy on Integrity in Research. All NDU staff, including administrators, faculty and professionals, who are involved in research are subject to this policy.

Faculties who are employed at NDU but are involved in a funded research project granted to another institution are subject to the policies of that institution. Faculties who are conducting research for the completion of a graduate degree from another institution are subject to the policies of that institution unless they propose to use members of the University community as their research subjects. In this case, they will be considered external researchers and their proposals must be accepted by the REB.

##### **2.1.2 Institutional Objectives**

- i. To promote the role of the University as a primary research centre by enhancing, expanding and supporting research activities and growth of research capacity in all disciplines in the University, encouraging research activities by formation of disciplinary and interdisciplinary research teams, that contribute to the achievement of the university objectives as outlined in the current strategic plan and inculcating research based knowledge into the university teaching system, thereby increasing quality of student research activity;
- ii. Create an enabling environment for staff to manage, conduct, disseminate and report

- research results by removing or reducing obstacles that hinder or discourage research development;
- iii. Establish Niger Delta University as a centre of research excellence by creating strengths and establishing procedures to manage and use research resources effectively, efficiently and fairly;
  - iv. Improve the quality of outputs, including their impact, level of accountability and timeliness of reporting and providing a structure for continual improvement of research and development;
  - v. Develop research that are of local, regional, national and international relevance and enable the commercialization of research and development outputs for the benefit of the researchers, the University, the Nation and humanity;
  - vi. Develop and maintain a structure that will ensure sustenance of high quality research and promote interfaculty cooperation, research alliances and other collaborative partnerships with tertiary institutions, public and private industries, organizations, agencies and international bodies; and
  - vii. Give the necessary tools for increase in external funding and support for creative work.

## **2.2 Integration of Research with University Activities**

Niger Delta University recognizes that research can make an essential contribution to its teaching mission. In order to ensure the integration of research with other activities, the University has established the following protocols:

- i. During the preparation of a research proposal for research, the researcher must inform the departments, programmes and services concerned with the research project;
- ii. Before undertaking a research project, researchers must inform their Dean of Faculty;
- iii. When conducting a research project, all researchers must inform the department, programmes or services concerned;
- iv. When conducting a research project, the researcher must inform the IDS, the IRDC and the REB of its development and progression at regular intervals. There should be annual progress reports or at such intervals;
- v. The University shall support research by providing facilities, information and coordination between the researchers and the relevant departments, services and programmes;
- vi. The University administration, specifically the Director of the IDS, is responsible for administering external funds used to support research;
- vii. When necessary, the University will support the release of personnel from their regular duties in order to complete both independent and externally-funded research projects (under laid down regulations); and
- viii. All decisions regarding faculty involved in research shall respect the Faculty Collective Agreement.

## **2.3 Research Responsibilities**

### **2.3.1 The Researcher**

The researcher must apply the institutional policy at all stages of their respective research project. It is the researcher's responsibility to ensure that his or her research is conducted in a manner that respects policies on ethics and integrity.

In applying for external funding, researcher must also ensure that the proposal and budget conform to

the requirements of the external granting organization and the project is executed according to regulations of the external granting agencies. When applying as part of a team of researchers in more than one institution, the researcher must ensure that each establishment's participation and roles are well defined and accepted.

The implementation of the Research Policy is the responsibility of different units as set out below (see organogram in figure 1)

### **2.3.2 Departmental Research Committee (DRC)**

The HOD shall normally be the chairman of the departmental research committee to assess proposals and forward to the faculty research committee. The functions of this committee are as follows:

- i. Receive, review and recommend research proposals from individual members of staff to Faculty Research Committee;
- ii. To sensitize individual members of the department on proposal writing to various sponsoring agencies; and
- iii. To encourage members to participate in interdisciplinary research

#### **2.3.2.1 MEMBERSHIP:**

- i. Heads of Departments.
- ii. Four Senior Lecturers and above of the Department
- iii. The Heads of Department shall be the Chairmen of their respective DRCs

### **2.3.3 Faculty Research Committee (FRC)**

The Dean shall be the chairman of the Faculty Research Committee and he/she shall forward recommendations from the Faculty to the Research Ethics Board (REB). The FRC shall:

- i. Receive, review and recommend proposals from various departments to the REB;
- ii. To organize seminars for presentation of research findings;
- iii. Train Faculty members to write research proposals conforming with various specifications from sponsoring agencies; and
- iv. Search the internet for sponsoring agencies

#### **2.3.3.1 MEMBERSHIP:**

- i. Provost and Deans of the faculties
- ii. Heads of various Departments.
- iii. Provosts and Deans shall be Chairmen of their respective FRCs

### **2.4 Institutional Development Services (IDS)**

This office will support and manage all research projects. Its primary role is coordination between the researchers, internal committees. The IDS shall:

- i. Keep an inventory of and circulate information on research grants;
- ii. Keep an inventory of current and past research projects at the university;
- iii. Provide the necessary support for eligible personnel to prepare research proposals;
- iv. Manage and administer the grants awarded to individual researchers;
- v. Participate in the activities of the IRDC;

- vi. Provide Secretarial duties to support the activities of the REB;
- vii. Securely store all documents related research misconduct and research committee activities;
- viii. Ensure the dissemination of research results; and
- ix. Organize at least one annual event to promote awareness of the policy.

#### **2.4.1 MEMBERSHIP:**

- i. A Director to be appointed by the Vice-Chancellor

#### **2.5 Innovation, Research and Development Committee (IRDC)**

The Committee consists of four members appointed by the Faculty Boards, one representative of Student Affairs, one representative of IDS, the Director of IDS as the Secretary and one student Union member as observer. The DVC Academic shall be the chairman.

The IRDC has the mandate to:

- i. Review, evaluate and recommend all research conducted by faculty and staff to the University to ensure that they respect the major principles for research at NDU;
- ii. Report research projects to URC;
- iii. Forward all requests from external researchers that propose to use NDU community members as subjects for research to the REB for authorization;
- iv. Receive and review the progress reports from University researchers;
- v. Refer any act of scholarly misconduct to the URC;
- vi. Review and recommend revisions to the Institutional Research Policy to URC; and
- vii. Prepare an annual report.

#### **2.5.1 MEMBERSHIP:**

- i. Chairperson shall be the Deputy the Vice-Chancellor (Academics)
- ii. Provost/ all Deans
- iii. Heads of relevant Departments
- iv. One student to represent Student Union as observer
- v. One representative of Student Affairs
- vi. Director of IDS as Secretary

If the IRDC determines that a research project does not respect the guidelines for research established by NDU it may recommend that the proposal in its current form be amended or rejected. The decision and its rationale must be communicated to the applicant in writing within a reasonable period of time after the decision has been made. Applicants can request that the IRDC reconsider its decision before making a formal appeal. A request for reconsideration can be made by writing to the Chairman of IRDC. The letter requesting reconsideration must outline the reasons for reconsideration.

The IRDC must offer the applicant the opportunity to appear in support of the request although the applicant does not have the right to be present when the decision is taken. If the proposal is rejected for a second time, the Chairman of IRDC shall provide the researcher with all the reasons for the decision. Once a proposal has been rejected for a second time, the applicant may appeal the decision of the IRDC. The request for an appeal must be submitted by the applicant to the Director of the IDS in writing. The

Director of IDS shall then forward the request to the Chairman of IRDC who will present the appeal to URC. The URC shall, therefore serve as the Appeals Board for the IRDC. All materials related to the application process shall be made available to members of the URC. All decisions made by the URC regarding the appeal shall be final.

## **2.6 The Research Ethics Board**

The Ethics Board is responsible for promoting the policy on ethics involving research on human and animal subjects, and reviewing, evaluating and approving all proposals to ensure that the policy conform with ethical standards prescribed by this policy.

This board is responsible for:

- i. Developing policies regarding ethical issues related to the use of human subjects in research;
- ii. Reviewing and approving all research projects requiring the use of human and animal subjects and recommending them to the IRDC;
- iii. The annual review and updating of all policies regarding ethical issues related to human subjects in research projects;
- iv. Preparing an annual report for submission to the IRDC;
- v. Assisting the Director of the IDS in organizing professional development activities related to ethics in research involving human subjects.

### **2.6.1 MEMBERSHIP:**

- i. Chairperson shall be the Dean of Faculty of Law.
- ii. Provost / all Deans of Faculties
- iii. Head of Legal Unit
- iv. University Chaplain
- v. Director of IDS to serve as Secretary

## **2.7 The Health & Safety Office**

The Health & Safety office shall develop, coordinate and oversee the Chemical Safety and Bio-safety issues, and support the administration, subcommittees and the University community in carrying out the duties established therein. To that end, the Health & Safety office shall:

- i. Provide information, technical assistance and advice to individuals and units on the management of hazardous materials;
- ii. Organize and coordinate the hazardous waste programme;
- iii. Maintain records of accidents and incidents and carry out investigations as required;
- iv. Support units to ensure : MSDS, labeling, specific training and inventory control;
- v. Provide general training sessions on hazardous materials management
- vi. Initiate and participate in facility inspections, with particular attention to storage, handling and disposal of hazardous materials and make recommendations to the appropriate authority for corrective action;
- vii. Investigate and respond to complaints and inquiries, and report findings to the University Research Committee;
- viii. Report to external compliance agencies as required and make representation to external compliance agencies on behalf of the University; and
- ix. Keep abreast of legislation concerning hazardous materials and the environment, and

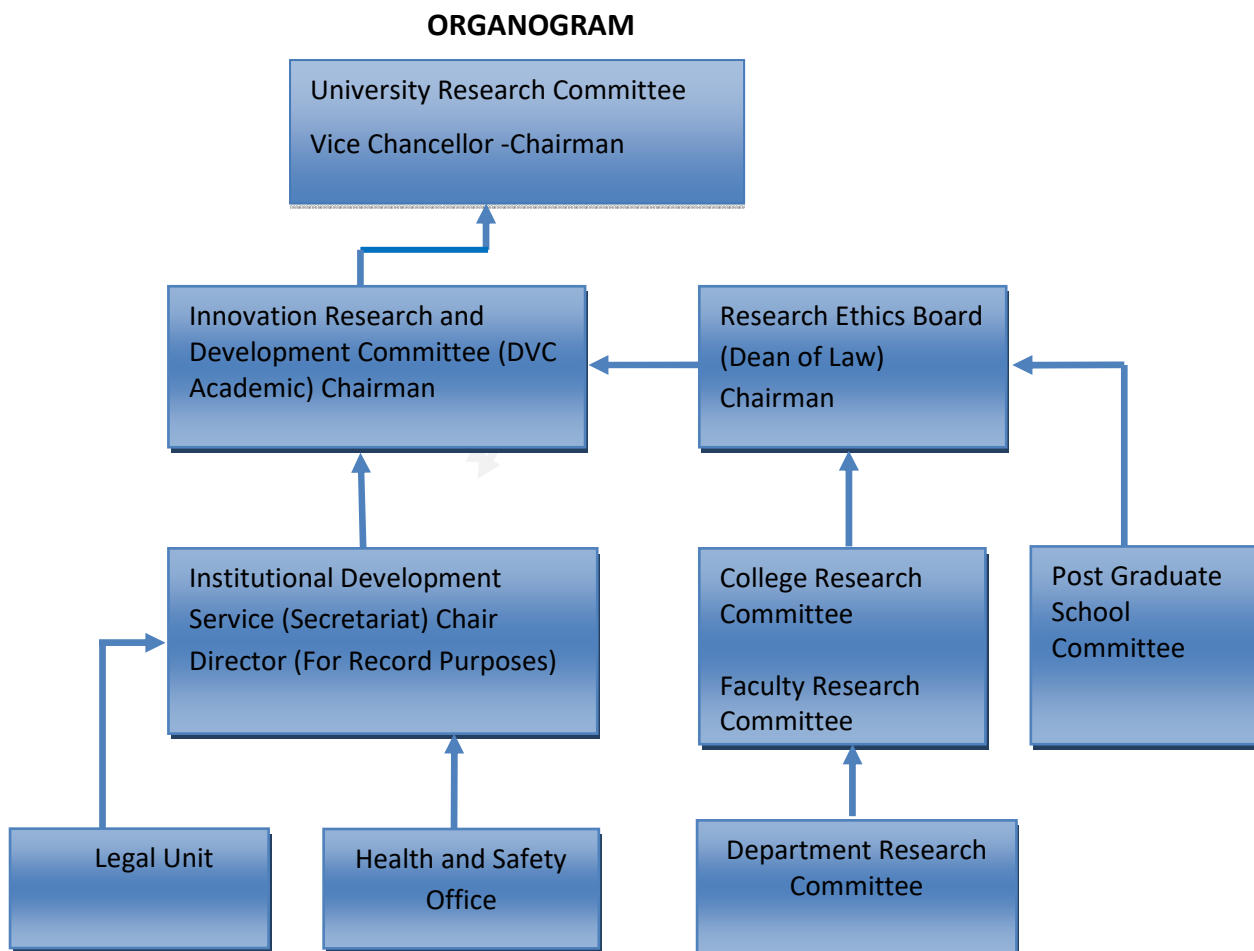
advise the University administration and the University Research Committee about potential impact on University activities.

## 2.8 Legal Unit

Functions of the Representative from the Legal Unit shall be to:

- i. Ensure that the legal interest of the University is adequately protected and safeguarded in all research contracts/MOUs;
- ii. Provide legal advice, opinion and guidance to the IDS on matters pertaining to research contracts/MOUs;
- iii. Advise the IDS on University legislation and policies relating to research contracts;
- iv. Assist the IDS in drafting, perusing, vetting documents;
- v. Interpret legal documentation relating to research contracts/MOUs;
- vi. Provide the IDS with legal advice on the federal laws, University;
- vii. Interpret Policy and other relevant legal issues pertaining to intellectual property rights, copyrights, patents, trademarks, inventions and their commercialization;
- viii. Provide legal support to the Ethical Research Board (REB); and
- ix. Prepare and submit annual reports to the Director of IDS.

**Figure 1: Organizational Framework Supporting Research Activities in NDU**



## CHAPTER 3: POLICY ON INTEGRITY IN RESEARCH

### POLICY ON INTEGRITY IN RESEARCH

#### 3.1 Purpose of the Policy on Integrity

The objective of this policy is to ensure that research and scholarship conducted at NDU conform to internationally recognized standards of integrity and scientific competency. This policy outlines our principles of integrity in research and scholarship as well as the procedures for investigating misconduct associated with the violation of these principles in research and scholarship by faculty and staff of NDU.

#### 3.2 Scope and Responsibilities

This policy applies to all faculty, staff and students who are engaged in research projects at NDU. External researchers whose research is facilitated by the University are governed by the integrity policies of their own research institutions. Externally-administered research projects are governed by the policies of the institution holding the research grant. The University is responsible for implementing, circulating, promoting and monitoring the Policy on Integrity in Research. Each researcher, however, is responsible for understanding, rigorously applying and ensuring conformity to the policy while conducting research.

Ignorance of the principles and regulations of this policy will be treated as negligence. When a researcher is responsible for a team of researchers, this researcher is responsible for making all team members aware of the policy and ensuring that the Policy on Integrity in Research is respected by everyone. Students are only subject to this policy if they commit an act of misconduct while working as a research assistant.

#### 3.4 Definitions of Integrity-Related Terms

**3.4.1 Authorship:** Authors and co-authors are those persons who make a significant intellectual contribution to the collection, analysis, interpretation and dissemination of research results. Administrative and technical contributions to the research do not constitute authorship.

**3.4.2 Complainant:** The person making the allegation of misconduct in research or scholarship. This person may or may not be directly affected by the alleged misconduct. This person may or may not be part of the University community.

**3.4.3 Conflict of Interest:** A conflict of interest occurs whenever a researcher compromises his or her independence and impartiality while conducting a research project and the personal interests of the researcher are given priority over the objectives of the research.

**3.4.4 Misconduct:** Any deliberate attempt to mislead the scientific community or the public or to profit unduly from a situation related to the research activity. Scholarly misconduct is any action that contravenes or is inconsistent with the University's Policy on Integrity in Research.

**3.4.5 Respondent:** The person who is alleged to have committed misconduct in research or scholarship on behalf of the University.

**3.4.6 Scholarly Integrity:** Research activities that strive to maintain the highest standards of academic responsibility and respect for ethical and scientific standards of conduct. Scholarly integrity is the practice of intellectual honesty at all stages of the research process.

#### 3.5 General Principles of Research Integrity



NDU holds all of its researchers responsible for conducting their research and scholarly activities in compliance with internationally recognized standards of research ethics and integrity. The University is responsible, therefore, for ensuring that all research and scholarly activity conforms to the standards outlined in this policy. The University will strive to prevent misconduct by promoting awareness of the standards of integrity outlined in this policy.

In the event that an allegation of misconduct is made, the University will ensure that the allegation is investigated in an impartial, expedient and confidential manner following the procedures outlined in this policy. The University will also ensure that when a case of misconduct has been confirmed, corrective measures are taken in order to rectify the situation. Finally, the University is also responsible for reporting the conclusions and actions taken in any case of confirmed misconduct to the relevant granting agencies.

### **3.6 Promoting Integrity and Preventing Misconduct**

The University is committed to developing awareness of our standards of scholarly integrity, accountability and responsibility among its researchers. The responsibility for the promotion of principles of integrity in research lies with the IDS in consultation with the IRDC. There are a number of different mechanisms that these bodies will use to increase awareness of the policy. First, these bodies will ensure that the policy and its procedures are accessible to the University community. The policy will be available to all departments and offices through the University website. In an effort to create an environment that is committed to scholarly integrity, the policy will regularly be presented to relevant committees.

The IDS on behalf of IRDC will ensure that the policy is distributed to any staff or faculty that is proposing a research project. Secondly, the IDS will periodically hold information sessions on the principles and practices of scholarly integrity for all potential and existing researchers. The orientation of new faculty and staff will include the circulation and discussion of this and other University research policies. Finally, to ensure that the policy responds to the needs of the University community, the IRDC and DVC Academic will monitor and review the policy as needed.

### **3.7 Standards of Integrity**

At NDU the primary responsibility for demonstrating honesty and scientific competence in research rests with researchers. Researchers are responsible for observing established standards of integrity and adhering to the University policies on integrity in research. Specifically, researchers must uphold the following principles:

- i. Researchers must use scholarly and scientific rigour and integrity in obtaining, recording and analyzing data and in reporting and publishing results. The fabrication or falsification of data or results is a serious breach of scholarly integrity;
- ii. Researchers must acknowledge the substantive contributions of collaborators and students. The unpublished work of other researchers and scholars can only be used with their permission and with due acknowledgement. Archival materials must be used in accordance with the rules of each archival source;
- iii. Researchers must obtain the written permission of the author before using new information, concepts or data originally obtained through access to confidential manuscripts or applications for funds or training that may have been seen as a result of processes such as peer review;

- iv. Researchers must ensure that the authorship of public works includes all persons who have materially contributed to, and share responsibility for, the contents of the publication, and only those persons;
- v. Researchers must provide the University with a research proposal that provides a rigorous outline of the stages of the research project, a clear definition of the roles and responsibilities of all members of the research team, and a detailed explanation of how all funds and resources will be managed during the research project;
- vi. Researchers must obtain the approval of the IRDC before conducting a research project on behalf of the University or using University facilities, materials or personnel;
- vii. Researchers must obtain the approval of the REB before engaging in any research involving human subjects. Once approval has been granted, researchers must ensure that the research is conducted in compliance with the *Policy on Ethical Research using Human Subjects*. Further, the researcher must respect the procedures, the norms and regulations of the University and its funding agencies while conducting the research project;
- viii. Researchers must insure that all information that has been part of data analysis is retained for a period of five years. The data must be stored in a secure place and be accessible in the event that the findings are contested. Storage of this material must respect principles of confidentiality and intellectual property;
- ix. Researchers must reveal to sponsors, the University, journals or funding agencies, any inter-personal conflict of interest that exists before or arises during the research project; and
- x. Researchers must reveal to sponsors, the University, journals or funding agencies, any material conflict of interest, financial or other, that might influence their decisions on whether the individual should be asked to review manuscripts or applications, test products or be permitted to undertake work sponsored from outside sources.

### **3.8 Policy on Data Recording, Storage and Retention**

All recorded results of a research project must be stored and retained in accordance with this policy.

- i. Primary data must be accurately and clearly recorded in a permanent form. All results must be retrievable. When human subjects have been used to generate the data, the principal researcher must use and retain a coding system to ensure the confidentiality of the research subjects. The principal researcher must arrange for secure and confidential storage of these results. The results must be made available to the University on request. If the principal researcher leaves NDU during this period, they must insure that the Director of IDS can have access to the data in the event of an investigation into misconduct;
- ii. All co-researchers will have free access to all primary data and other products of the research at all times. Before any member of the research team makes copies of the primary data for their own use, they must obtain the permission of the principal researcher. The principal researcher must have a valid reason for refusing such requests by members of the research team. An explanation must be provided in writing to the Director of the IDS; and

- iii. The provision of material products, such as software prepared during research, substances, or equipment, to third-parties for non-commercial research purposes within or outside of the research unit must have the approval of the principal researcher.

### **3.9 Policy on Authorship and Publication**

The attribution of authorship in all research publications must accurately reflect the intellectual contribution of each member of the research team. The author or co-authors of a research publication include all persons who have made a significant intellectual contribution to the collection, analysis, interpretation and dissemination of research results. Where students have made a significant scholarly contribution that is intellectual in nature, they must be given due prominence in the list of authors.

Any member of the research team that submits any portion of the research project for publication or presentation is responsible for acknowledging all relevant co-authors in the appropriate order. Each author is also responsible for circulating a draft of any manuscript stemming from the research project for comment and approval by all appropriate co-authors. Co-authors must also approve their co-authorship and the order of authorship for publication.

Administrative and technical contributions to the research do not constitute authorship. Authorship cannot be determined on the basis of an employment contribution. In the event that a conflict arises between authors on any issues of content or authorship, every effort should be made to resolve the issue informally. In the event that this is not possible, the Director of the IDS will attempt to mediate a resolution. If mediation does not resolve the conflict, an allegation of misconduct can be presented to the Deputy Vice-Chancellor, Academic (DVC Academic).

### **3.10 Dissemination of Research Results**

It is expected that the results of all research projects will be disseminated as public documents. Where the University has provided support administered funding or has been used as the institutional affiliation of the researcher, published research must reference Niger Delta University as the researcher's institutional affiliation. The method of dissemination will depend on the type of research. The results of most research projects may be published in academic or professional journals, public reports, and conference proceedings. They may also be presented at conferences or in seminars. They may also be presented at conferences or in seminars.

All academic research conducted at Niger Delta University must be made available for peer review and to the university community on request. The dissemination of results within the University via in-house presentations, seminars or within the curriculum is encouraged. Upon completion of a research project, the researcher must submit a full report to the IDS.

### **3.11 Implementation and Review of the Policy**

The University will take the necessary measures to promote the awareness and application of the present policy and its regulations throughout the University, especially among the principal actors involved in applying the policy. The IRDC will review, evaluate and recommend revisions of the current policy to the Senate on an annual basis. The IDS will ensure that the University community will receive regular instruction on the policy and will formally notify the community of any changes. All such changes must be recommended to Senate for adoption by the Council. The University will create new policies to respond to the evolution of research activities among faculty and staff.

### **3.12 Policy on Conflicts of Interest in Research**

#### **3.12.1 Defining a Conflict of Interest**

Conflicts of interest are instances when the researcher compromises his or her independence and impartiality while conducting a research project and the personal interests of the researcher have been given priority over the objectives of the research. Conflicts of interest arise when:

- i. The researcher uses, without authorization, the services, materials and equipment of the University for personal ends or for works paid for by agencies or organizations outside the University;
- ii. The researcher uses, without *authorization*, confidential information that has been obtained during a research project for personal gain;
- iii. The researcher compromises the scholarly integrity of the research in order to generate findings that are favourable to the interests of the funding body;
- iv. The researcher favours a person in his or her immediate entourage or makes a financial connection with him or her; and
- v. The researcher uses the name of the University for personal gain without authorization.

#### **3.12.2 Declaring a Conflict of Interest**

The researcher must immediately declare any existing, potential or apparent situation of a conflict of interest to the Director of the IDS. In the case of a conflict with this individual, the researcher can make his or her declaration to the Deputy Vice-Chancellor, Academic (DVC Academic).

The declaration of a conflict of interest allows for the maintenance of a necessary level of confidence and integrity and permits good conduct in research. The declaration of a conflict of interest does not necessarily require the stoppage of all research activities. The following measures can be put in place to assist in resolving and avoiding conflicts of interest in the future. These measures can consist of:

- i. Changing the terms of the contract or the project of research;
- ii. Withdrawing the researcher who is influencing the orientation of the research from his or her responsibilities;
- iii. Establishing a uniform procedure for hiring research personnel;
- iv. Prohibiting the continuation of the research project until the researcher rectifies the situation.

#### **3.13 Scholarly Misconduct**

Scholarly misconduct includes any action that contravenes or is inconsistent with the principles outlined above. Acts of misconduct do not include honest errors, differences of opinion or differences in the interpretation of scientific findings. Acts of misconduct may include, but are not limited to, any or all of the following actions taken during a research project:

- i. The lack of consideration and acknowledgement of existing knowledge on the subject matter of the research being conducted;
- ii. The falsification, suppression and fabrication of data;
- iii. The plagiarism of the ideas, data, or findings of other researchers;
- iv. The failure to give due acknowledgement to the significant contributions of others;
- v. The use of unpublished work of other researchers without permission;

- vi. The use of archival materials in violation of the rules of the archival source;
- vii. The willful misrepresentation or misinterpretation of findings resulting from the research conducted;
- viii. The general lack of respect for the confidentiality of information;
- ix. The failure to respect the confidentiality of information that has been guaranteed to participants during the data collection;
- x. The failure to inform the University of the involvement of human subjects in the research;
- xi. The failure to comply with federal and provincial regulations for the protection of human participants, the general public, the environment and the welfare of laboratory animals;
- xii. The abuse of power directed toward the personnel assigned to the research.
- xiii. The demonstration of bias, negligence or discrimination in any activity related to the research and to research personnel;
- xiv. The deliberate misuse of research funds allocated by granting agencies;
- xv. The failure to adhere to the terms and conditions of contracts with a third party that is sponsoring the research, including government funding agencies and other external contractors;
- xvi. The failure to disclose a conflict of interest that is apparent before the research project begins or arises during the course of the research; and
- xvii. Any other form of misconduct such as introducing computer viruses, tampering with another's research, and so on.

The University is responsible for investigating allegations of misconduct in research involving its researchers. When allegations of misconduct are found to be unquestionably confirmed, sanctions will be imposed. In the first instance, the researcher will receive a warning. In the event of another confirmed act of misconduct, the respondent may be reprimanded as appropriate to the circumstances.

### **3.14 Procedures for Reporting, Investigating and Sanctioning Misconduct**

Allegations of misconduct may come from anonymous or identified sources from within or outside the University. They may be well-founded, honestly erroneous or even mischievous. Whatever their source, motivation or accuracy, allegations of this nature have the potential to seriously harm the respondent and the complainant as well as the institution and granting agencies. Therefore, the University has put in place a procedure for addressing allegations of misconduct in an expedient, just and accountable manner.

This process must be rigorous, fair, confidential and respectful of the rights of the people implicated. At every stage in the process, investigations into misconduct must respect the *procedures described in this document*. Using the procedure outlined below, the respondent and complainant will be fully informed of all evidence presented and given the opportunity to respond accordingly.

### **3.15 Allegations**

The following procedures will ensure that fairness and equity are applied. They are applicable to all contraventions of the Research Integrity Policy.

- i. An allegation of misconduct must be received in writing by the Director of the IDS within six months of the discovery of the alleged misconduct before any investigation against the researcher or researchers who are the subjects of the allegations may begin. Allegations received after six months of the discovery will only be considered in compelling circumstances. Any person, even those outside of the University, can make an allegation if they can reasonably demonstrate that an individual has breached the Policy on Research Integrity. Anonymous allegations will not be considered unless the circumstances are compelling;
- ii. Members or participants in research who hold well-founded suspicion of misconduct on the part of any researcher may seek informal assistance and may request a preliminary investigation from the Director of the IDS. The Director of the IDS must report such complaints in writing to the Deputy Vice-Chancellor, Academic (DVC Academic). Such inquiries must be kept confidential;
- iii. Any members and participants who have allegations of misconduct reported to them must report that in writing to the Director of the IDS or the Chairman of IRDC;
- iv. The Director of the IDS and Chairman of IRDC must take reasonable steps to protect complainants, including students, staff and research assistants when they are supervised by the person against whom the complaint has been lodged;
- v. Anonymous allegations will not normally be entertained; however a preliminary investigation will be initiated if compelling evidence of misconduct is received from an anonymous source; and
- vi. Complaints should be sufficiently detailed to permit the Director of the IDS to understand and be able to evaluate in a preliminary manner the potential seriousness of the allegation.

All allegations of misconduct must identify the respondent, provide a description of the case of misconduct and be signed by the complainant. Descriptions of an alleged act of misconduct must be as thorough as possible and include all documentary evidence that supports the allegation. Cases of misconduct submitted to any other individual must be redirected to the Director of the IDS in order to ensure consistency and equity of treatment.

The Director of the IDS may require that the person making the complaint be identified if it is concluded that such identification is necessary to investigate the allegations. No one will be identified without their agreement. At all times, the Director of the IDS will maintain the anonymity of the complainant

### **3.16 Informal Preliminary and Confidential Inquiry**

- i. Within two working days of receiving an allegation, the Director of the IDS must meet with the researcher named in the complaint to inform the researcher of the complaint, provide him/her with an opportunity to respond to the charges or allegations and to understand whether information provided by the researcher resolves the issue or whether grounds exist for further action;
- ii. The Director of the IDS may decide that the complaint has no merit and that no further action should be taken. In such a case the he or she must immediately inform the complainant of the result of the inquiry and provide written explanations for the decision not to proceed any further. The complainant may

appeal the decision of the Director of the IDS to the Deputy Vice-Chancellor, Academic (DVC Academic) who will forward it to the university's REB for consideration and a decision. The decision of the REB will be binding;

- iii. If as a result of the preliminary inquiry, the Director of the IDS decides that the complaint has merit but that it may be possible to resolve it through mediation, an informal process of mediation may be followed. The Director of the IDS will attempt to find through mediation a solution which is acceptable to all the parties concerned. If the mediation is successful, no further action will be taken and the file will be destroyed. The complaint will be deemed resolved through an informal mediation process when both the complainant and the researcher agree that it has been resolved. The complaint will be considered to have been formally withdrawn;
- iv. If the mediation process fails to produce a resolution, or if it is decided that a more detailed investigation is required, the Director of the IDS must immediately inform the Deputy Vice-Chancellor, Academic (DVC Academic). The Deputy Vice-Chancellor, Academic (DVC Academic) will appoint two members of the University ethics committee for research to carry out the informal investigation;
- v. The Deputy Vice-Chancellor, Academic (DVC Academic) must ensure that the members of the informal inquiry committee are not collaborators with the complainant or the person charged. The members shall be unbiased and have appropriate background to judge the issues being raised;
- vi. The members of the informal inquiry committee will meet and discuss, with confidentiality and with promptness, with the person or persons at the centre of the allegation (person charged) and try to reach a mutual agreement and solution. The members may have to carry out an informal investigation of the allegation, thus providing the person charged the opportunities to respond to the allegation and explain the situation. Within two weeks the members of the informal inquiry committee should provide a report to the Deputy Vice-Chancellor, Academic (DVC Academic); and
- vii. Within five days of receiving the report of the informal investigative committee, the Deputy Vice-Chancellor, Academic (DVC Academic) must then decide what action should be taken. He may decide that there are no grounds to substantiate the allegation and conclude the procedure. He may determine that the allegation has merit, is sufficiently serious and make arrangements for a formal inquiry.

### **3.17 Formal Inquiry**

- i. The Deputy Vice-Chancellor, Academic (DVC Academic) will create a formal investigative committee consisting of three individuals including the Director of the IDS no later than five working days after receiving the report of the informal investigative committee. The formal investigative committee is authorized to decide on misconduct and *its decision is binding on the institution*;

- ii. None of the members of this committee shall have been members of the informal inquiry committee and they shall be subject to the same provision for appointment as described in the previous section;
- iii. All the pertinent and relevant materials will be presented to the investigative committee;
- iv. The person charged has the right to contest the nomination of any member in the investigative committee;
- v. Any member of the investigative committee also has the right to withdraw from the committee because of conflict of interest or professional competency;
- vi. The investigative committee has the right to interview any appropriate person, consult experts in order to verify facts pertinent to the inquiry;
- vii. The person charged will be provided with the evidence and will have the opportunity to be heard and respond to the allegations and to be accompanied by an Advocate of his/her own choosing. Until matter has been brought to a resolution, disbursement of funds granted the research project from agency will be withheld;
- viii. Based on all the evidence from both sides, the investigative committee will make a recommendation to the Deputy Vice-Chancellor, Academic (DVC Academic) concerning appropriate penalties or solutions;
- ix. All the proceedings of the inquiry including any interviews of all parties involved should be recorded. Copies of these documents must be stored under tightly limited access in the files of the Research Officer for a period of not less than 10 years;
- x. The inquiry should not take more than 30 days from the receipt of the commission from the Deputy Vice-Chancellor, Academic (DVC Academic). The committee should make its report not later than 10 days from the end of the inquiry; and
- xi. The person charged will be informed of the decision within one week. Both complainant and Respondent must be provided with a draft of the committee's report. They will be permitted five working days to submit comments in writing to the committee. The committee will then make its final report to the Deputy Vice-Chancellor, Academic (DVC Academic), who will provide copies to the Director of the IDS and to both complainant and Respondent within five working days.

The report will outline the inquiry and its findings. This report must demonstrate whether or not the respondent committed an act of misconduct and, if so, indicate the seriousness of the act. The findings must be based on clear and convincing evidence. The report must specifically include the following:

- i. A brief overview of the alleged act of misconduct;
- ii. The list of the members of the committee and why they were chosen;
- iii. A description of the methods and procedures used to conduct the inquiry;



- iv. The names and roles of all third parties who were interviewed;
- v. An outline of the evidence evaluated;
- vi. A statement of the findings and the reasons for these findings;
- vii. Recommendations on actions to be taken;
- viii. Recommended sanctions to be taken against the respondent or the complainant; and
- ix. Recommended measures to be taken to restore reputations that may have been damaged and to protect complainants who have acted in good faith. It should also include any other details that may shed light on the process that was followed to arrive at the conclusions of the report.

Once the report has been submitted to the Chairman, IRDC he or she will have fifteen working days to consult, make recommendations and inform the respondent and complainant of its findings. Based on this report, the Chairman, IRDC will recommend sanctions or actions to be taken. The Chairman, IRDC will also take actions to protect the reputation of the complainant. If the complaint proves to be false or unfounded, he must take measures as appropriate to repair any inadvertent damage to the reputation of the respondent.

### **3.18 Sanctions**

- i. If the allegations of misconduct are found to be groundless, no punitive action will be taken and all the records will be destroyed to protect the person's reputation. The university must take all reasonable steps to restore the reputation of those who have been unjustly accused. If the allegations have been deemed to have been unfounded, malicious and reckless, the complainant may be subject to sanctions;
- ii. If there is evidence of misconduct, the Vice-Chancellor acting on behalf of URC in consultation with the Establishment, will take measures depending on the seriousness of the misconduct. The person charged will be informed in writing of the decision, as well as the measures to be taken. In some cases, the nature of the misconduct may require that law enforcement agencies be notified; and
- iii. The appropriate funding agencies will be notified of the investigation and the action taken and a copy of the report of the investigation committee must be forwarded to the funding agencies within 30 working days. If the investigation was requested by the Granting Agency, a full copy of the report should be sent to the Agency within 30 days, whether or not the committee has concluded that misconduct has occurred.

### **3.19 Recourse**

All researchers who are found guilty of academic misconduct have the right to an appeal. The person charged and found guilty of misconduct may file an appeal to the Pro-Chancellor/ Chairman of Council, within one week after being informed. An appeal may be requested only if:

- 1. The procedures of the formal inquiry have not been followed; and
- 2. New information, not previously presented, can be provided.

### **3.20 Documentation and Conservation of the Evidence**

All documents involved in a case of misconduct must be registered and retained during and following any stage of the inquiry. Once an allegation is made, the Director of the IDS is responsible for recording and retaining all documentation in a secure location and in a confidential manner. The Director of the IDS is responsible for conserving and maintaining the confidentiality of the files. All documents and evidence collected during the inquiry must be recorded and retained in the Office of the Director of the IDS for a period of not less than 10 years.

This documentation must be sealed and stored in files with restricted access. At the end of the inquiry, all additional copies of the documents will be destroyed and the originals will be retained by IDS. Access to the reports and files of the inquiry will be permitted under the restrictions. Any person who wishes can request the right to access these University documents. Such demands must be directed in writing to the Director of the IDS.

## CHAPTER FOUR: POLICY ON INTELLECTUAL PROPERTY

### 4.1 Preamble

The Intellectual Property (IP) Policy of the Niger Delta University shall be to promote and facilitate research, productivity and inventions geared towards the enhancement of humanity. The policy shall define ownership, commercialization and various forms and patterns of association relevant to Intellectual property in the University. The University largely depends upon financial support primarily from the government and from local and international organizations for its research activities. Consistent with this premise, the University through the policy shall encourage, promote, guarantee and preserve the rights and interest of staff and students of the Niger Delta University in discoveries, inventions and creativities for the interest of Niger Delta University in particular and the nation in general.

The IP Policy seeks to provide guidelines that can be consistently applied to facilitate the commercialization of research outputs and to arrive at equitable solutions to possible IP issues relating to the conduct of research, technology transfer and commercialization.

### 4.2 Objectives/ Scope

The following are the objectives and scope of NDU IP Policy.

#### 4.2.1 Objectives

- i. To promote, preserve, encourage and aid research investigations through which new discoveries, inventions and creations would blossom within the Niger Delta University and provide incentives through rewards and other forms of recognition;
- ii. To facilitate the transfer of technology from the Niger Delta University to industry in order that research conducted at the University results in applications that would benefit the public;
- iii. To establish and maintain an innovation fund for research and innovation;
- iv. To enhance the prestige of the University as an academic research institution and as a member of society by pursuing the highest ideals of scholarship and teaching and by conferring the benefits of that scholarship and teaching on the University community and society.
- v. In its broad discretion and consistent with its overall mission, encourage, assist and provide mutually beneficial rewards to the University and members of the University community who transfer University intellectual property to the public through commercial channels under this IP Policy;
- vi. Establish standards for determining the rights and obligations of the university and creators of intellectual property; and
- vii. Ensure compliance with applicable laws and regulations and enable the University to secure sponsored research funding at all levels of research;
- viii. To put in place procedures that ensures the filing of protection for the IP prior to any publication.

#### 4.2.2 Scope

- i. **Personnel:** The IP Policy applies to all University personnel i.e. academic and research staff, staff members, students who participate in research project at the University's main campus and satellite campuses unless the University specifies other arrangements in such person's letter of appointment with the University.

- ii. **Areas covered by IP Rights:** The IP Policy shall cover all types of intellectual property rights under relevant IP Laws of the country, such as:
  - iii. Copyright and Related Rights;
  - iv. Trademarks and Service Marks;
  - v. Geographic Indications;
  - vi. Industrial Designs;
  - vii. Patents;
  - viii. Utility Models;
  - ix. Lay-out Designs (Topographies of Integrated Circuits); and
  - x. Undisclosed Information; and
  - xi. New plant, animal and insect varieties, as provided in the Nigerian law.

### **4.3 Definition of Terms**

**4.3.1 Academic & Research Staff-** Include all faculty/ academic staff, visiting faculty, emeritus faculty while at the university and affiliate and adjunct staff members, fellows and other researchers carrying out research at the University, whether part-time or full-time.

**4.3.2 Breeder-** means the University personnel or student who bred, or discovered and developed a new plant variety; or the person who is the employer of the aforementioned person or who has commissioned the work; or the successors-in-interest of the foregoing persons as the case may be; or the holder of the Certificate of Plant Variety Protection.

**4.3.3 Confidential Information-** means any information or data of a confidential nature, including all oral and visual information or data, and all information or data recorded in writing or in any other medium or by any other method, and all information and data which the University is under an obligation, whether contractual or otherwise, not to divulge.

**4.3.4 Copyright-** is the legal protection extended to the owner of the rights in an original artistic or literary work. Copyright is a legal term used to describe the rights that creators have over their literary and artistic works. Works covered by copyright range from books, music, paintings, sculpture and films, to computer programmes, databases, advertisements, maps and technical drawings. Copyright protection extends only to expressions, and not to ideas, procedures, methods of operation or mathematical concepts as such. Copyright may or may not be available for titles, slogans, or logos, depending on whether they contain sufficient authorship. In most circumstances copyright does not protect names.

**4.3.5 Creator-** means the University personnel or student (covered under the Scope of this IP policy) who is considered the legal owner of literary, scholarly, scientific and artistic works or has made creative or authorship contributions.

**4.3.6 Geographical Indication (GI)-** is a name or sign used on certain products which corresponds to a specific geographical location or origin (e.g. a town, region or country). The use of a GI may act as a certification that the product possesses certain qualities, or enjoys a certain reputation, due to its geographical origin.

**4.3.7 IP Code-** means the Intellectual Property Code of Nigeria and its amendments.

**4.3.8 IP Policy-** means the University's "Policy on Intellectual Property, Technology Transfer and Research Collaboration" as may be amended from time to time.

**4.3.9 Intellectual Property-** or "IP" means any patentable invention, utility model, industrial design, undisclosed information or know-how, copyright, layout design of integrated circuits, tangible research property, rights relating to computer software, trade mark and any other industrial or intellectual property rights, registrable, registered or otherwise, including tangible research property.

**4.3.10 Inventor-** means the University personnel or student (covered under Article 3.1 of this IP policy) who is considered the legal inventor of the work under relevant IP laws.

**4.3.11 Industrial Design-** is any composition of lines or colors or any three-dimensional form, whether or not associated with lines or colors; Provided, that such composition or form gives a special appearance to and can serve as pattern for an industrial product or handicraft.

**4.3.12 Know-how-** means any methods, techniques, processes, discoveries, inventions, innovations, non-patentable processes, specifications, recipes, formulae, designs, plans, documentation, drawings, data and other technical information.

**4.3.13 Layout Design of Integrated Circuits-** is an original topography (picture of a place) of elements, at least one of which is an active element, and of source or all interconnections of an integrated circuit, or such three-dimensional disposition prepared for an integrated circuit intended for manufacture.

**4.3.14 Mark-** means any visible sign capable of distinguishing the goods (trademark) or services (service mark) of an enterprise and shall include a stamped or marked container of goods.

**4.3.15 Patent-** is an exclusive right granted for an invention. Generally speaking, a patent provides the patent owner with the right to decide how - or whether - the invention can be used by others. In exchange for this right, the patent owner makes technical information about the invention publicly available in the published patent document.

**4.3.16 Patentable Invention-** means any technical solution of a problem in any field of human activity which is new, involves inventive step(s) and is industrially applicable.

**4.3.17 Plant-** includes terrestrial and aquatic flora

**4.3.18 Staff member-** includes all administrative staff, non-researchers or any other persons employed by the university participating in research projects, whether part-time or full-time.

**4.3.19 Student-** means all matriculated undergraduates, student employees and higher degree students i.e. graduate students, candidates for Master's and Doctoral degrees, post doctoral fellows at the University.

**4.3.20 Tangible Research Property-** shall mean research results that are in a tangible form and that include items such as materials, drawings, integrated circuit chips, computer software, computer and other databases, processes, prototypes, circuit diagrams, biological materials and equipment

**4.3.21 Trademark-** is a sign capable of distinguishing the goods or services of one enterprise from those of other enterprises. Trademarks date back to ancient times when craftsmen used to put their signature or "mark" on their products.

**4.3.22 Utility Model-** means any technical solution of a problem in any field of human activity which is new and is industrially applicable. A utility model does not involve an inventive step.

**4.3.23 University Personnel-** means all academic and research staff as well as staff members.

**4.3.24 University resources-**are defined as all tangible resources provided by the University to inventors, including:

- i. Facilities such as office, lab and studio space and equipment;
- ii. Computer hardware and software;
- iii. Support and secretarial services;
- iv. Research teaching, and lab assistants;
- v. Supplies;
- vi. Utilities; and
- vii. Funding and reimbursement for research and teaching activities, including travel.

University resources do not include salary, insurance or retirement plan contributions paid to or for the benefit of Creators.

**4.3.25 Undisclosed information or trade secrets-** shall mean information which is secret in the sense that it is not, as a body or in the precise configuration and assembly of its components generally known among or readily accessible to persons within the circles that normally deal with the kind of information in question; has commercial value because it is secret; and has been subject to reasonable steps under the circumstances to keep it secret, by the person lawfully in control of the information.

**4.3.26 Works-** are original intellectual creations in the literary and artistic domain protected from the moment of their creation and shall include in particular:

- i. Manuscripts, educational course materials and academic papers;
- ii. Books, pamphlets, articles & other writings;
- iii. Periodicals & newspapers;
- iv. Lectures, sermons, addresses, dissertations prepared for oral delivery, whether or not reduced in writing or other material form;
- v. Letters;
- vi. Dramatic or dramatic-musical compositions, choreographic works or entertainment in dumb shows;
- vii. Musical compositions, with or without words;
- viii. Works of drawing, painting, architecture, sculpture, engraving, lithography or other works of art; models or designs for works of art;
- ix. Original ornamental designs or models for articles of manufacture, whether or not registrable as an industrial design, and other works of applied art;
- x. Illustrations, maps, plans, sketches, charts and three-dimensional works relative to geography, topography, architecture or science;

- xi. Drawings or plastic works of a scientific or technical character;
- xii. Photographic works including works produced by a process analogous to photography; lantern slides;
- xiii. Audiovisual works and cinematographic works and works produced by a process analogous to cinematography or any process for making audio-visual recordings;
- xiv. Pictorial illustrations and advertisements;
- xv. Computer programmes; and
- xvi. Other literary, scholarly, scientific and artistic works

**4.3.27 Variety-** means a plant grouping within a single botanical taxon of the lowest known rank, that without regard to whether the conditions for plant variety protection are fully met, can be defined by the expression of the characteristics resulting from the given genotype or combination of genotypes, distinguished from any other plant groupings by the expression of at least one (1) characteristic and considered as a unit with regard to the suitability for being propagated unchanged. Seed, transplants, plants, tubers, tissue culture plantlets and other forms may represent a variety.

#### **4.4 Intellectual Property Ownership of Works**

Copyright ownership of Works by Niger Delta University Personnel or Students shall vest in the Creator, except under the following circumstances:

- i. If the Work is created in the course of or pursuant to an agreement between the University and an external party, copyright ownership is subject to the terms on IP ownership set out in the relevant agreement; or
- ii. If the Work is created by a non-academic University Personnel or Student in the course of his or her employment with the University; or
- iii. If the Work is commissioned by the University or is created at the direction of the University for a specific University purpose; or
- iv. If the Work is created using funds provided by or through the University for such purpose.
- v. Copyright with respect to software is dealt with as per other IP rights under 1a of copyright of works above;
- vi. The University shall also have the right to use, publish and reproduce such Works in whatever form, electronic or otherwise, for its teaching, research and academic purposes with appropriate notification to the owner; and
- vii. If the owner of the copyright is other than the Niger Delta University, prior consent is required from the owner before any compilation, distribution and sale can be made.

#### **4.5 IP Ownership by the University of Patent and other IP Rights**

- i. Rights in IP made or created by the Niger Delta University personnel or students are owned by the University when either of the following applies;
- ii. The IP was developed in the course of or pursuant to University Research. University Research includes;
- iii. In the case of a University Personnel, all research conducted in the course of his/her employment with the University as part of his/her duties or in fulfillment of his/her contract of employment;
- iv. In the case of Students, all research for which the Student receives financial support in the form of wages, allowances, salary, stipend or grant from funds whether or not administered by or

- through the University;
- v. All research conducted pursuant to a research agreement between the University and an external party, subject to the terms on IP ownership set out in the relevant research agreement;
  - vi. The IP was developed with substantial use of University's resources. The following shall be deemed to be substantial use of the University's resources;
  - vii. Where University funds are used to specifically support the development of the IP;
  - viii. Where there has been use of resources at the University that are not ordinarily available to most University personnel or Student. The use of office, library, computers and storage servers constitutes resources that are ordinarily available to University Personnel and Students and do not constitute substantial use of University's resources; and
  - ix. All IP developed by University Personnel or Students in their own personal time, which are neither connected to University Research nor developed with substantial use of University's resources, shall belong to such University Personnel or Students as Inventors.

#### **4.6 Trademarks**

The Niger Delta University shall be the sole owner of the university logo and shall have it registered with the appropriate office in charge of Intellectual in Nigeria. Any use of the university logo shall require prior license or permission from the university.

**4.7 Tangible Research Property (TRP)** or research results as defined under definitions, which cannot be the subject of any other kind of intellectual property are presumptively owned by the University. In no case shall biological material in any form be the subject of patents or any form of acquisition.

**4.8 Control of TRP** – It is Niger delta University policy to promote the prompt and open exchange of TRP and associated research data with scientific colleagues outside the investigator's immediate laboratory. It is the responsibility of the principal researcher ( if the TRP is not developed as part of a sponsored research project) to control the development, storage, use and distribution of TRP made in the course of research activity, subject to provisions of the grants or contracts and University policy.

TRP may have commercial as well as scientific value, the principal researcher may wish to make TRP available for others' scientific use by means, which do not diminish its value or inhibit its commercial development or public use. TRP may not be sold for profit, although licensing agreements which include provision for royalty income may be negotiated for commercial use of the TRP. TRP such as major equipment which are too big to be placed in the principal researcher's laboratory shall be placed in a central laboratory where other scientists can have access to use the equipment.

#### **4.9 Student Thesis/Dissertation**

A student shall own the copyright of his or her thesis/dissertation subject to any agreement with the University or external parties. The student shall grant to the University a royalty-free permission to reproduce, publish and publicly distribute copies of the thesis, in whatever form, electronic or otherwise.

If a thesis/dissertation contains information on an invention that may be patentable, the thesis may be required to be withheld in accordance with the procedures below:

- i. The College/Faculty/Department may withhold public access to the Student's thesis/dissertation containing information on patentable invention until such time a patent application is filed by



- the Innovation Development Service;
- ii. If the Innovation Research and Development Office or IP Unit decides not to pursue a patent protection in accordance with, the thesis/dissertation may be released in accordance with the procedures adopted by the University; and
- iii. If the Inventors' request for the return of the IP and wishes to pursue patent protection for the invention themselves, the Inventors may request the College/Department to withhold the thesis/dissertation for not more than three (3) months from the date of return of the IP in order for the relevant patent application to be filed.

#### **4.10 Disclosure, Evaluation and Commercialization of University IP**

##### **4.10.1 IP Disclosure and Evaluation Process**

- i. If an Inventor has developed any IP, the ownership of which is vested in the University under section 5, or pursuant to any obligation to disclose such IP under any agreement the University may have with an external party, the Inventor(s) must promptly disclose the full details of the IP to the IP Unit by submitting a Technology Disclosure Form with a copy to his/her Dean of School;
- ii. The IP Unit will evaluate the commercial potential and patentability of the IP. The IP Unit may consult with other University Personnel or independent experts who are competent in the field to assist in the evaluation if appropriate or necessary;
- iii. The IP Unit shall, within three (3) months from the date of receipt of the Technology Disclosure Form, confirm in writing to the Inventor(s) whether or not the University will pursue patenting and/or commercialization of the IP, subject to any obligations that may be owed to external parties;
- iv. Failure of the IP unit to act within the period as stated herein shall be deemed as a waiver by the University of its right to patent and/or commercialize;
- v. The IP Unit generally will seek patent protection in order to pursue commercialization of the invention and/or protect scientifically meritorious inventions;
- vi. If there are obligations owed to an external party under the terms of a grant or research agreement in respect of the IP, the IP Unit will contact the external party and proceed with the management of the IP in accordance with the terms of the agreement with such party;
- vii. The Inventor(s) shall at all times maintain confidential the details of the invention in accordance with the Confidentiality policy set out below, in particularly during the period when the IP Unit is assessing the viability of commercialization and/or patenting the invention;
- viii. Any publication (even verbal disclosure), which describes an invention prior to filing for a patent, may jeopardize the patenting process. During the evaluation process, the inventor is obliged to delay public disclosure until patent application has been filed. The University must endeavor to minimize delays in publication;
- ix. All Inventors shall disclose to the IP Unit the identity of any party interested in the commercial exploitation of the IP in sufficient detail and as soon as practicable after the relevant facts have come to their knowledge. All Inventors are also required to disclose any conflict of interest; and
- x. Prior to any patent filings or commercialization by a University Personnel in respect of IP deemed owned by the University Personnel under section 5.2(b), the University Personnel shall make full and truthful disclosure to the University by submitting the Declaration of Mandatory Disclosure.

##### **4.10.2 Return of IP to Inventor(s)**

The IP unit shall within 3 months return the IP to the inventors for commercial exploitation where:

- i. The IP unit has informed the Inventor(s) that it does not wish to pursue the commercial

- exploitation and patenting of the IP under section 6.1(c); or
- ii. The IP unit does not inform the Inventor(s) within 3 months of the acknowledgment of receipt of the Technology Disclosure whether it wishes to pursue commercial exploitation and/or patenting of the IP; or
- iii. The University has not commercialized the IP after 3 years from the date of receipt of the Technology Disclosure and there are no on-going discussions with any interested parties.

#### **4.10.3 Commercialization and Protection of the University's IP**

- i. The University shall be entitled to approach, negotiate and enter into any binding IP agreement with any third party on such terms and conditions as the University, being the legal and beneficial owner of such IP, shall in its sole and absolute discretion deem fit;
- ii. The University shall be entitled to assign rights or grant licenses, whether exclusive or not, in respect of the IP for such periods as it shall deem fit, or make such other arrangements relating to such IP as it may deem appropriate in order to facilitate technology transfer while protecting the rights of the University and the Inventors;
- iii. The University will not negotiate contracts for consulting services for individual Inventors as part of a license arrangement. Individual Inventors are free to negotiate such contracts on a personal basis;
- iv. The University may use any means whatsoever, as it shall in its sole and absolute discretion deem fit, to protect any IP owned by it, including but not limited to instituting proceedings concerning infringement of IP rights and breach of license agreements; and
- v. The support and cooperation of the Inventors are usually critical for successful commercialization. The Inventor(s) shall provide all information and render all assistance to the University in any phase as may be required from time to time.

#### **4.10.4 Distribution of Commercialization Benefits**

- i. The University shall share with the Inventor(s) of the IP any Net Revenue [as defined in section 6.4 (b) received by the University in the following ratio:
  - a. University (60%):
  - b. Inventor(s) (40%)
- ii. Net Revenue is defined as the gross consideration (including all royalties, fees and other benefits) received from the commercialization of the IP less all Expenses incurred in the commercialization of that IP. Expenses shall include all patent filing and legal fees, marketing and licensing costs, administrative expenses and fixed overhead costs and any other expenses necessarily incurred for patenting and commercializing the IP;
- iii. If the University receives shares in a company in exchange for a license or assignment of the IP to the company, the shares the University obtains will be held by the University and the proceeds from the liquidation of the shares shall be distributed to the Inventor(s) according to the same ratio as set out in below. An Inventor may also request to hold his/her portion of the shares in his/her own name, in which case such Inventor shall no longer be entitled to any proceeds from the liquidation of the remaining shares by the University;
- iv. The Inventors' share of Net Revenue under section below will be distributed equally among any joint Inventors unless the University has been previously notified in writing of any different sharing

arrangement agreed upon between the joint Inventors;

v. It is the responsibility and obligation of each Inventor to keep the University updated of his/her current contact number and address in order for the University to distribute his/her share of the Net Revenue;

vi. The University's share of the Net Revenue shall be distributed as follows:

- a. College/Faculty/Department (30%)
- b. The University of IP (30%)
- c. Innovation Fund (40%)

Where there are multiple Inventors from different Colleges/Departments, the College's/Department's share of Net Revenue will be distributed amongst the College/Department in accordance with the number of Inventors from each College/Department;

vii. The University shall distribute to the Inventor(s) the proportion of the Net Revenue due to them in such manner and at such times the University shall, in its sole and absolute discretion, deem fit;

viii. Where the University returns the IP to Inventor(s), the Inventor(s) shall sign a Letter Agreement, which shall include the following terms and conditions for the return of the IP;

ix. The Inventor(s) shall be entitled to file for patent rights in their own name and at their own expense;

x. The University shall be entitled to a percentage of any benefits received by the Inventor(s) from the commercial exploitation of the IP as follows:

1. The university(s) shall account to the inventor(s) 40% of any Net Revenue that is received for the commercial exploitation of the IP. Net Revenue in this context shall mean the gross consideration (including all royalties, fees and other benefits, but excluding shares in a company), received less all Expenses incurred in the commercial exploitation of the IP. Expenses in this context shall mean all patent filing, licensing, legal, and any other reasonable and necessary expenses incurred for patenting, enforcement of rights and commercially exploiting the Invention;
2. Where the Inventor(s) receive shares in a company in return for the license or assignment of the IP to the company, the University shall be entitled to 15% of the Inventors' shares. Such percentage may be reviewed on a case-by-case basis;
3. Where the Inventor(s) will be receiving shares in a start-up company that the Inventor(s) found, the University or its nominee will further have a first right to invest in up to 45% of the total equity of the company at the initial formation of the company;
4. The Inventors shall submit to the University an annual report, and will keep the University informed of the status of each and every patent application filed in connection with the IP;
5. The Inventor(s) shall disclose, furnish or otherwise make available to the University all information relating to or in connection with such patent application(s) and/or the commercial exploitation of the IP as and when requested by the University; and
6. The University may, but is not obligated to, request for the IP to be returned to the University if the Inventor(s) fail to commercialize the IP after 3 years from the date the IP is returned to the

Inventor(s).

#### **4.11 Research Collaborations with External Parties**

##### **4.11.1 Research Collaborations with Non-Commercial Parties**

- i. Non-commercial parties include other universities, research institutions, government agencies and non-governmental organizations;
- ii. In collaboration with non-commercial parties, IP will generally be jointly owned where both parties have jointly developed the IP (i.e. where employees/students of both parties are involved in creating, developing or generating the IP). Usually the parties will have the right to jointly commercialize the jointly-owned IP; and
- iii. Where the IP is solely developed by the University, the University will retain the ownership of the IP but the non-commercial party will have free internal use of the subject IP. The terms and conditions of any commercial use of IP shall be subject to negotiations.

##### **4.11.2 Research Collaborations with Industry**

- i. Collaborations with industry are encouraged as interaction with industry ensures that research at the University remains relevant and they also provide exposure to students to possible future employers. Companies will also benefit as they obtain access to the University's expertise, facilities and resources not otherwise available elsewhere;
- ii. The guidelines below lay down the factors that are taken into consideration in determining the IP terms in order to provide consistency in decision-making. The guidelines also recognize the different types of projects that can be undertaken with industry, which can range from exploratory research (where the application is not known), technology development (where the application is known) to product design and problem solving. The guidelines also provide for recognition of the University's contributions in the form of license fees payable by the Company as the Company obtains commercial benefits from IP generated with the help of the University; and
- iii. The following guidelines on IP ownership and commercial use and licensing of the subject IP will apply to all research projects with industry.

##### **4.11.3 Sole Ownership of IP by the University**

- i. This will be the default position taken for all research collaborations with industry unless the scope of the project and the contributions by the Company can be shown to fall under (i) or (iii) below;
- ii. The Company will have a first right to negotiate either a non-exclusive or exclusive fee-based license on commercial terms. An exclusive license may not be available where a key platform technology is involved;
- iii. Joint Ownership of IP by the University and the Company;
- iv. The University will consider joint ownership where the Company will be contributing background IP to the project or will have intellectual contribution to the IP, that is, employees of the Company are also involved in creating or generating the IP together with the University. The Company must also be providing funding for a significant portion of the total project costs;
- v. As a joint-owner Copyright is a legal term used to describe the rights that creators have over their literary and artistic works;
- vi. In works covered by copyright range from books, music, paintings, sculpture and films, to computer programmes, databases, advertisements, maps and technical drawings which have contributed significantly to the development of the IP, the Company will have a non-exclusive

- royalty-free right to commercially exploit the IP. As the Company is free to commercially exploit the project IP on its own without accounting to the University, the University will also retain the right to give out non-exclusive licenses without accounting to the Company;
- vii. The Company will have the right to license the IP non-exclusively to third parties but is required to account to the University a percentage of any licensing revenue it receives; and
  - viii. If the Company wishes to commercially exploit the IP exclusively, the Company will also have a first right to negotiate a royalty-bearing exclusive license with the University on commercial terms.

#### **4.11.4 Sole Ownership of IP by the Company**

The university will consider the sole ownership by the Company if the project meets the following criteria:

- i. The project is focused mainly on product development or improvements to the Company's existing products or services and only the Company's background IP is involved;
- ii. The project has unambiguous known objectives and the Company lays down a defined way of performing the study;
- iii. The University's existing IP is not involved as the Company requires mainly access to the expertise and know-how of the University's staff members;
- iv. The University must benefit from the project and acquiring relevant industry experience through the exposure provided by working with the Company;
- v. The Company will be required to bear the full project cost, which includes full University manpower and facilities/equipment costing; and
- vi. The Company's ownership of IP, will, however, be limited to the Company's Field of Application as specified in the project agreement. The University will reserve ownership of any project IP generated in the fields of application not specified in the project agreement and will be free to exploit the IP in those other fields of application.

#### **4.12 General Policies on Other Terms in Research Agreements**

**4.12.1 Publications:** The University reserves the right to publish or present the findings of the project or research, subject to only the right of the external party to require the delay of any publication or presentation in order to remove any of its confidential information or for the filing of any patents in accordance with the term of the research agreement for the project. Where there are multiple authors to a copyrightable work, the interest of each author shall be defined from the onset.

**4.12.2 Warranties:** As the research is only conducted on a reasonable efforts basis, the results are provided "as-is" and without any representation or warranty of merchantability or fitness for any particular purpose or any warranty that any use will not infringe or violate any patent or other proprietary rights of any other person.

**4.12.3 Indemnities:** The University requires the external party to indemnify the University from any claim, loss, cost, expense or liability of any kind that may be incurred by the University due to the external party's use (commercial or otherwise) of the results or IP generated from the project.

#### **4.13 General Obligations**

**4.13.1 Confidentiality:** All University Personnel and Students shall at all times maintain confidential all information as defined herein, whether made/developed on his/her own, in collaboration with University colleagues, or acquired through discussions (whether formal or informal) with University colleagues.

The above confidentiality obligations shall not apply in any of the following circumstances:

- i. where disclosure is required by law or any government agency;
- ii. where the information is in the public domain or becomes generally available to the public; or
- iii. where disclosure is made with the prior consent of the University.

#### **4.13.2 Disclosure of Conflicts of Interest**

- i. All Inventor(s)/Creator(s) who have any interest, whether directly or indirectly, in any party interested in the commercial exploitation of University IP, shall make full and honest disclosure of the nature and extent of their interest to the University, as soon as practicable and to the best of their knowledge. Without prejudice to the generality of the foregoing, an Inventor shall be deemed to have an interest if he/she (or a person over whom he/she has control) is a director of, or a shareholder with a material shareholding in the organization or company interested in the commercial exploitation of the University IP;
- ii. In addition, all University Personnel shall make full and honest disclosure and seek the approval of the University in the event of any situation where a conflict of interest may arise; and
- iii. Failure to declare his/her interest in the commercial exploitation of the University IP and/or to seek approval from the University as required by the Policy, the University personnel shall be liable to disciplinary or other actions which the University shall, in its sole and absolute discretion, impose.

#### **4.14 Consultancies/Directorship In Companies**

##### **4.14.1 Consultancies**

- i. University Personnel entering into consultancy work pursuing the commercialization of the IP shall commit not to disclose or transfer to external party any IP belonging to the University. They shall also ensure that a separate agreement is entered into with the appropriate College/Department for the use of University facilities, equipment or resources for such consulting work.
- ii. In any consulting service, University Personnel shall not breach the confidentiality obligations to which they are subject by virtue of being employees of the University. They shall not disclose any Confidential Information which relate to University IP or any research which is being carried out at the University.

##### **4.14.2 Conflict of Interest**

Conflicts of interest may arise in various situations relating to technology transfer interactions with industry. To minimize or prevent such conflict of interest situations, University Personnel must make full and honest disclosure to, and seek approval of, the University in the following situations:

- i. undertaking sponsored or collaborative research with a company that has licensed IP from the University, where the research is related or in the same area as the IP licensed;
- ii. deployment of Students by the University Personnel to do product and/or process research and development for a company in which the University Personnel has an interest. In cases where a University Personnel supervises final-year projects and higher degree students, this includes working on thesis topics in which the University Personnel has a commercial interest in the research area;
- iii. transmitting to a company information that is not generally available to the public. This includes withholding or reducing publications after transferring technology to the company, or failing to attend to industry visitors from competing companies;
- iv. undertaking or changing the orientation of the University Personnel's research (whether

supported by University funds or external grants) to serve the research, product development or other needs of a company;

- v. use of the University Personnel's position in the University to participate in company activities;
- vi. purchasing of equipment, instruments, materials or other items for University teaching and/or research from a company in which the University Personnel has an interest; and
- vii. engaging in consultation with a company in which the university personnel or any person related to him (including without limitation, his parent, spouse, brother, sister, son, daughter, or any person who is holding legal title for the benefit of the university personnel) has an interest, whether legal, beneficial or otherwise.

#### **4.14.3 Directorship of Companies (Including University Spin-Off Companies)**

Subject to the conditions as laid down by the University for academic staff to undertake external consultation and specialist work (including Non-Executive Company Directorship), University Personnel may be given approval to accept appointment to non-executive directorships in companies, including companies to be formed, that will commercialize their inventions.

#### **4.14.4 General Provisions**

**4.14.4.1 Construction:** In the event of doubts in the interpretation of this IP Policy, the provision should be construed in favor of the University.

**4.14.4.2 Waiver of Policy:** The University shall have the discretion to waive or vary any or all of the provisions of these rules in a particular case. A waiver on one occasion and for a particular case shall not be deemed to be a waiver or variation of the same or any other provision on a future occasion or for a future case.

#### **4.14.4.3 Criminal Offences and Penalties**

Any person found to have violated any of the provisions of this IP Policy shall be dealt with in accordance with the provisions of the faculty, staff, administrative or applicable employment conditions of service. Any violation of these policies shall be considered as a disciplinary offense. It shall be the responsibility of the University to take necessary legal action for any criminal breach of the Intellectual Property Policy.

**4.14.4.4 Rights of Appeal:** Where a party disagrees with the decision of the Intellectual Property Committee he/she shall within 30 days lodge an appeal with the Vice Chancellor who shall appoint an arbitrator with the view to resolving such dispute. The Intellectual Property Rights Office shall forward all documents relating to the dispute to the arbitrator through the Vice Chancellor for review and recommendations.

When any party still disagrees with the decision of the University, the disagreeing party shall seek legal redress.

#### **4.15 Administration of Intellectual Property**

##### **4.15.1 Enforcement of Intellectual Property Policy**

The Chairman of URC shall have the primary responsibility for the implementation of this policy on behalf of the Niger Delta University.

##### **4.15.2 Creation of the Intellectual Property Unit (IP Unit)**

To supervise the implementation of the IP Policy and commercialization of University IP assets, an

Intellectual Property Unit (IP Unit) shall be created with the following functions and responsibilities:

- i. Administer and monitor the implementation of the IP Policy;
- ii. Evaluate the potential of the works and/or inventions submitted for commercialization;
- iii. Negotiate with University personnel with respect to the development of independently owned technologies after a determination of their commercial potential for purposes of registration, licensing or joint venture agreements;
- iv. Manage the University's patent portfolio including the drafting, filing and prosecution of applications with the Intellectual Property Office of the as well as the maintenance of granted patents and registered trademarks;
- v. Administer the funds allocated for patenting and activities related to the protection and commercialization of the University IP;
- vi. Negotiate and manage contracts for the production, distribution and marketing of the University's IP assets;
- vii. Spearhead the preparation of business and marketing plans, and in securing financial assistance for any commercialization project activity.
- viii. Administer payments derived from any commercialized IP assets; and
- ix. Negotiate all license agreements for the University IP.

#### **4.15.3 Staffing of the IP Unit**

The IP Unit may have the following personnel, the number of which depends on the volume of activities that will be handled:

- i. Technology Licensing Officer - who shall direct and supervise the day-to-day operation.
- ii. Associate Technology Licensing Officer - who shall evaluate patentability and commerciality of University IP assets submitted.
- iii. Financial Operations Staff –who shall handle financial matters.
- iv. Marketing Officer – who shall be responsible in locating suitable commercial development partners.
- v. Legal Officer – who shall handle legal matters and issues relating to University IP assets.
- vi. Office Operations Staff – who shall provide administrative support to the staff.

#### **4.15.4 Creation of the Intellectual Property Management Committee (IPMC)**

The University administration supervising the operation of the IP Unit may be placed under Innovations Research Development office or opt to create an IPMC with the following suggested functions:

- i. The IPMC shall serve as the oversight committee that will oversee the management of the University's IP by the IP Unit;
- ii. The IPMC will be responsible for resolving any dispute that may arise from the interpretation of this IP Policy. If the matter cannot be resolved at the IPMC, such matter shall be referred to the Vice-Chancellor for his decision, which will be final and conclusive; and
- iii. The IPMC will also review and endorse license agreements negotiated by the IP Unit as well as periodically review the patent management and licensing practices of the University.



## **CHAPTER FIVE: POLICY ON ETHICS INVOLVING RESEARCH ON HUMAN SUBJECTS**

### **5.1 Purpose of the Policy on Ethics Involving Research on Human Subjects**

The objective of this policy is to ensure that research and scholarship conducted at NDU conform to internationally recognized standards of research ethics and scholarly competency. This policy outlines the principles of ethics in research involving human subjects within Niger Delta University. The overall objective of this policy, therefore, is to protect the rights of all human subjects that participate in research associated with NDU.

### **5.2 Scope and Responsibilities**

This policy applies to all staff and students engaged in research and scholarship in any capacity at NDU, as well as authorized external researchers whose research is facilitated by the University. As such, it provides a framework for ethical practices when conducting research that uses human subjects in any capacity at NDU. All scholarly research involving human subjects conducted by NDU faculty and staff must be authorized by the University's Research Ethics Board (REB).

All research conducted by external researchers using members of the university community must have ethical approval from their own research institution and be recommended by the Innovation, Research and Development Committee (IRDC). Research conducted as part of the everyday operations of the University must also conform to the policy, but is not subject to review by the REB, unless the IRDC determines that it may give rise to a more than minimal risk to the participants. Students who conduct research using human subjects as part of their course work must obtain the approval of their instructor. In short, the principles established in this policy must be respected by all, although different mechanisms will be used to monitor their application.

The actors in the research process have three major responsibilities. First, the University is responsible for implementing, circulating, promoting and monitoring the Policy on Ethics in Research Involving Human Subjects. It is the responsibility of the University to ensure that all activities related to research in the University, or in collaboration with other institutions, conforms to the framework outlined in this policy.

Second, all researchers are responsible for understanding, rigorously applying and ensuring conformity to the policy while conducting research. Researchers have the responsibility for developing research projects that respect ethical standards for the treatment of human subjects.

Finally, all research conducted within the University, whether it is conducted by faculty and staff at NDU or by an external researcher using members of the NDU community, must be reviewed and recommended by the designated University Committees.

All applications must be submitted to the relevant Department, Faculty, REB and IRDC for review and approval. The Director of the IDS is responsible for coordinating the ethics review process, ensuring that the IRDC and the REB are informed about any changes to the ethics policies, and serving as the secretary of the REB.

### **5.3 Definitions related to Ethics involving Research on Human Subjects**

Human subjects: Individuals or groups of individuals, such as publically identifiable social, ethnic, religious, or economic groups that are the source of raw or unformulated data in a research project.

**5.3.1 NDU Community:** All students, staff or volunteers of NDU, regardless of status. Students include all full-time, part-time and visiting students. Staff members include people employed in administration, as support staff, faculty or as professionals at all levels of employment status including part-time, full-time or contractual employees.

**5.3.2 Minimal risk:** “If potential subjects can reasonably be expected to regard the probability and magnitude of possible harms implied by participation in the research to be no greater than those encountered by the subject in those aspects of his or her everyday life that relate to the research then the research can be regarded as within the range of minimal risk.

**5.3.3 Research ethics:** A set of values, principles and rules that should be promoted in the framework of research involving human subjects that define the responsibilities of the researcher and the institution involved with regard to the subjects of their research project.

**5.3.4 Research Ethics Board (REB):** A multi-disciplinary board established by an institution to conduct ethics reviews of research projects involving human subjects developed or undertaken within that institution.

**5.3.5 Research involving humans as subjects:** Research that includes the observation of people going about their daily activities, evaluation of a new teaching method, testing of new drugs or medical devices, interviewing an individual in public life for a scholarly purpose, and research involving remains, cadavers, tissues, biological fluids, embryos or foetuses.

## **5.4 Ethical Guidelines**

The ethical guidelines that inform NDU’s are based on the following:

### **5.4.1 Respect for Human Dignity**

This is a cardinal principle of research ethics that aspires to “protect the multiple and interdependent interests of the person – from bodily to psychological to cultural integrity” Respect for human dignity is the basis of all ethical obligations in research and must be monitored by individual researchers and research ethics boards.

### **5.4.2 Respect for Free and Informed Consent**

A fundamental ethical principle is the requirement that the participation of a research subject must be based on individual consent. Additionally, consent must be voluntary and based on complete information regarding the research project. During an ethical review, committees should apply “the principle of respect for persons”, which is concerned with “the dialogue, process, rights, duties and requirements for free and informed consent by the research subject”.

### **5.4.3 Respect for Protection of Vulnerable Persons**

When applying the principle of respect for human dignity, the ethical obligations towards vulnerable persons are amplified and must follow special procedures. Vulnerable persons are “those whose diminished competence and/or decision making capacity make them vulnerable”, and include “children, institutionalized persons and others who are vulnerable”. In the course of research, such individuals are entitled to caring, solidarity and fairness, to special protection against abuse, exploitation or discrimination.

#### **5.4.4 Respect for Privacy and Confidentiality**

Protecting the private identity of research subjects is a fundamental principle of respect for human dignity. Specifically, ethical standards of privacy and confidentiality protect the access, control and dissemination of personal information. Respecting standards of privacy, confidentiality and anonymity are essential to the protection of a subject's psychological and social integrity.

#### **5.4.5 Respect for Justice and Inclusiveness**

The term 'justice' refers to both to the treatment of the researcher and the research subject, otherwise referred to as procedural and distributive justice. Procedural justice refers to the treatment of the researcher and requires that the ethics review process have fair methods, standards and procedures for reviewing research protocols.

Distributive justice refers to the role of the research subjects in the research project and strives to balance the benefits and burdens of research. When research is 'just', in this sense, it does not exploit its research subjects. With regard to the potential harms, the participants in the research should not be unfairly unburdened. Finally, 'inclusiveness' refers to the potential benefits of the research in that populations that may benefit from the research cannot be excluded or neglected.

#### **5.4.6 Balancing Harms and Benefits**

Research ethics boards should employ a 'harms-benefits analysis' when assessing research projects. The goal of all research that involves human subjects should be to achieve a 'harms-benefits balance' in which the foreseeable harms should not outweigh anticipated benefits. In other words, research that uses human subjects must strive to minimize harms and maximize benefits.

#### **5.4.7 Minimizing Harms**

Research involving human subjects is informed by the principle of 'non-maleficence', the duty to avoid, prevent or minimize harms to others. When subjecting a research proposal to a harms-benefits analysis, two aspects of minimizing harm should be considered. First, research subjects must not be subject to unnecessary risks of harm.

Secondly, when a research project poses more than 'minimal risk' to the participants, their participation must be essential to achieving scientifically and societal important aims that cannot be realized without their participation. Finally, sample sizes and the amount of testing should be minimized. In other words, research must involve the smallest number of human subjects and the smallest number of tests on these subjects that will ensure scientifically valid data.

#### **5.4.8 Maximizing Benefits**

Research involving human subjects is also informed by the principle of 'beneficence', which is an act that benefits others and society in general. Ideally, research that uses human subjects must benefit society as a whole and lead to the advancement of knowledge.

### **5.5 Research Requiring Ethical Review**

Unless explicitly excluded, all internal research involving human subjects must be reviewed by the REB before it is started. The three primary categories of research that fall under this heading include:

- i. Research that involves intervention or interaction with living individual(s) as a primary source of data collection. This includes naturalistic observation, physical, sociological or psychological

tests and measurements, testing of new drugs or medical devices, survey research, non-intrusive systematic observation as well as interviewing an individual in public life for a scholarly purpose;

- ii. Research that involves the use of secondary data (medical or school records) from non-public records that contain identifying information that may be linked to individuals by inference or elimination. This includes the study of recorded data from previous studies, databases, and archives, in which it is possible to identify living individuals; and
- iii. Research that involves the use of human remains, cadavers, human organs, tissues and biological fluids from individually identified subjects, embryos or fetuses. Such research must also be subject to a bio-safety review.

### **5.6 Research not Subject to Ethical Review**

Research that is not subject to an ethical review by the REB falls into two categories: research that uses public sources and research that is part of the normal operations of the University.

### **5.7 Research Using 'Public' Sources**

Research on human subjects that is based on public sources is not subject to review. Such research includes:

- i. Research that uses information about any individuals that is already part of the public domain (autobiographies, diaries or public archives);
- ii. Research about a living individual involved in the public arena, or about an artist, based exclusively on publically available information, documents, records, works, performances, archival materials or third-party interviews. Such research only requires a review if the subject is approached directly for interviews or if access to private documents is requested; and
- iii. Research that involves the naturalistic observation of participants in the public domain, such as during political rallies, demonstrations, or public meetings, where it can be expected that participants are seeking public visibility.

### **5.8 Research as Part of the Normal Operations of the University**

Research that is part of the normal operations of the University is not subject to review.

This type of research includes:

- i. Student evaluations of teaching performance and course content distributed in class by instructors or other University staff;
- ii. Informal surveys conducted by teachers in class as part of the course content or for the development of instructional strategies;
- iii. Quality assurance studies conducted by University faculty and staff to evaluate the performance of University services and programmes. Projects of this nature must follow the ethical guidelines governing research at NDU;
- iv. Research conducted by the IDS or by others authorized by the Council where such research is conducted to meet external reporting requirements or to facilitate the management of the institution; and
- v. Research conducted by students as part of course requirements. Teachers and departments are responsible for the ethical review of student research proposals. These projects should always be designed in accordance with the principles outlined in this policy. Student projects must, moreover, be designed as 'minimal risk' research projects.

It is important that the REB have some manner of ensuring that these research projects respect the ethical requirements for research on human subjects while not unduly burdening teachers and

departments with onerous reporting practices. To this end once every three years the Chair of each department must provide the Chairman of IRDC with a report indicating the range of topics generally assigned by teachers and the methodology used in the preparation of the research papers where human subjects are involved.

The IRDC shall forward these reports to the REB. Once the REB is assured that student research projects, where they are assigned, do respect the principles outlined in the university's research policy the REB will then issue a Certificate of Ethical Approval covering the research for the next three years. In addition, at the end of each semester, the Chair of each department will provide to the REB a short summary of the research projects assigned in the department and assurances that these projects have been properly supervised and have met the requirements of the university's research policy. Any dispute as to the ethical validity of an assignment must be reported to the REB for a decision.

## **5.9 Procedural Guidelines for the Review of a Research Proposal**

### **5.9.1 Submission**

The basic principle is that ethical review and approval of all NDU research comes under the jurisdiction of the REB. This refers to research involving human subjects undertaken by members of the University community. While it is not necessary for the REB to review a proposal before it is submitted to a funding agency, REB approval must be obtained before the research begins. Submissions for review and approval by the REB must be routed through the relevant Department and Faculty to the IRDC.

The application package should contain the following:

- i. Ethics Form for Research involving Human subjects that has been signed and dated by the applicant's Programme Dean; The form should detail the following:
- ii. Project title (including course number if a teaching program);
- iii. Project leader(s) (Principal Researcher's) name;
- iv. Names of other Research Staff and other authorized personnel, including personnel qualifications and training;
- v. Departmental affiliation, mailing address, phone number(s), and lab location.
- vi. Proposed start date, proposed end date;
- vii. Funding agency;
- viii. An indication of the use of any hazardous material including infectious agents and other biological hazards, toxic or carcinogenic chemical agents, and radioactive materials;
- ix. Rationale and purpose of the proposed study and the scientific goals of the research;
- x. Groups and individuals to be used with scientific justification; the number of animals used should be justified statistically;
- xi. An indication of the categories of discomfort and the classification of research based on primary use;
- xii. A description detailing the procedures that are to be carried out; and
- xiii. Assurance that procedures will avoid or minimize discomfort, distress, and pain to the participants/subjects consistent with sound research design.

#### **5.9.1.1 Others**

- i. Any other information considered important or necessary and pertinent;
- ii. A sample information letter to be used to inform potential participants about the research;
- iii. A sample of free and informed consent form;
- iv. The research proposal that includes the research question and or objectives, methodology, sampling methods and the instrument of measurement where applicable;

- v. A covering letter addressed to the chair of the Ethics board, which clearly outlines how the proposed research conforms to the institutional policy statement; and
- vi. Any peer reviews and former work done.

### **5.9.2 Assessment Criteria**

There are a number of ethical criteria that must be assessed when deciding whether or not to give a research project ethical approval. The following list describes a number of issues to be addressed but is far from exhaustive.

### **5.9.3 Informed Consent**

One of the major considerations of a REB should be the extent to which the proposed research conforms to standards of 'Informed Consent'. Whether or not subjects are adequately informed, whether or not there is deception, and whether participants can give informed consent are major ethical concerns. When a proposal has been approved, the principal researcher (head of research team) must ensure that all participants are fully informed about the nature of the research, their roles, any risks involved and the perceived benefits of the research.

Consent must be voluntary and not the result of misinformation, misrepresentation, manipulation, undue influence or pressure; disagreement with any aspect of the process on the part of a potential subject will preclude his or her participation.

### **5.9.4 Minimum Information**

Researchers shall provide at a minimum the following information:

- i. information that the person is being invited to participate in a research project;
- ii. a comprehensible statement of the research purpose, the identity of the researcher and University, the expected duration and nature of participation, and a description of the research procedures;
- iii. a comprehensible description of reasonably foreseeable risks and benefits that may arise from participation in the research, as well as any consequences of non-action, particularly related to research involving treatment, or where invasive methods are involved, or where there is a potential for physical or psychological harm;
- iv. assurance that the prospective participants are free not to participate, and are able to withdraw at any time without prejudice;
- v. assurance that the participants have ongoing opportunities to decide whether or not to continue to participate during the course of the research;
- vi. the potential of commercialization of research findings, and the presence of any apparent, actual, or potential conflict of interest on the part of the researchers, sponsors, or institutions; and
- vii. The name, and contact information for a person who may be contacted for information on the nature of the research, or in the case of concerns, complaints, or consequences. Written consent must normally be obtained and properly filed.

### **5.9.5 Competence**

The competence of the potential participants to provide free and informed consent is an important factor in the validity of the consent. Competence refers to the ability to understand the information presented about the research, to appreciate the potential consequences of a decision, and to provide free and informed consent to participate in a specific research project. Competence is not an all or

nothing condition. The prospective participants do not need to have the capacity to make every kind of decision, only the informed decision about participation in the specific research.

For research involving individuals who are not competent, the REC shall ensure that, as a minimum, the following conditions are met:

- i. the researcher shall show how the free and informed consent will be sought from the authorized third party, and how the participant's best interests will be protected;
- ii. the authorized third party is not the researcher or any other member of the research team;
- iii. the continued free and informed consent of the authorized third party is required in order for the continuation of the participation of the legally incompetent person in the research project, as long as the person remains incompetent; and
- iv. if the incompetent participant becomes competent during the research project, his or her informed consent will be sought as a condition of continuing participation.

#### **5.10 Additional Assessment Criteria**

- i. **Minors as Research Subjects:** The participation of students who are minors (under 18) will require parental consent and the assent of the minor. Note that normally minors cannot be involved as subjects in research that poses more than minimal risk;
- ii. **Privacy:** Another concern is the extent to which the proposed research respects the privacy of the individual participants. Attention to the ways in which the data will be collected, stored and published should inform this assessment. The issue of the type of information being sought and the level of invasiveness of the research method should also be considered. They must submit and gain approval from the REB of any interview procedures designed to elicit identifiable personal information from research subjects, whether the interview is in person, on the telephone, electronic media or by means of individualized questionnaires;
- iii. **Conflicts of Interest:** The role of the researcher and any possible conflicts of interest in the research process are another central concern, especially in pedagogical research that uses our own students. The REB should assess how the research proposes to gain access to the subjects and whether or not this creates any conflict of interest, imbalance of power or coercion;
- iv. **Inclusiveness:** Inclusiveness is an issue of distributive justice that centres on the extent to which all who might benefit from the research have been included. There are also basic standards of inclusion that simply require that no one group (or groups) have been purposely excluded from the research sample or population. It is important, therefore, to ensure that the sample and population are logical and inclusive;
- v. **Accessing Communities:** Issues of access and respect for the context of other communities should inform all research that proposes to include participants from communities other than that of the researcher. The researcher must demonstrate how they will present themselves and their research in a context that acceptable to their subjects; and
- vi. **Intervention:** Any research involving human subjects that involves a 'treatment' (or intervention of any kind) must be subject to harms-benefits analysis. If the treatment has too great an impact on the subjects, the benefits of the research must be assessed. In assessing the probable benefit of research that involves more than a minimal risk of harm, the REB must satisfy itself that the benefits outweigh the harms and that the research design will enable the researchers to adequately answer the research question.

## **5.11 Proportionate Review Process**

The REB will use a proportionate approach based on the general principle that the more invasive the research, the greater should be the care in assessing the research. The level of review will depend on the risk of harm to the participants.

Research involving human subjects will be subject, therefore, to one of two types of ethics reviews and, if required a scholarly review, as outlined below.

### **5.11.1 Expedited Review**

On receipt of a research proposal the Chair of the REB must determine whether it merits a full review or an expedited review by the REB. For research that involves no more than 'minimal risk'. Research that is not likely to meet this threshold includes research on vulnerable populations, research that includes a highly invasive methodology or a highly sensitive subject matter, and research in a different cultural context. An expedited review does not require face-to-face meetings of the REB members. It is usually completed within ten working days of the submission of a completed application form.

The Chair may reject any request for an expedited review and refer a project to the REB for full review if necessary. The applicant must be informed of the decision no later than 14 days after the submission of the application.

### **5.11.2 Full Review**

The term 'full review' refers to a face-to-face meeting of the full REB. The researcher submitting a proposal may be invited to meet the REB to respond to questions, but the researcher cannot be present for their initial review or when the REB is making a final decision. When the REB is considering a negative decision, all reasons for this decision will be made available to the researcher and a reply from the researcher will be requested. The IDS will take minutes of these meetings and store them in the appropriate case files.

The REB may determine whether the proposed research is:

- i. Acceptable as submitted and therefore recommended;
- ii. Acceptable with modifications, in which case the REB will discuss appropriate modifications with the applicant and make formal recommendations (recommendation will be granted when the amendments have been made);
- iii. Acceptable but requires additional review such as a scholarly review; and
- iv. Unacceptable, in which case the applicant will be advised that they have the right to have their application reconsidered.

### **5.11.3 Scholarly Review**

When the project poses more than minimal risk, the REB must insure that the design of the research project is capable of addressing the questions being asked in the research. This must be determined through peer review. Sufficient peer review may be considered to be any of the following:

- i. Successful approval of the REB, but only if the research is in the REB's field of expertise;
- ii. Successful funding of a grant proposal by a funding agency;
- iii. An ad hoc independent external peer review reporting directly to the REB.



## **5.12 Decisions of the Research Ethics Board**

When a research project is recommended by the REB, the Chair will issue an ethics certificate (Certificate of Ethical Approval) that is valid for one year from the date of issue. In the event that a research proposal is not accepted, all applicants to the REB have the right to have their research proposals reconsidered. In the event that the proposal is not accepted after reconsideration, applicants may make a formal appeal. Any researcher who proceeds with their research project without a Certificate of Ethical Approval from the REB may be subject to sanctions by the university.

## **5.13 Recommendation**

If the REB determines that a research proposal conforms to the standards outlined in this *Policy Statement* it must approve said proposal and issue a Certificate of Ethical Approval. If minor modifications are required, the Chair will send a letter to the applicant recommending the proposal and outlining the modifications required. The researcher must amend the proposal and resubmit it to the Chair of the REB for reconsideration. Once the modifications have been made, the Chair will issue a Certificate of Ethical Approval. If a research project is rejected, applicants can request that the REB reconsider their decision before making a formal appeal.

## **5.14 Reconsideration**

Researchers have the right to request, and the REB has an obligation to provide, the reconsideration of decisions affecting a research project. If a research proposal is rejected by the REB, the researcher may make a request for reconsideration by writing to the Director of the IDS. The letter requesting reconsideration must outline the reasons for the request and be submitted within ten working days of the REB meeting at which the proposal was considered. If the proposal is rejected for a second time, the Chair of the REB shall provide the researcher with all of the reasons for doing so and give the researcher an opportunity to reply before making final decision.

The URC may not override negative REB decisions without recourse to the formal appeal mechanism.

## **5.15 Appeal**

Researchers must appeal a negative REB decision within ten working days of the date of their receipt of the decision. To do so, the researcher must send an appeal letter to the Director of Institutional Development Services with a copy to the Chair of the REB. Appeals may be granted on procedural grounds or where there is a significant disagreement over an interpretation of the *Policy Statement*. The decision of the Appeal REB shall be binding.

## **5.16 Sanctions**

Any researcher covered under this policy who conducts research on human subjects without a Certificate of Ethical Approval issued by the Chair of the NDU REB will be subject to sanctions by the university. This includes researchers who neglect to submit their proposals to the REB or researchers that have submitted proposals but have not been officially recommended by the REB before beginning their research.

The IRDC will report to the Deputy Vice-Chancellor, Academic (DVC Academic) any cases that undermine NDU's compliance with the *Policy Statement*. The Deputy Vice-Chancellor, Academic (DVC

Academic) will decide if and what sanctions or penalties will be imposed on the researcher in accordance with laid down procedures.

#### **5.17 Annual Report of the Research Ethics Board**

An annual activity report from the REB will be made to the IRDC who will bring the report to the URC.

#### **5.18 Additional Support and Responsibility for REB**

The work involved in the ethical review and approval process as well as the promotion of the policy should be distributed appropriately among faculty members, staff, researchers and administrators.

#### **5.19 The University**

The University will support the administrative processes and educational activities required by the REB.

#### **5.20 Deans**

Deans of faculties are responsible for supporting the REB's enlightenment activities and advising faculty members about the need to comply with the Policy. They must also ensure that researchers requiring ethical review submit applications to the REB.

#### **5.21 The Institutional Development Service**

Responsibility for the administrative support for the REB lies with the Institutional Development Service.

These responsibilities include:

- i. The distribution of forms and materials for submission of research proposals to the REB;
- ii. The collection and distribution of submissions to REB members;
- iii. Keeping minutes of the REB meetings;
- iv. Storing submissions and related materials in a secure location;
- v. Supporting the REB in its educational activities;
- vi. Acting as the point of contact for the Advisory Group; and
- vii. Other duties related to the support of the REB in carrying out its mandate.

## **CHAPTER SIX: POLICY ON ETHICS ON USE OF ANIMALS**

### **6.1 Preamble**

This policy is aimed at establishing a research environment that ensures ethical and humane use and responsible care of Animals in research, teaching and testing in accordance with applicable laws, guidelines and regulations. The responsibilities of investigators, teachers and institutions using animals are emphasized. The policy promotes the use the development and use of techniques and tests, which can replace fully or partially animal use in research and teaching wherever possible. It aims at reducing the number of animals used, ensuring the welfare of the animals is considered and pain or distress to the animals is avoided.

This policy outlines

- i. Ethical principles that govern Animal care in research, teaching and testing;
- ii. Expectations pertaining to Animal care and Animal ethics; and
- iii. Consequences of non-compliance with the policy.

This policy shall apply to all research, teaching, and testing involving animals in the Niger Delta University. The University Research Committee through the Ethics Committee will be responsible for ensuring that the policy is implemented

### **6.2 Animals in Teaching and Research**

The University is committed to ensuring the ethical and humane use as well as responsible care of animals in research and teaching in accordance with international standards and regulations. Animals are to be used only for valid scientific studies with a reasonable expectation of obtaining knowledge for the potential benefit of people and animals. The welfare of animals used in research has gained attention globally that has led to the development of guidelines and in some instances national laws governing animal experimentation.

Investigators and teachers must submit written proposals to the Ethics Board for all animal projects which must take into account the expected value of the knowledge to be gained, the justification for the project, and all ethical and animal welfare aspects especially taking into consideration the 3Rs (Replacement, Reduction and Refinement).

The Three Rs (Replacement, Reduction, and Refinement) Concept

The three Rs concept is a universal doctrine for regulating the use of animals in teaching and research.

### **6.3 Replacement**

Techniques that totally or partially replace the use of animals for scientific purposes must be sought and used wherever possible.

### **6.4 Reduction**

Each project must use no more than the minimum number of animals necessary to ensure scientific and statistical validity. The principle of reducing the number of animals used should not be implemented at the expense of greater suffering of individual animals.

Scientific and teaching activities involving the use of animals must not be repeated unless essential for the purpose or design of the project. Teaching activities must involve no more than the minimum

number of animals required to reach the educational objectives. Overproduction of animals bred for scientific purposes should be avoided so that the need to kill healthy animals is minimized.

### **6.5 Refinement**

- i. Animals must be suitable for the scientific purpose taking into account their biological characteristics including behavior, genetic attributes and nutritional, microbiological and general health status;
- ii. The design and management of animal accommodation should meet species- specific needs. Special consideration is required where this is precluded by the requirements of the project;
- iii. Animals should be transported, housed, fed, watered, handled and used under conditions that meet species-specific needs. The welfare of the animals must be a primary consideration in the provision of care, which should be based on behavioral and biological needs;
- iv. Wildlife should not be taken from natural habitats unless animals bred in captivity are not available or are not suitable for the specific scientific purpose;
- v. Investigators and teachers who use animals for scientific purposes must employ the best available scientific and educational techniques and be competent in the procedures they perform or must be under the direct supervision of a person competent in the procedure;
- vi. Projects should be designed to avoid both pain and distress in animals. If this is not possible, pain or distress must be minimized;
- vii. Pain and distress cannot be evaluated easily in animals and therefore investigators and teachers must assume that animals experience these in a manner similar to humans unless there is evidence to the contrary. Decisions regarding the animals' welfare must be based on this assumption;
- viii. An animal with signs of pain or distress not predicted in the proposal must have the pain or distress alleviated promptly. Alleviation of such pain or distress must take precedence over completing a project. If this is not possible the animal must be euthanized without delay;
- ix. Scientific and teaching activities that may cause pain or distress of a kind or degree, for which anesthesia would normally be used in medical or veterinary practice must be carried out using anesthesia appropriate to the species and the procedure;
- x. Pain management appropriate to the species, the procedure and the circumstances must be provided;
- xi. The use of local or general anesthetic, analgesic or tranquilizing agents must be appropriate to the species, and should at least parallel their use in current medical or veterinary practice;
- xii. Where it is established that the purpose of the project precludes the use of anesthetic or analgesic agents to alleviate pain, the planned end-point of the project must be as early as feasible;
- xiii. Neuromuscular blocking agents must not be used without appropriate general anesthesia, except in animals where sensory awareness has been eliminated. If such agents are used, continuous or frequent monitoring of paralyzed animals is essential to ensure that the depth of anesthesia is adequate to prevent pain or distress;
- xiv. 'Death as an end-point' must be avoided wherever possible; and
- xv. Scientific and teaching activities involving the use of animals must be of minimum duration compatible with the objectives of the project.

### **6.6 Animal Rights**

Rights are a means of protecting disadvantaged individuals from the tyranny of the more advantaged one. Animal Rights refers to the moral right of animals to be treated with respect and without exploitation.

In Nigeria, The right of animals under domestic situation or captivity has been defined by both the Criminal code and Penal code of Nigeria. These are summarized thus:

- i. The right to be free from hunger.
- ii. The right to be free from discomfort.
- iii. The right to be free from fear and distress and
- iv. Freedom to express normal behaviour.

### **6.7 The Nigerian Law**

Section 495 of the Nigerian Criminal Code and Cap. 196 of the Penal code specifically lists offences of cruelty to animals to include:

- i. Beating, kicks, ill-treatment, over riding, over driving, overloading, torture, terrifying or cause or process or permit any animal to be so treated,
- ii. Cause or permit unnecessary suffering,
- iii. Conveys or carries or permits to be conveyed or carried in such a manner or position to cause unnecessary suffering,
- iv. Administration of poisons or injurious drugs,
- v. Operations without due and humane consideration,
- vi. Fighting and baiting including management of such a place.
- vii. Universal Declaration of the Right of Animals

The essence of Animal Right has been summarized in the Universal Declaration of the Right of Animals Viz.:

#### **6.7.1 This declaration hereby proclaims that:**

**Article 1:** All animals are born with equal due to life and the same rights to existence.

**Article 2:** All animals are entitled to respect. Man as an animal shall not arrogate to himself the right to exterminate or inhumanely exploit other animals. All animals have a right to the attention, care and protection of man.

#### **Article 3:**

- i. No animal shall be ill treated or subjected to “animal acts”.
- ii. If an animal must be Killed, this should be instantaneous and without distress.

**Article 4:** All wild animals have a right to liberty in their environment where they should be allowed to procreate. Deprivation of freedom even for educational purpose is an infringement of this right.

**Article 5:** Animals living traditionally in a human environment have a right to live and grow in the rhythm and under the conditions of life and freedom peculiar to their species.

Any interference by man with this rhythm or conditions for purpose of gain is an infringement of this right.

**Article 6:** All companion animals have the right to complete their natural life span.

Abandonment of an animal is a cruel and degrading act.

**Article 7:** All working animals are entitled to a reasonable limitation of the duration and intensity of work to the necessary nourishment and rest.

**Article 8:** Animal experimentation, involving physical or psychological suffering is incompatible with the right of animals, whether it is for scientific, medical or commercial or any other form of research.

Replacement methods must be used and developed.

**Article 9:** Where animals are used in the food industry, they shall be reared, transported, lair aged and killed without the infliction of suffering.

**Article 10:**

- i.No animal shall be exploited to the amusement of man.
- ii.Exhibitions and spectacles involving animals are incompatible with their dignity.

**Article 11:** Any act involving the wanton killing of an animal is biocide, which is a crime against life.

**Article 12:** Any act involving mass killing of wild animals is genocide, which is a crime against the species. Pollution or destruction of the natural environment leads to genocide.

**Article 13:** Dead animals shall be treated with respect. Scenes of violence involving animals shall be banned from cinemas and television except if for humane education.

**Article 14:** Representatives of movements that defend animal rights should have an effective voice at all levels of government.

The rights of animals like human rights should enjoy the protection of law.

**6.8 Facilities for Animals**

- i. The University or affected Department will acquire and maintain or allow to be bought and maintained only the number and type of Animals that can be accommodated in existing facilities in accordance with applicable regulation.
- ii. If space is unavailable, the research may need to be modified, rescheduled or funds may need to be allocated for modification or expansion of existing facilities.

**6.9 Categories of Animal Use**

The use of animals for research or testing purposes requires an ethics approval. The application form for this purpose is designed to provide the committee with all the information it needs to assess the required ethical aspects and to guide the applicant

**6.9.1 Animals Used for non-experimental Purposes**

A separate application form should be provided for animals used in teaching (e.g. Surgical/dissection exercises and animal handling). Such animals must be housed and handled according to acceptable standards as specified by the Ethics Board, and all procedures performed on the animals must be listed.

The following information must be submitted to the Ethics Board at the end of every academic year:

- i. The number of animals involved;
- ii. The buying, breeding and disposal of animals and the number of contacts between animals and students;
- iii. A person should be identified who will be directly responsible for overseeing the health and welfare of the animals; and
- iv. Procedures for providing care for the animals in case of emergency should also be described.

The Ethics Board must authorize the use of animals in continuing education courses. Applications for approval must include all details of the planned course, animal care, procedures to be performed, aftercare and disposal of animals.

Animals are housed or maintained only in areas that have been inspected and approved for this purpose as follows:

- i. All animal facilities are inspected on an annual basis at a minimum and that the facilities and animal care provided within meet the standards;
- ii. Level of security in the animal facilities is adequate for the protection of the animals housed therein and that this is reviewed on a regular basis;

- iii. Recommendations are provided to Departments, Units and Sections which oversees each facility in regard to necessary development/improvements, maintenance and use of the animal facilities in their charge;
- iv. Adequate numbers of animal care personnel are present, and that animal users and animal care personnel are qualified to perform their duties;
- v. All individuals shall receive training in the humane care and use of animals;
- vi. Facilities and equipment meet the standards of all applicable regulations and policies; and
- vii. Standards of husbandry and veterinary medical care that meet or exceed regulatory mandates are provided

## **6.10 Animal Use and Care Protocol**

### **6.10.1 General Requirements**

The animal use protocol must include the following information:

- i. Project title (including course number if a teaching programme);
- ii. Project leader(s) (i.e. Principal Investigator) name;
- iii. Names of other Research Staff and other authorized personnel, including personnel qualifications and training;
- iv. Departmental affiliation, mailing address, phone number(s), and lab location;
- v. Proposed start date, proposed end date;
- vi. Funding agency;
- vii. An indication of the use of any hazardous material including infectious agents and other biological hazards, toxic or carcinogenic chemical agents, and radioactive materials;
- viii. Rationale and purpose of the proposed use of animals and the scientific goals of the research;
- ix. Species and number of animals to be used with scientific justification; the number of animals used should be justified statistically;
- x. An indication of the categories of discomfort and the classification of research based on primary use;
- xi. Methods of anesthesia and analgesia, including dosages and methods of use, if applicable;
- xii. The methods of euthanasia, if necessary;
- xiii. A description detailing the procedures that are carried out in the animals;
- xiv. Assurance that procedures with animals will avoid or minimize discomfort, distress, and pain to the animals consistent with sound research design;
- xv. Written assurance that the principal investigator has considered alternatives to procedures that may cause more than momentary or slight pain or distress to the animals, and has provided a written narrative description of the methods and sources and has established that alternatives were not available;
- xvi. Assurance that all procedures that may cause more than momentary or slight pain or distress to the animals will be performed with appropriate sedation, analgesia, or anesthesia, unless the procedure is justified for scientific reasons in writing by the investigator;
- xvii. Assurance that animals that would otherwise experience severe or chronic pain or distress that cannot be relieved will be painlessly euthanatized at the end of the procedure or, if appropriate, during the procedure;
- xviii. Assurance that adequate pain relieving drugs and pre-and post-surgical care will be provided by trained personnel;
- xix. Assurance that the methods of euthanasia used will be consistent with international recommendations, unless a deviation is justified for scientific reasons in writing by the investigator;
- xx. Unusual housing and husbandry requirements;

- xxi. Any other information considered important or necessary and pertinent; and
- xxii. All information must be presented in a form that all members of the Ethics Board can readily understand.

### **6.10.2 Clinical Cases**

Clinical cases (including donors) should be managed in accordance with the currently accepted standards. No unauthorized research may be conducted on clinical cases. This includes taking samples by invasive means or exposure of patients to irradiation for the sake of the investigation. No drugs or procedures that are either controversial or of unproven value, may be applied without prior authorization.

This authorization is based on the evaluation of a comprehensive research project, which should include the details of the informed consent of the owners of the animals. The research project must clearly indicate the reasonable cause where any poisonous or injurious drug or substance is administered to any animal.



## **CHAPTER SEVEN: POLICY ON USE OF HARZADOUS MATERIALS**

### **7.1 Preamble**

The Niger Delta University hazardous materials management policy establishes a framework whereby the University can manage hazardous materials in a responsible manner while maintaining teaching and research missions, and operations.

This policy has several purposes as follows, to:

- i. ensure compliance with legislative requirements (Federal/Provincial acts, regulations, standards and guidelines and Municipal by-laws) pertaining to hazardous materials management;
- ii. ensure protection from hazardous materials for all individuals in the University;
- iii. ensure the University controls access to hazardous materials;
- iv. set out University requirements for proper disposal of hazardous materials;
- v. ensure that individuals receive required training in the proper handling, storage, transportation and disposal of hazardous materials and waste;
- vi. ensure a hazardous materials inventory is maintained; and
- vii. monitoring various Individuals exposed to hazardous materials in the course of their duties

The University will minimize exposure to hazardous materials to ensure employee safety.

The number and variety of possibly hazardous materials at the Niger Delta University are large. Some are created as the result of experimentation. For this reason, the procedures under this policy are meant to provide guidance by illustration, and example to individuals at the University regarding areas such as chemical, biological, human, and animal materials. Individuals unsure about whether a substance (such as paint, oil, pharmaceutical, battery) is hazardous, or about the appropriate steps to take should refer to the University's Health and Safety Office.

### **7.2 Transport of Dangerous Goods Act**

- i. "Hazardous" means likely to cause harm or injury in certain circumstances. A "Hazardous material" means any prohibited product, restricted product, controlled product or special waste;
- ii. A "hazardous waste" means a controlled product that is intended for disposal or is sold for recycling or recovery;
- iii. A "label" includes any mark, sign, device, stamp, seal, sticker, ticket, tag or wrapper;
- iv. "Line management" means the person to whom you report;
- v. A "material safety data sheet" means a document on which words, figures or symbols disclosing the information mentioned;
- vi. A "Member of the University community" means a faculty member, a staff member, a student, a contractor or subcontractor or visitor at the university;
- vii. "Personal protective equipment" means any clothing, device or other article that is intended to be worn or used by an employee to prevent injury or to facilitate rescue;
- viii. "Regulated biological waste" means a waste stream that includes infectious and non-infectious waste materials generated in the diagnosis, treatment, or immunization of human beings or animals; in research thereto; or in the production of biologicals;
- ix. "Special waste" means any product, substance or organism that is dangerous to the environment or to human beings, and that is no longer used for its original purpose, at the time of disposal or in storage/transportation prior to treatment or disposal;

- x. “Supervisor” means a person who is authorized by the Niger Delta University to oversee or direct the work of employees;
- xi. A “supplier” means, unless otherwise stated, a person who supplies, sells, offers or exposes for sale, leases, distributes or installs any biological substance of chemical substance or any plant to be used at the Niger Delta University;
- xii. To “train” means to give information and explanation to an employee with respect to a particular subject matter and require a practical demonstration that the employee has acquired knowledge or skill related to the subject matter;
- xiii. A “visitor” denotes any individual who is not an employee or student who is using hazardous material and has been authorized to do so in the Niger Delta University; and
- xiv. “Employee” means a person who is engaged in an occupation in the service of the Niger Delta University.

### **7.3 Hazardous Materials/Purchasing/Acquisition/Rules**

Consideration must be given to substituting less harmful materials for those that are known to be hazardous at the time of acquisition. Hazardous materials should be purchased in quantities small enough that they do not have to be stored at the Niger Delta University over specified time periods.

Authorized faculty and employees can only order hazardous materials through the University purchasing Office. Students/visitors require written authorization of permission from the Dean, Director or Department Head to order any hazardous materials. The unit must be capable of handling the supportive functions needs as prescribed by legislation.

The Health & Safety office, develops and maintains a Chemical and biological Safety protocol that provides generic chemical safety information. For chemicals unique to a particular laboratory, the principal investigator must develop written procedures, to be vetted by the Health & Safety office. Each faculty, department, or equivalent unit using hazardous materials must develop or adopt procedures that include:

- i. Acquiring minimum quantities only;
- ii. Safe and secure storage;
- iii. Removing out-of-date materials from inventory;
- iv. Inspection of time sensitive materials;
- v. Appropriate labeling consistent with legal requirements;
- vi. An ongoing current inventory of hazardous materials;
- vii. Training of faculty, staff and students;
- viii. Proper use of personal protective equipment, emergency spill and decontamination; and
- ix. Compliance with University procedures for disposal.

### **7.4 Human, Animal and Biological Materials**

The Health & Safety office develop generic procedures for handling and use of infectious materials. A copy of the Bio-safety protocol must be available at all labs. For materials unique to a particular laboratory, the supervisor using human, animal, or biological materials must develop specific written procedures that include how to deal with regulated biological waste. Regulated biological waste includes, but is not limited to, the following categories:

- i. Cultures and stocks of infectious agents, and any materials contaminated with a potentially infectious agent, including, culture dishes and devices used to transfer,

- inoculate and mix cultures;
- ii. Any human pathological wastes, including waste human blood or blood products, generated in medical or research procedures, and other potentially infectious materials; items contaminated with these materials, and any containers that held these potentially infectious materials;
- iii. Any animal specimens, carcasses or tissues;
- iv. Any biological material contaminated with an infectious agent;
- v. DNA;
- vi. Vaccines, pharmaceuticals;
- vii. Wastes from medical or research procedures that were in contact with infectious agents, including slides and cover slips, disposable gloves, and protective equipment;
- viii. Sharps: used or new hypodermic needles and syringes (with or without needle attached), scalpels and razor blades. Also, Pasteur pipettes and broken glassware, when contaminated with an infectious agent;
- ix. Mixed waste: Biological specimens or material treated with or preserved in chemicals including alcohol or formaldehyde are considered mixed waste (regulated biological waste and hazardous chemical waste);
- x. Bedding for animals;
- xi. Other regulated biological waste solids must be placed in secure, leak-proof packaging and stored in such a manner that will prevent decomposition or deterioration during storage;
- xii. It is the responsibility of each individual to establish proper disposal procedures prior to producing regulated biological wastes; and
- xiii. Area supervisors or other employees producing regulated biological waste materials are responsible for compliance with applicable regulations and disposal programme requirements.

Each faculty, department, or equivalent unit using human, animal or biological materials must develop procedures that include:

- i. Acquiring minimum quantities only;
- ii. Safe and secure storage;
- iii. Appropriate labeling and an annual inventory of materials;
- iv. An ongoing current inventory of hazardous materials;
- v. Training of faculty, staff and student;
- vi. Proper use of personal protective equipment, emergency, spill and decontamination procedures; and
- vii. Compliance with University procedures for disposal.

### **7.5 Chemical Safety Protocol**

The Chemical Safety Protocol is coordinated by the Health & Safety office and includes procedures for the acquisition, handling, responsible use, storage, transportation and disposal of hazardous materials and makes provision for the following:

- i. Designation of responsibility;
- ii. Acquisition;
- iii. Identification (labeling and Material Safety Data Sheet (MSDS));
- iv. Information and training;
- v. Storage;

- vi. Engineering controls;
- vii. Safety devices and personal protective equipment;
- viii. Record keeping;
- ix. Registration and reporting to external compliance agencies;
- x. Accident and incident investigation;
- xi. Spill response; and
- xii. Emergency preparedness and response.

## **7.6 Hazardous waste collection and disposal**

### **7.6.1 Disposal of Hazardous Waste**

- i. The Health & Safety office shall coordinate the Hazardous Waste disposal protocol. Heads of Department and Senior Technologists are responsible for organizing and arranging for hazardous waste disposal in their units. All hazardous waste scheduled for disposal shall be stored in a safe, suitable location in a laboratory or other approved storage site pending pick-up. Maximum storage time shall be six months;
- ii. Packaging, identification and labeling of hazardous wastes and their transport to the temporary holding area are the responsibility of the individual producing the hazardous waste;
- iii. All materials designated for disposal shall be properly labeled as waste and packaged in containers suited to the type of waste. The containers shall be tightly sealed and in good condition;
- iv. All containers shall be properly labeled with the name of the material, its chemical class, quantity, the laboratory or room from which it came, the name of the person(s) whose activity produced the waste, and the date. A Material Safety Data Sheet (MSDS) shall be supplied for each compound;
- v. Hazardous waste of different classes shall not be mixed in the same container;
- vi. When several containers are packed inside a box, each container shall be properly labeled and the box shall have a list of the contents on the outside;
- vii. It is the responsibility of the individual using hazardous materials to identify each material and label it properly. Unidentified compounds are the responsibility of the individual producing the hazardous waste; and
- viii. A hazardous waste disposal request form must be submitted to the Health & Safety office for approval.

## **7.7 Operational Responsibilities**

The University is responsible for the safe handling and disposal of hazardous waste from the point of generation to final treatment, and shall maintain an Emergency Procedures Policy and Handbook. The University recognizes its responsibility to act with due diligence where hazardous materials are concerned as follows:

- i. Where hazardous materials are used, they shall be identified, evaluated and controlled to minimize risk. Hazardous materials shall be ordered only in quantities required and shall be stored in appropriate areas;
- ii. Hazardous materials shall only be used in facilities appropriately and adequately equipped to control personnel exposure. Personal protective equipment shall be worn wherever it is required. Appropriate antidotes and spill response materials will be kept in close proximity to locations where hazardous materials are used;
- iii. Individuals using hazardous materials shall be suitably trained and supervised as required by

- legislation;
- iv. Hazardous materials shall be stored in an approved manner;
- v. A current up to date inventory of hazardous materials shall be kept both in the relevant unit and in a central University registry. The responsibility for maintaining the Unit inventory lies with each Faculty or Department and the Health & Safety office maintains the central University automated registry;
- vi. The Health & Safety office shall coordinate specialized written procedures and guidance documents relating to hazardous materials management. These procedures shall be modified to reflect changes in legislation, university operations, and recognized standards or codes of practice; and
- vii. Waste shall be disposed of in a manner, which conforms to legislation, university regulations and responsible standards of practice.

### **7.7.1 Responsibilities**

#### **7.7.1.1 The University**

The University is responsible for ensuring compliance with legislative requirements (Federal/States, guidelines and Local Government by-laws) pertaining to hazardous materials management.

#### **7.7.1.2 Deans, Directors, Department Heads and Technologists**

- i. Hazardous materials management within units or equivalent units is the responsibility of the line management;
- ii. Supervisors shall ensure that the activities carried out within their area of responsibility comply with federal, provincial and municipal legislation, conform to University policy and follow recognized standards of practice;
- iii. Deficiencies that cannot be managed at the unit level shall be brought to the attention of the next level of administration for attention or corrective action;
- iv. To ensure that all employees and students working within the unit are provided sufficient information, training and supervision to carry out their work safely;
- v. To comply with WHMIS regulations on all unit activities;
- vi. To provide workplace-specific training;
- vii. To ensure correct labeling; to maintain current MSDSs and ensure that these are accessible;
- viii. To ensure that engineering controls and safety equipment are adequate, appropriate and in good working order;
- ix. To provide and maintain all personal protective equipment required by employees and ensure it is used correctly;
- x. To ensure that all personnel receive appropriate and adequate information and training to be able to respond safely to spills and hazardous materials incidents occurring within the unit;
- xi. To provide the necessary material and equipment for spill response;
- xii. To identify hazards, post hazardous warning signs and communicate emergency procedures;
- xiii. To evaluate activities carried out within the unit, and to develop specific policy and operating procedures as appropriate;
- xiv. To carry out regular inspections of laboratories, studios and workshops;
- xv. To report accidents and incidents to the appropriate supervisor and to the Health & Safety office within 24 hours of occurrence and cooperate in their investigation;
- xvi. To maintain records as required by legislation or University policy;
- xvii. To cooperate with requests from the Health & Safety office ;
- xviii. To review grant applications to ensure that the space, facilities, engineering controls and

- procedures are adequate and appropriate for the work and hazardous waste disposal to be carried out safely and in accordance with regulations; and
- xix. Where significant hazards exist to appoint a local safety officer and to establish a unit health and safety committee.

#### **7.7.1.3 Employees and University Employed Students**

Employees and University employed students must follow safe work practices and procedures and University Policies. They must attend required training and use the safeguards and personal protective equipment provided.

- i. It is the responsibility of individual employees/students/visitors:
- ii. To be familiar with all University and unit safety instructions, whether written or oral, and to comply with such instructions when performing assigned duties;
- iii. To report all incidents/accidents involving hazardous materials to their immediate supervisor and the Health & Safety office or Campus Security within 24 hours of occurrence; and
- iv. Employees/students/visitors who have not received appropriate training and specific hazard information, or who cannot be competently supervised, shall not use or handle hazardous materials.

#### **7.7.1.4 Contractors, Subcontractors, Suppliers and Others**

- i. Contractors, subcontractors, suppliers and others providing a service for the University of Regina shall, as part of their contracts, agree to comply with all relevant health and safety legislation and University policies and procedures where directed by the University and as required by the Niger Delta University Safety Policy;
- ii. All contractors working on University premises shall carry out their work in accordance with the legislation and University policies; and
- iii. No contractor shall bring a hazardous material onto University premises without ensuring that a copy of the MSDS is readily available to employees.

#### **7.8 Non-compliance**

Individuals who do not follow this policy or regulatory requirements may face disciplinary action and possible criminal prosecution.

## **CHAPTER EIGHT: GENERAL PROVISIONS**

### **8.1 Financial Matters**

The Principal Functions of the Finance Unit shall be:

- i. Work with the Grants Section and Audit of the Bursary to facilitate the financial management of grants;
- ii. Maintain a database of all funds received for research by the University;
- iii. Advise researchers on relevant financial processes and regulations;
- iv. Send out timely alerts to researchers in line with financial requirements of control agreement;
- v. Work with relevant units, especially the Research Development and Policy Unit, regarding budgetary aspects of research proposals;
- vi. Assist in performing closeout procedures for grants and awards and retain records; and
- vii. Prepare and submit annual reports to the Director.

#### **8.1.1 Funding – Disbursement of Funds and Accountability**

The Process of obtaining research funds is as follows:

- i. Submission of twenty-five copies of research application to the Central Office of research for consideration by the University Research Committee;
- ii. Applications for fresh research grants can only be considered by the University Research Committee on the condition that the research project on ground has terminated;
- iii. Principal Researcher of a research project should not be involved in more than one project as a leader of separate research projects at the same time. He can however participate in one and a maximum of two other studies as a co-researcher;
- iv. Researchers should confine themselves to the approved spending profile, as the Committee will not entertain application for refund;
- v. Once a research project has been approved, the disbursement of the first tranche of funds should be made within the first one week; and
- vi. All research proposals should contain a robust and explicit budget, detailing all aspects of expenditure and procurement.

#### **8.1.2 Per Diem**

This shall be in accordance with prevailing market rates for each particular job classification.

**8.1.3 Estimates of travel costs:** should be made for each day of travel using international rates.

#### **8.1.4 Retirement procedures and time frames**

Retirement should be done in accordance with IRDC approval retirement schedule for the project.

#### **8.1.5 Equipment**

Estimates of the cost of each item or piece of equipment listed should be based on a catalogue, telephone, or written quotation. The estimated cost should include sales tax, shipping, and assembling (installation), if necessary.

If a piece of equipment is to be fabricated, the cost of its components plus, all materials, supplies and services from outside vendors or authorized internal recharge activities used in the fabrication process are exempt from indirect cost, if titles is retained by the University and the item has a useful life

expectancy of more than one year. Departmental labour, travel or other operating expenses associated with the fabrication such as salaries of Principal Researchers, graduate student researchers, or other comparable personnel who participate in the fabrication process are not included in the acquisition cost of the item and are subject to indirect costs.

If the fabricated piece of equipment is a deliverable and title is not retained by the University, all costs of its fabrication are subject to indirect costs. If the fabricated item has a life expectancy of less than one year, it does not meet the definition of equipment and all fabricated costs are subject to indirect costs.

#### **8.1.5.1 Procedure for Procurement of Equipment**

For the procurement of equipment, the normal process for procuring in the University should be followed. However, in cases of procurement of special and sophisticated equipment, especially from overseas, the Principal Researcher will identify the supplier and cost, and once it is within the budget, the information and specifications of the equipment will then be given to the Procurement Officer to purchase and deliver.

The Procurement Officer and the Principal Researcher should ensure that the equipment purchased and delivered meet the required specifications and quality. All equipment purchased for the purpose of research, where necessary should include provision for installation and training, and if possible, maintenance contract for a given period of eighteen months. All equipment purchased must be properly installed and tested before final payment is made.

Generally, equipment purchased for the purpose of research is supposed to be domiciled in the Principal Researcher's laboratory. However, where such a equipment is of multi-purpose use and too big to be domiciled in the department, it could be placed in the University Central Research Laboratory.

#### **8.1.5.2 Qualification of the Procurement Officer**

It is mandatory that the University Procurement Officer is properly qualified and licensed as required by International Funding Agencies.



## **APPENDIX 1**

### **ELEMENTS OF A RESEARCH PROPOSAL**

- i. Title
- ii. Abstract
- iii. Research Problem
- iv. Significance of the study
- v. Aims and objectives of the study
- vi. Hypotheses to be tested
- vii. Review of related literature
- viii. Methodology
  - a. Research design
  - b. Data requirements
  - c. Method of data collection
    - Instruments
    - Sample size and sampling procedure
    - Measurement
  - d. Method of data analyses
- ix. Ethical consideration
- x. Consent form
- xi. Privacy of information
- xii. Work plan
- xiii. Budget
- xiv. Research team
- xv. Dissemination of plans

It should be noted that in some cases funding agencies prescribe their own format. In such cases, the format should be strictly adhered to.