



**DIRECTORATE OF RESEARCH &  
DEVELOPMENT**

**ALEX EKWUEME FEDERAL UNIVERSITY,  
NDFU-ALIKE EBONYI STATE, NIGERIA**

***AE-FUNAI RESEARCH POLICY***

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# Table of Contents

Chapter 1: Introduction	3
Chapter 2: Conduct of Research @ AE-FUNAI	6
Chapter 3: Research Investigators: Principal Investigators and others	14
Chapter 4: Research Culture @ AE-FUNAI	20
Chapter 5: Research Ethics	32
Chapter 6: Financial Management in Research	48
Chapter 7: Conflicts of Interests	53
Chapter 8: Research Project Proposals and Project Management	59
Chapter 9: Risk Analysis and Management of Research Projects	64
Chapter 10: Use of Humans & Animals in Research	67
Chapter 11: Health & Safety in Research Environments	68
Chapter 12: Publication and Intellectual Property	71
Chapter 13: Faculty & Contract Research Staff	86
Chapter 14: Research Property Management	94
Chapter 15: Financial Administration and Management of Sponsored Research Programs	99
Chapter 16: University Committees on Research	104

# Chapter 1

## Introduction

This document outlines the research policy of Federal University Ndufu-Alike (AE-FUNAI). AE-FUNAI is a 21st century entrepreneurial university that strives to make giant strides through purpose-driven and result-oriented research, development and innovation (RDI). RDI is the engine that drives global economic transformation and growth in various facets of societal development.

The vantage role and importance of university-driven RDI vis-à-vis government/institutional support, are self-evident in the phenomenal economic growth and transformation of the People's Republic of China (PRC) at the dawn of 20th century (from 1986 and thereafter). This quantum leap in economic growth, wealth creation and re-distribution, has been variously referred to as "China Miracle" in some circles. The conundrum in China Miracle is the lifting of hundreds of millions of people out of poverty to wealth over a 30-year period. The China story demonstrates that RDI (particularly university-driven RDI) is the main underpinning for sustainable country-level and global socio-economic growth and human capital development. The global community has embarked on a very ambitious goal for sustainable development as encapsulated in the United Nation's Sustainable Development Goals (SDGs). Each of the UN's 17 thematic SDGs needs purposeful resulted-oriented research and development for success. Thus robust RDI at the global level is very pivotal for the attainment of UN's SDGs. AE-FUNAI is desirous to be a key player and contributor in 21st century RDI.

Moreover, being an entrepreneurial university also demands a fundamental paradigm shift in the university's conduct of RDI. This means that it must strive for a good mix and balance in her conduct of research. In this context, the university is determined to conduct researches that address problems of the society with commensurate applicable results to solve the identified problems. Hence there is a strong focus on industry-university research interfacing and collaboration so that research results would be appropriately transmitted to relevant industry stake-holders for consumption. The

dimension of university-industry interfacing, and collaboration for bi-directional knowledge exchange and diffusion constitute a major differentiator of research at AE-FUNAI. The university will also conduct frontier (basic) research as they contribute to enhance the position of Nigerian Science among the global scientific community. Research in AE-FUNAI is driven by the unique AE-FUNAI genetic code encapsulated in the university motto, vision and mission, as elucidated in the ensuing section.

## 1.1 AE-FUNAI Motto, Vision and Mission

### Motto

- Excellence and Integrity

### Vision

The vision of the Alex Ekwueme Federal University Ndufu-Alike is to become a vibrant centre of learning and research that will be reputable nationally and internationally and a hub for the economic transformation and development of the region through creative and innovative endeavours.

### Mission

- To train top quality human resource that will propel the development of the country by equipping the graduates with the relevant knowledge and skills required in the market place in a globalised world.
- To take a leading role in fostering the economic development of Ebonyi State and the entire Nigerian society at large through specific education, training and outreach activities.

## 1.2 Scope of AE-FUNAI Research Policy

The research policy straddles across several areas of interest as they relate to global best practices in research. These include; an exposition on conduct of research at AE-FUNAI, research investigators, research culture and ethics, financial management of research, conflicts of interests, research project proposal and project management, use of animals and humans in research, health and safety, publication and intellectual property, faculty (full time) and contract staff, property management, financial administration and management of sponsored research programs, and university committees on research. The outlined areas of coverage are discussed in detail in their respective dedicated chapters. This research policy should be read together with other university guidelines and associated policy documents that are referenced in appropriate sections.

## Chapter 2

### Conduct of Research @ AE-FUNAI

Research is a core activity undertaken by staff in AE-FUNAI. Every member of staff is encouraged to play active roles and contribute towards attaining the university's short-, medium-term and strategic research goals, which is to become a key player in local, national, regional, continental and global RDI. This chapter gives a panoramic view of research at AE-FUNAI. However, although it criss-crosses various aspects of research, specific details are discussed in appropriate chapters. The chapter first introduces the AE-FUNAI Directorate of Research and Development (DRD). Thereafter, it discusses other salient features of research at AE-FUNAI.

#### 2.1 Directorate of Research and Development (DRD)

The DRD is charged with the responsibility to steer the university's strategic research direction. These include; (i) providing strategic and proactive approach and direction for research and development in the university, and (ii) running an Intellectual Property and Technology Transfer Office (IPTTO). The document highlights key features of DRD and the evolutionary research policy required to propel the university achieve the desired RDI goals.

The Vice-Chancellor (VC) is the Head of the DRD. The Director, Research and Development reports to the Head (VC). The Director oversees the functions and activities of personnel employed by the university to work in the Directorate.

##### 2.1.1 DRD AE-FUNAI – Vision & Mission

At the heart of the Directorate's vision and mission statements, is the well-articulated University Motto: "Excellence and Integrity". These two keywords constitute the AE-FUNAI genetic code and the main underpinning of the Directorate's activities as it strives to achieve its short- medium- and long-term goals and objectives, which are all geared towards realising the university's broader goals and objectives

Vision:

To become a world class research-led university, driven by excellence, integrity and innovation in research for local, regional, national and international societal transformation and socio-economic development.

Mission:

The mission of DRD include;

- Supporting effective university-industry knowledge transfers. These include prospecting and development of collaboration with industrial partners (private sector, Ministries, and other government agencies).
- Monitoring and support of major national and international research programs and initiatives.
- Steering university research committees
- Develop and implement research reward systems for staff motivation
- Organize and manage research evaluation exercises, both internal and external research assessments
- Prospect and organize research events that will raise the university profile both nationally and globally
- Develop short-, medium- and long-term research strategies for the university.
- Support intellectual property and technology transfer processes.
- Support development of programs to aid researchers' careers development in partnership with the Directorate of Human Resources Development and Training in the University

### 2.1.2 Functions of the Directorate and Research Services

The DRD has several functions that are geared towards delivering the university's strategic, medium, and short-term research goals/agenda. These are amplified in the research services and activities of the directorate. The research services include

development of a research policy that straddles across; research ethics, research strategy, research output system and quality metrics, supporting staff in research proposals and development, research mentoring, identification of research opportunities including local, national, regional and international funding opportunities, university-industry knowledge exchange, technology transfer, intellectual property and commercialisation.

### 2.1.3 Intellectual Property & Technology Transfer Office (IPTTO)

The Directorate is also required to establish and provide adequate resources to run an office that focuses on intellectual property, technology transfer, and commercialisation. Different sub-units will coordinate the technology transfer and commercialization processes of research products. Some examples of the sub-units which the IPTTO will coordinate include;

- ✓ Technology Development (TD)
- ✓ Market Research (MR)
- ✓ Investment Opportunities (IO)

The detailed functions of the above sub-units are outlined in a policy document and guidelines on IPTTO.

## 2.2 FUNAI Research Ecosystem and Strategy

### 2.2.1 AE-FUNAI Research Ecosystem

The university recognizes the need to harness the synergy resulting from research activities of employees and students of the university community at various levels of engagement. This recognition is enshrined in the university's research ecosystem. Contextually, AE-FUNAI research ecosystem refers to the community of researchers and underpinning infrastructure (finance, institutions, governance etc.) that embark on research for knowledge creation, dissemination and solving societal problems. It consists of components and processes that interact seamlessly in the

research space. The components include; Faculty (full time academic staff), researchers (research associates), Postgraduate Students (Doctoral and Master's degree students) undergraduate students, external institutes, industry, Central Government (Federal Government), State Government and funding agencies. The process view of the research ecosystem include; journals and book publications, library information systems and other academic information systems including online research forums, workshops, research training and review seminars, conferences and research fairs. The component dimension recognizes university employees and students as the most critical organizational assets and hence the need for their active participation in RDI, while the process dimension highlights the importance of effective engagement and active participation of AE-FUNAI staff and students in the various processes that cumulatively define research outputs both in terms of quantum and quality.

Underpinning the research ecosystem is the succinct recognition that a good research culture is the sine-qua-non to great strides and attaining excellence in RDI. Thus, AE-FUNAI is desirous to entrench a robust research ecosystem and a research culture that supports and encourages high quality, ethical and valuable research. The research culture is imbued with research integrity and standards: good/healthy competition, high quality results and commensurate reward, collaboration (both intra- and inter-disciplinary, inter-domain and multi-disciplinary collaborative research), and a Research Output System (ROS) with defined quality performance metrics. Details of the university research culture are discussed in chapter 4, with an accompanying operational guideline.

### 2.2.2 FUNAI Research Strategy:

The research strategy is designed to harness the necessary expertise and/or strengthen available human capacity to differentiate AE-FUNAI's research in identified core areas. The identified areas align with national strategic research imperatives. The research strategy also aims to give credence to the University visionary statement which is to be a research-led university that competes and is recognized nationally and internationally. It promotes quality driven, research-oriented scholarship by building the necessary

expertise and/or strengthening available human capacity to differentiate AE-FUNAI's research in identified core areas. The identified areas align with national strategic development plan, and will be systematically implemented with appropriate risk analysis and management. The ensuing section discusses the strategic research themes.

2.2.2.1 Agriculture: Agriculture remains the main underpinning for sustainable national development and economic growth. In Nigeria it is a core area and the main thrust of successive government policies as each government strives to steer the country away from a mono-economy that is excessively oil-dependent with attendant systemic risks and financial shocks, to a more sustainable agriculture-based economy. There is particular emphasis on agric-business and other critical areas of the value chain in agriculture. The university supports commensurate research that align with government strategic policies on agriculture.

2.2.2.2. Health: Nigeria's health problems and challenges are visible everywhere while the age-long notion that a healthy nation is a wealthy nation remains a truism. AE-FUNAI researchers in the College of Medicine and other allied disciplines in the Faculty of Basic Medical Sciences, develop research proposals that address various aspects of our country's health problems and challenges. The emphasis is on sustainable healthcare delivery for a developing country like Nigeria.

2.2.2.3. Engineering: Nigeria is a developing country that requires different inputs from several engineering disciplines in order to achieve her national development goals and aspirations. AE-FUNAI Researchers in the Faculty of Engineering & Technology (FET) develop focus areas that have maximum impacts on national development vis-à-vis scholarly research outputs.

2.2.2.4 Community & Others: This cluster of research address several society-specific problems. Disciplines such as humanities, social sciences and other allied areas have pivotal roles in conducting innovative research in this thematic area. However, the business case for research proposals in this area must specify in unambiguous terms, the community and/or societal problems that are being addressed, and the potential beneficiaries (e.g. industrial sectors, parastatals, and other organizations)

2.2.2.5 Frontiers: While there is strong need to focus on research that addresses practical societal problems, there is also a business case for frontier research that encourages the natural spirit of enquiry and experimentation (i.e. curiosity-driven research). Some of these types of research require inter-disciplinary collaboration, but most importantly they will contribute to position Nigerian Science in the global scientific community. Examples include Innovative solutions on Climate change, Biotechnology, Nanoscience & Nanotechnology etc. The university supports such frontier researches for global recognition and positioning of her research outputs vis-à-vis original knowledge creation/generation and dissemination.

The strategic research themes will be reviewed from time to time as the need arises.

### 2.3 AE-FUNAI Research Output System (AE-FUNAI-ROS)

The AE-FUNAI-ROS incorporates multi-dimensional performance metrics. It recognises and integrates wider activities of researchers such as high impact publishing, peer review, mentoring, and public engagement amongst others. The University's guidelines for assessment and promotion of academic staff captures various aspects of the research performance metrics. The AE-FUNAI-ROS is being implemented in phases, starting with manual implementation and culminating in a web-based system for direct and/or automated input of research outputs by academic staff and research post graduate students (RPG), for automatic capture and verification by the DRD. The initial phase involves collating research outputs of staff of AE-FUNAI over the past years. Appendix 2.1 shows a typical standard form for collating such research output information.

### 2.4 FUNAI Internal Research Assessment:

The university will periodically conduct internal research assessment as part of an integrated Quality Assurance (QA) and Quality Control (QC) in AE-FUNAI research. A detailed set of key performance indicators (KPIs) has been developed and will be periodically updated to incorporate wider requirements of National University Commission (NUC), which is mapping out strategies to entrench quality and reposition

the Nigerian University System for global competitiveness. Appendix 2.2 shows a sample internal research assessment form that will be developed further to capture NUC specific research metrics as they become established for use. .

## 2.5 FUNAI Research Incentives

The university will establish research incentives as one of the mechanisms to motivate staff for both quantitative and qualitative research output.

## 2.6 Research Handbook

DRD will produce a general reference research handbook for the university. However, each faculty and department will produce their respective discipline-specific research handbooks at the appropriate levels of detail.

## 2.7. Faculty Research Committees:

Each faculty in AE-FUNAI shall establish a Faculty Research Committee under the Faculty Board. The committee has the mandate to identify, coordinate and advise on the development of research in the Faculty and on the preparation and presentation of research proposals to meet the requirements of various funding organizations. The Faculty Research Committees are also required to give advice to the Senate Committee or other appropriate bodies, where appropriate, for policy-making. In addition each Faculty has a representative in the Faculty Research Representatives that hold periodic research review meetings, which are organized by the DRD. .

## 2.8 FUNAI Research e-Infrastructure

The DRD is working with ICT unit to develop an agile robust e-Infrastructure to underpin the outlined research services and activities. The e-Infrastructure will; (i) facilitate seamless dissemination of information and ensure unimpeded access to data and information within the limits of extant data protection requirements, and (ii) serve as a platform to provide global presence and visibility of the university's research outputs and products; iii) provide facilities for regular back-up and recovery of critical system information.

The Directorate will continue to work with the ICT unit in this regard.

The AE-FUNAI Research Email address is: [funai-research@funai.edu.ng](mailto:funai-research@funai.edu.ng). DRD will periodically update its mailing list to facilitate effective dissemination of research-related information to the university community. Staff are encouraged to subscribe to the mailing list by sending their email addresses (preferably a AE-FUNAI Domain email address i.e. USERNAME@funai.edu.ng) to: [funai-research@funai.edu.ng](mailto:funai-research@funai.edu.ng).

2.9. Research Funding: The sources of research funding include national and international agencies cum private sector funded research programs. The University welcomes research programs funded from a multiple number of grantors. However, such multiple funded project must ensure full disclosure of necessary information to the University and all grantors.

#### References:

Research Policy Handbook - Stanford University USA

Research Policy Handbook - Harvard University USA

Research Policy Handbook - University of Hong Kong, HKSAR

Research Policy Handbook – University Oxford UK

Research Policy Handbook – Imperial College London UK

Research Policy Handbook - University of Cambridge UK

Research Policy Handbook – Massachusetts Institute of Technology (MIT) USA

Research Policy Handbook – California Institute of Technology USA

Research Policy Handbook – Loughborough University, UK

Research Policy Handbook - University of Cape Town, Republic of South Africa

## Chapter 3

# Research Investigators: Principal Investigators and others

3.1 Principal Investigator: Here called the PI, she/he is also the chief investigator whose primary responsibility is to prepare, conduct, and administer a research grant, cooperative agreement, training or public service project, contract, or other sponsored project in compliance with relevant laws and regulations on the conduct of sponsored research in AE-FUNAI.

In the end, the PI ensures that the policies and procedures of Senate Research Grants Committee (SRGC) are complied with as well as oversee the research study and the informed consent process. The PI may from time to time delegate duties to members of the research team, even though she/he retains the final responsibility for the conduct of the study.

### 3.1.1 WHO MAY SERVE AS A PRINCIPAL INVESTIGATOR

Since the PI is directly responsible for interacting with, and supervising, the research team, she/he must be a current employee of AE-FUNAI and/or AE-FUNAI Medical Centre (FMC) who operates within their University or FMC role to oversee the conduct of the study. PIs intending to leave the University are responsible for notifying the SRGC well in advance of their departure so that they can make arrangements to either close the study or recommend another suitably qualified and current staff of the University to serve as the PI.

The following individuals may serve as PI within the AE-FUNAI Research Policy framework:

- Academic Staff: On the recommendations of the Faculty Research committee (FRC), any academic staff member on tenure can serve as PI. Non-tenured staff cannot serve as PI but are eligible to serve as co-investigator.

- Non-Teaching Staff (administrative, technical, etc.): This applies to other University or FMC staff who possess relevant qualifications to conduct the research but such staff must obtain the approval of their immediate supervisor to undertake the research.
- Students: AE-FUNAI may permit students to serve as PIs for research they initiate and for which they make submission to the SRGC. In such a situation, the student is expected to include in the proposal a faculty mentor. However, a faculty member is not required if a student PI from another institution is also a staff member at the University or FMC. In these circumstances, such a student-staff must satisfy all requirements listed above under "Staff" (academic and non-teaching).

### 3.1.2 WHO MAY SERVE AS CO-PRINCIPAL INVESTIGATOR OR CO-INVESTIGATOR (CO-PI/CO-I)

Co-PIs/Co-Is are central to the execution of all research projects. Their duties complement those of the PI on research projects. While it is the primary responsibility of the PI to undertake the research project, the Co-PI/Co-I must also ensure that the project is run in compliance with the laws and regulations of the University as well as those contained this policy document.

All investigators must realise that to serve as PI and Co-PI of any research in the University is a privilege granted to eligible University personnel who meet the established criteria. All persons granted PI and Co-PI status must accept all of the responsibilities and conditions associated with the application for and administration of awarded sponsored projects in the AE-FUNAI.

For every proposal submission, the PI and Co-PI must take responsibility for, and certify, the truth and completeness of all information provided and that the proposal conforms to the extant University policies and procedures on sponsored activities. In order to be certified as a PI or Co-PI, a researcher must confirm that:

- she/he will comply with all regulatory directives;
- all information submitted within the proposal may be subjected to criminal, civil, or administrative penalties.
- She/he will agree to accept responsibility not only for the conduct of the project but to provide all required reports as applicable should the proposal is accepted and project subsequently awarded.

Upon accepting the award, each PI, Co-PI and, if applicable, must also confirm that she/he will be responsible for project management of the award and agree to carry out the project with the highest professional standards and within the time frame provided for in the award.

### 3.2 OVER-ALL RESPONSIBILITIES OF PRINCIPAL INVESTIGATORS

As a general condition for the approval of a research study, the SRGC holds the principal investigator of the study responsible for ensuring that there is:

- proper application of research procedures and design such that risks to research subjects are minimized and subjects are not unreasonably exposed to risk;
- a balance between the risks to human research subjects, expected benefits (if any) to the individual and the ultimate knowledge to be derived from the research outcome;
- an equitable selection of human subjects and patients for research participation;
- adequate flow of information among individuals on the risks and benefits of research participation and the procedures that will be involved in the research, as well as guaranteeing the consent of each prospective human research subject, or their legally authorized representative, in accordance with University policies;
- an informed consent of human research subjects in advance of research participation and appropriate documentation in accordance with relevant rules and policies and they conform to best practices;

- routine monitoring of the data collected to ensure the safety of human research subjects, where necessary;
- protection of the privacy of human research subjects and confidentiality of data;
- ensure physical security over paper documents and the system security over electronic documents
- appropriate additional protection of the rights and welfare of human research subjects who are likely to be vulnerable to coercion or undue influence.

### 3.2.1 SPECIFIC RESPONSIBILITIES OF PRINCIPAL INVESTIGATORS

For any approved research study, the SRGC expects the principal investigator to:

- promptly respond to all requests for information or materials solicited by the SRGC including the timely submission of the research for SRGC renewal;
- ensure that adequate resources and facilities are available to carry out the proposed research;
- refrain from enrolling any individual in a research study (i) until such study is approved in writing by the SRGC; (ii) during any period when the SRGC or PI has suspended study activities; or (iii) following SRGC or PI-directed termination of the study;
- ensure that all personnel assisting in the conduct of the research are informed accordingly of: (i) the study procedures; (ii) informed consent requirements; (iii) the possible unfavourable events associated with study participation and the steps to be taken to eliminate or ameliorate potential risks; (and (iv) data collection and record-keeping criteria;
- conduct the study in strict compliance with the current SRGC-approved research procedure;
- report promptly to the SRGC any deviations from the currently approved research procedure;
- request SRGC approval of any intended/proposed modifications to the research procedure before effecting such modifications;

- obtain in advance the consent in accordance with the current SRGC-approved informed consent documents;
- report promptly to the SRGC any internal or external adverse event that is considered to be 1) unexpected; 2) serious and 3) conceivably or absolutely related to the study;
- report promptly to the SRGC any significant changes in the risk/benefit of study participation;
- ensure that, in the event that a research subject experiences a significant adverse event, every reasonable effort is made to provide the subject with adequate care to correct or alleviate the consequences of the adverse event to the extent possible and as contained in the University Conditions of Service;
- ensure that human research subjects are kept fully informed of any new information that may affect their willingness to continue to participate in the research study;
- ensure that all listed investigators have the relevant qualifications to conduct the portion of the study in which they are involved;
- ensure that conduct of the research study adheres to Good Clinical Practice guidelines, if applicable;
- maintain adequate and accurate research subject records to reflect adherence to definite procedural requirements.
- comply with additional requirements for research in AE-FUNAI.

### 3.3. SUB-INVESTIGATORS (SI) AND RESEARCH STAFF (RS)

Suitably qualified sub-investigators and research staff may perform tasks as delegated by the Principal Investigator but they do not accept primary responsibility for the research study.

Sub-Investigators and Research Staff are generally required to:

- Complete required institutional and procedural training

- Abide by to all relevant policies and procedures with regards to the safety and protection of human participants
- Ensure the privacy and confidentiality of all participants in line stipulated rules of engagement.

## References

1. University of Pittsburgh, Human research protection office (HRPO), [rcco.pitt.edu/event-types/human-research-protection-office-hrpo](http://rcco.pitt.edu/event-types/human-research-protection-office-hrpo)
2. Trinity Health of New England, <http://www.trinityhealthofne.org/responsibilities-of-research-investigators-and-study-coordinators>
3. University of Massachusetts Amherst Research Administration & Compliance, <https://www.umass.edu/research/policy/pi-and-co-pi-roles-and-responsibilities>

## Chapter 4

### Research Culture at AE-FUNAI

#### 4.1 Background

AE-FUNAI believes that building research in “Universities lacking in a rich research tradition requires the vital development of a research culture. Culture refers to patterns of human activity and the symbolic structures that give such activity significance. It is a deep and holistic expression of human activity learnt over time. Culture influences all our choices, including personal choices and how we display these choices. Culture is the commonly held and relatively stable beliefs, attitudes and values that exist within the organisation”

As AE-FUNAI ingrains a formidable culture of research, the University is committed to ensuring that all research carried out under its auspices meets the highest standards of integrity. AE-FUNAI will ensure that an environment of research integrity prevails through the promotion of good research practices, together with the use of fair, effective, and transparent procedures to address research misconduct. Research integrity should be understood to relate to the performance of research to the highest standards of professionalism and rigour, and to the accuracy and integrity of the research record in publications and elsewhere.

#### 4.2. AE-FUNAI Research Culture Ideas

- i. A culture of research requires both institutional - and unit-based leaders to set clear research goals and communicate them effectively.
- ii. Institutions wishing to develop a culture of research must allocate significant resources for faculty training and support.
- iii. A developing culture of research requires open and collaborative personal relationships among faculty members.
- iv. To implement cultural change, administrators must be prepared to tailor resource allocations based on faculty members’ current motivations and abilities.

- v. A culture of research may take years to develop and, once established, requires regular maintenance.
- vi. Plans for a culture of research should include consideration of student involvement.

#### 4.3. Research Culture Strategies

- i. There shall be a deliberate action by the Vice Chancellor and Management to seriously improve the research profile of AE-FUNAI. Issues about research shall be prominent in the strategic plan, other high level plans, and mainstream budgets.
- ii. All Deans, Directors Heads of Departments and senior staff shall actively support research development.
- iii. Research activities shall be led by a member of the Director of Research. However the whole task cannot be left for one person.
- iv. AE-FUNAI shall focus her development of research profile in areas identified by each faculty and departments respectively. However, the Directorate of Research shall ensure that selected areas of research focus are local and national areas of need.
- v. To the extent that research intensiveness brings about research excellence. AE-FUNAI shall consciously and carefully plan to invest her scarce resources in a few selected areas from time to time. This shall be determined by the extent of investment required to develop world class areas.
- vi. AE-FUNAI shall take into account her mission; location; competitive advantages; existing research performance; interdisciplinary opportunities; and potential for collaboration when selecting its areas of research concentration.
- vii. The research areas selected for accelerated development shall be ones that can be sustained for a long period. They have to make complete sense in the context of the university and need to be based on known, not just predicted, factors.

- viii. While concentrating its research effort, the AE-FUNAI shall continue to develop new areas of focus as opportunities arise, and shall reward research excellence wherever it is found.
- ix. When one or two areas are achieving world class performance, as well as continuing strongly to support them, selected other areas should also be developed.
- x. Throughout, individuals or undesignated small groups performing very well should also receive active support. These actions help to develop breadth of research performance.
- xi. As the research profile and performance improve, AE-FUNAI shall strengthen the linkages between teaching and research. Teaching and research shall follow the classical format of supporting one another. Teaching and research are connected via undergraduate research, honours students and higher degree by research candidates.
- xii. AE-FUNAI shall provide structures, such as research centres/institutes, that support research development while strengthening, not undermining, existing faculty structures. Care must be taken to discourage tensions between faculty structure and research centres or institutes allocations is one such mechanism

#### 4.4. Research Integrity

##### 4.4.1. Scope

- i. This policy applies to all employees of AE-FUNAI, and to all Adjunct, Emeritus, and visiting personnel officially engaged in research work at the University and/or undertaking any research activity in the University's name.
- ii. Where students are undertaking research on behalf of AE-FUNAI, their Principal Investigator/Supervisor shall have responsibility for ensuring that the students undertake appropriate training in research integrity

- Principal Investigator: A Principal Investigator is an employee of AE-FUNAI who has primary responsibility for the design, implementation, completion and management of a research project.
- Supervisor: A Supervisor is an employee of AE-FUNAI who is assigned to a postgraduate research candidate at the time of their commencement of a postgraduate research project. It can also be a AE-FUNAI employee assigned to oversee the project work of an undergraduate student. The supervisor has responsibilities relating to the student's academic and research activities.
- The term 'researcher' is used throughout this section to refer to any or all of the above categories as appropriate.
- Events may occur where there is possible infringement of this section by a person who is not an employee of AE-FUNAI and therefore not subject to the 'University Code of Conduct'; such cases should be addressed by the respective employer. AE-FUNAI however reserves the right to commence legal proceedings in such cases.

#### 4.4.2 Principles of Research Integrity

Following the 'European Code' AE-FUNAI endorses the eight basic principles that underpin all research integrity and good practice in carrying out research. These are principles that all scientific and scholarly researchers should observe directly in performing their own individual research, in dealings with research partners, and in dealings with the audience that receives their research reports. The principles are:

- Honesty in presenting research goals and intentions, in precise and nuanced reporting on research methods and procedures, and in conveying valid interpretations and justifiable claims with respect to possible applications of research results.
- Reliability in performing research (meticulous, careful and attentive to detail), and in communication of the results (fair and full and unbiased reporting).

- Objectivity: interpretations and conclusions must be founded on facts and data capable of proof and secondary review; there should be transparency in the collection, analysis and interpretation of data, and verifiability of the scientific reasoning.
- Impartiality and independence from commissioning or interested parties, from ideological or political pressure groups, and from economic or financial interests.
- Open communication, in discussing the work with other scientists, in contributing to public knowledge through publication of the findings, in honest communication to the general public. This openness presupposes a proper storage and availability of data, and accessibility for interested colleagues.
- Duty of care for participants in and the subjects of research be they human beings, animals, the environment or cultural objects. Research on human subjects and animals should always rest on the principles of respect and duty of care.
- Fairness, in providing proper references and giving due credits to the work of others, in treating colleagues with integrity and honesty.
- Responsibility for future science generations. The education of young scientists and scholars requires binding standards for mentorship and supervision.

#### 4.4.3 Good Research Practice

In addition to the principles of Research Integrity, AE-FUNAI has identified the following research practices as being essential for promoting and safeguarding a culture of research integrity:

i) Openness: AE-FUNAI recognizes the need for researchers to protect their research interests in the process of planning their research and obtaining their results. However researchers are encouraged to be as open as possible in discussing their work with other researchers and the public, provided that such actions are compatible with sponsor terms. In line with National Policy the researcher should also understand the need to protect any Intellectual Property (IP) arising from their research that has potential to create economic value. Once results have been published, the University encourages researchers to make available relevant data and materials to others on

request. Researchers can also provide sufficient clear information to enable the research findings to be replicated, provided that this is consistent with any ethics approvals and consents which cover the data and materials and any IP rights in them.

ii) Leadership and Cooperation Within the University it is the responsibility of the Vice Chancellor and the Deans of the Faculties, Heads of Departments, senior staff, Principal Investigators and Supervisors to ensure that a climate of mutual cooperation is created which allows research to be conducted in accordance with good research practice. Within a research Institute/centre/group, responsibility lies with the Institute/centre/group leader. Institute/Centre/Group leaders, and Principal Investigators/Supervisors must also ensure that appropriate direction of research. They should see to it that supervision of researchers, and research students, is provided. It is the responsibility of Heads of Departments to clearly convey the standards and protocols for research in their Departments and to ensure that adherence to these standards is integral to the life of the Department.

iii) Documenting Results and Storing Primary Data: All research data and records should be securely stored and managed in accordance with good data/record management practice as set out in the 'University's Records Management & Retention Policy'.

iv) Publication: AE-FUNAI requires where possible, that research results are published in an appropriate form, usually as papers in peer-reviewed journals, or books or book chapters with impactful publishers. Publication should occur in a timely fashion. Researchers should familiarise themselves with the Authorship and Publications for Research Guidance document as well as the norms and standards that may be applicable to their discipline.

v) Training: The University will make available appropriate training courses. It is the responsibility of the Heads of Departments, Institute/Centre/Group leaders, and Principal Investigators/Supervisors to ensure that all researchers have the opportunity to receive appropriate research training including attendance as necessary on relevant

courses and guidance from professional bodies. In this regard, the needs of new researchers are of paramount importance; responsibility for ensuring that new researchers (including students) understand and adopt best research practice as quickly as possible rests with all Heads of Departments, Institute/Centre/Group leaders, and Principal Investigators/Supervisors. Continuing education on research integrity should also be provided through mentorship by senior investigators responsible for the supervision/training of PhDs and postdoctoral researchers alike.

#### 4.4.4 Publication and dissemination of research findings

- i) AE-FUNAI recognises the importance of research being communicated to other researchers, professional practitioners and the wider community. Ideally this would occur after peer appraisal. Where research is reported in the public media prior to peer review, the reporting must be based on the research data and findings.
- ii) Peer assessment of research outcomes is important in the validation of research.
- iii) Wherever possible, researchers must submit their research for peer review.
- iv) Publication of multiple papers based on the same set(s) or subset(s) of data is not acceptable, except where there is full cross-referencing within the papers (for example, in a series of closely related work, or where a complete work grew out of a preliminary publication and this is fully acknowledged).
- v) An author who submits substantially similar work to more than one publisher must disclose this to the publishers at the time of submission.
- vi) Publications must include information on the sources of financial support for the research, including scholarship funding for any author who has been a Higher Degree by Research student at the time the research was carried out. This information must include the grant ID number(s) as well as the name of the funding body or bodies. Financial sponsorship that carries an embargo on such naming of a sponsor must be avoided. Where research approval has been obtained, information to this effect is preferred to be included in the publication.
- vii) Publications and other outputs involving either a student enrolled with AE-FUNAI, or a AE-FUNAI staff member (including adjunct staff) must acknowledge that the work

was carried out at the University by using the University address. The address must include the full name of the University, as well as the official name of the appropriate faculty, school or centre, e.g. "Department of Fisheries and Aquaculture, Federal University Ndufu Alike Ikwo". Any publication without appropriate address is not regarded as AE-FUNAI research publications.

vii) Deliberate inclusion of inaccurate or misleading information relating to research activity in curriculum vitae, grant applications, job applications or public statements, or the failure to provide relevant information, is a form of research misconduct. Accuracy is essential in describing the state of publication (in preparation, submitted, accepted), research funding (applied for, granted, funding period), and awards conferred, and where any of these relate to more than one researcher.

viii) Before a failed grant application can be re-submitted to the same or another funding agency, action must be taken to ensure that all chief investigators agree to the re-submission and continue to meet the criteria for authorship.

ix) All FUNAI authors must ensure that details of their FUNAI research publications are recorded in the FUNAI Research Repository.

X) AE-FUNAI supports the principle of Open Access by making publications freely available online within twelve months of publication through the AE-FUNAI Research Repository. AE-FUNAI authors are responsible for depositing copies of their publications in accordance with this policy.

xi) Where legal or contractual obligations make this impossible, an explanatory note is added to the publication information in the Research Repository. AE-FUNAI authors are encouraged to avoid transferring copyright to the publisher and are asked to ensure that publication contracts allow self-archiving of the Author's Accepted Manuscript in the AE-FUNAI Research Repository. If self- archiving is not included in the publisher contract then AE-FUNAI authors must request inclusion of the following addendum:

"The author has the right to publically archive their revised, peer reviewed personal version of their paper in their institutional repository, provided a link to the version on the publisher website is included."

xii) All AE-FUNAI authors must adhere to the Open Access requirements of funding bodies.

xiii) Publications are made available on Open Access in the AE-FUNAI Research Repository under the most appropriate Creative Commons license, and preferably the CC-BY license.

#### 4.4.5 Authorship

i) Attribution of authorship must be based on substantial contributions in a combination of:

- Conception and design of the project
- analysis and interpretation of research data
- drafting significant parts of the work or critically revising it so as to contribute to the interpretation.

ii) The right to authorship is not tied to position or profession and does not depend on whether the contribution was paid for or voluntary. It is not enough to have provided materials or routine technical support, or to have made the measurements on which the publication is based. Substantial intellectual involvement is required.

iii) A person who qualifies as an author must not be included or excluded as an author without their permission. This should be in writing, and include a brief description of their contribution to the work.

iv) Participation solely in the acquisition of funding or the collection of data does not justify authorship. General supervision of the research group is not sufficient for authorship. Any part of an article critical to its main conclusion must be the

responsibility of at least one author. An author's role in a research output must be sufficient for that person to take responsibility for at least that part of the output in that person's area of expertise. No person who is an author, consistent with this definition, must be excluded as an author without their permission in writing.

v) Authorship of a research output is a matter that must be discussed between researchers at an early stage in a research project, and reviewed whenever there are changes in participation. If there are conflicts arising through disputes about authorship, the Director of Research must be notified. The Director of Research will determine the appropriate course of action.

vi) When there is more than one co-author of a research output, one co-author (by agreement amongst the authors) must be nominated as lead author for the whole research output, and must take responsibility for record-keeping regarding the research output.

vii) Where the research is published, including electronically, one author must be given principal status with the responsibility for signing a Statement of Authorship form ensuring that all co-authors are in agreement with their inclusion and that no person entitled to authorship as defined in clause 5 (iii) above has been excluded. Authors of web-based publications must be able to take responsibility for the publication's content and must be clearly identified in the publication.

viii) The authors must ensure that others who have contributed to the work are recognised in the research output. Courtesy demands that individuals and organisations providing facilities must also be acknowledged.

ix) Authors must include their ORCID identifier in their publications and must ensure that it is linked to their authoritative profile in the AE-FUNAI Research Repository.

#### 4.5 Peer review

i) The University encourages all researchers to participate in peer review because this provides expert scrutiny of a project, and helps to maintain high standards and encourage accurate, thorough and credible research reporting.

ii) Participants in peer review must act fairly and in a timely manner, must keep confidential and not disclose the content or outcome of any process in which they are involved, must declare conflicts of interest, and must ensure that they are informed, and comply with the criteria to be applied.

iii) Researchers whose work is undergoing peer review must not seek to influence the process or outcomes.

iv) Supervising researchers have a responsibility to assist trainee researchers, including students, in developing the necessary skills for peer review and understanding their obligation to participate.

#### 4.6 Collaborative research across institutions

i) Where the AE-FUNAI is involved in a joint research project, including overseas, an agreement must be reached in writing with the collaborating organisations detailing issues to do with intellectual property, confidentiality and copyright, sharing commercial returns, responsibility for ethics and safety clearances, and reporting to appropriate agencies

ii) The collaborating parties must identify a person to be involved in the management of research data, primary materials and other items to be retained at the end of the project.

Materials Consulted and must be credited

Australian Code for the Responsible Conduct of Research (2007) and the Western Australian University Sector Disposal Authority (2012)

Hannover Research (2014) Building a culture of research  
[www.hannoverresearch.com/.../Building-a-Culture-of-Research-Recommended-Practic...institutional](http://www.hannoverresearch.com/.../Building-a-Culture-of-Research-Recommended-Practic...institutional) plans for developing and maintaining cultures of research. Building a ..... Address to the Academic Senate – University of Western. Sydney, May 2014

University of Limerick (2017) Research Integrity Policy.  
[https://www.ul.ie/research/sites/.../20170109\\_Research%20Integrity%20Policy.pdf](https://www.ul.ie/research/sites/.../20170109_Research%20Integrity%20Policy.pdf) Jan 9, 2017 - the policy is aligned with the National Policy Statement on Ensuring Research Integrity in Ireland (2014) (hereafter 'National Policy' .

UWA (2012). University Policy on: Code of Conduct for the Responsible Practice of Research  
<http://www.governance.uwa.edu.au/procedures/policies/policies-and-procedures?method=document&id=UP12%2F25>

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# Chapter 5

## Research Ethics

### 1. AE-FUNAI position on Ethics in Research

The broad principles that guide research have long been established, and they are regarded as vital to Alex Ekwueme Federal University Ndufu Alike (AE-FUNAI). Central to these are the maintenance of high ethical standards, and validity and accuracy in the collection and reporting of research findings. Communication between collaborators, maintenance of, and reference to, research records, presentation and discussion of work at meetings of experts, publication of results including the important element of peer review, and the possibility that investigations will be replicated or extended by other researchers, all contribute to the intrinsically self-correcting and ethical nature of research. The University expects those engaged in research to act in accordance with the highest standards of integrity whether they are employees, researchers, or students of the University, and irrespective of the source from which their posts or research is funded, whether this is internal or external to the University. These standards are also expected of those engaged in the setting of research priorities, and in the assessment of research.

### 2. Ethical Principles

The Policy recognizes and advocates the use of the following ethical principles:

a. Prevention of harm: Academic Staff and Students (henceforth 'researchers') must seek to protect participants from physical and psychological harm during the research process. Researchers should not make frivolous use of participants. Researchers must also take steps to protect their own physical and psychological well-being during the research process. The risk of harm must reflect a balance of impact on participants and the benefits of the research. See Section 15 for a definition of harm.

b. Informed consent: Informed consent helps to minimise harm to participants. Without informed consent, participants may feel manipulated, humiliated or mistreated by researchers. It is necessary to attain full participant consent unless there is a strong rationale for no or partial consent. Consent should be attained by researchers informing participants in advance of all necessary information expected to influence willingness to take part in the study. Participants should be given the opportunity to ask questions about their involvement in the study before securing consent. Where the study involves more than a one-off research interaction, such as the case in the use of longitudinal research methods, it may be necessary to seek approval from participants/actors at more than one juncture of the study.

c. Relevance: Researchers must have ethical responsibility to ensure that their research is relevant both to the broad health and development needs of Ebonyi State and the country at large and to the individual needs of study population in the case of studies involving humans and animals. The findings of the research must be translatable into mechanisms for improving the health and socioeconomic status of Ebonyi State and Nigeria.

d. Scientific Integrity: In addition to fulfilling a need and being of value, the research proposed must demonstrate sound methodology and a high probability of providing answers to the research questions posed. The research protocol must show knowledge of relevant literature, derived from a systematic review of that literature and, where appropriate, from laboratory and animal studies. Moreover, research methods and results must be open to peer review and scrutiny.

e. Investigator Competence: A suitably qualified investigator should conduct the study. The investigator's competence is assessed mainly by technical competence, which includes research competence, and is itself assessed in terms of education, knowledge,

certification and experience. Compassion and empathy are among the characteristics required of a technically competent researcher.

f Rights of participants: In giving consent, participants retain the right to withdraw this consent. If applicable, researchers should indicate at what point in the study participants can withdraw consent or request data destruction.

g. Minimising risk with vulnerable participants: Some participants should automatically be considered vulnerable because of a limited ability to provide consent to take part in a research project, e.g. young children, people who are ill or bereaved. Other groups may be considered vulnerable because of the context, e.g. unemployed, migrants, refugees. Extra safeguards and consent procedures must be designed and followed when recruiting vulnerable participants to research projects.

h. Respect for participants: Researchers should aim to conduct research that is respectful of: national and international law, gender differences, all groups in society, and, marginalised/disadvantaged groups.

i. Confidentiality: Unless agreed otherwise, the findings from research should be communicated in a manner that protects the confidentiality of the participants. Researchers are expected to protect the confidentiality of the participant's identity and data throughout the fullness of the research project. Where it is not possible or fitting to provide all information necessary for informed consent, it should be provided at an appropriate juncture once the participant has made the contribution to the study.

j. Inclusion and Exclusion Criteria: The selection, recruitment, exclusion and inclusion of research participants must be just and fair, based on sound scientific and ethical principles. No person may be inappropriately or unjustly excluded on the basis of race, age, sex, sexual orientation, disability, education, religious beliefs, pregnancy, marital status, ethnic or social origin, conscience, belief or language.

k. Risk and Benefits: A risk/benefit analysis of the study should precede the research itself. Risk/benefit analysis should take full notice of benefits and harms beyond the duration of the research, particularly in the case of chronic life-threatening conditions. Alternative ways of providing benefits to the participants might be available. The principal investigator has the ethical duty to exclude participants who might be placed at undue risk.

l. Publication of Results: Investigators have an obligation to disseminate research results, whether positive or negative, in a timely and competent manner. This is particularly important in clinical trials, where investigators are duty bound to ensure that findings are made public for all outcomes assessed. It is, however, important that the release of research findings be done in an ethical manner, to ensure that false expectations are not raised in a vulnerable population. Research results should not be prematurely released or published, or unreasonably delayed. It is advisable that the main results should be disseminated, using appropriate communication formats, to the participants and other interested members of the communities in which the study was conducted. Research ethics committees should be satisfied that there is no interference with the right to publish results.

m. Conflict of Interest: A researcher must disclose the sources and extent of funding to the research participants, the ethics committee and, where appropriate, to the regulatory authority. Commercial affiliations or financial interests at the time of proposing and reporting the research must also be disclosed.

### 3. Research Ethics Committee

#### 3.1 Establishment of Research Ethics Committee

a. It has become exigent to consider the subject of ethics in research considering the concerns of society at large. The reasons include a) a major expansion in research involving humans, b) the significant public investment in research, c) the increasing

need for experimentation on human subjects, d) publicized cases of ethical violation, e) internalization of research, and f) the expanding role of private industry. With the increasing acceptance and appreciation of individual human rights, and the need to respect and protect them, it is not acceptable that the welfare and the respect of the individuals be compromised in the pursuit of benefits that may accrue to science and society.

b. Ethics are principles of right conduct. The University will have a AE-FUNAI Research Ethics Committee (AE-FUNAI-REC). The Chairman of each Faculty Research Ethics Committee will represent the Faculty in AE-FUNAI-REC. Other members may be appointed by the Director of Research.

c. An external member from outside the University (especially a Legal Practitioner) shall be appointed as a member of AE-FUNAI-REC.

d. The Chairman of the AEFUNAI-REC will be appointed by Director of Research and approved by the Vice Chancellor. The Chairman will have a tenure of two years.

e. The Chairman of the Faculty Research Ethics Committee (FREC) will be appointed by Dean of the Faculty and will have tenure of two years. The FREC of all faculties will report directly to the AE-FUNAI-REC. The AE-FUNAI-REC in conjunction with Directorate of Research will coordinate activities of all FREC.

f. The AEFUNAI-REC and all FREC will work closely with the Directorate of Research. The committees will undertake the review and approval of scientific research being conducted in order to ensure that the international ethical standards are maintained in the research works that are conducted in the University. Each faculty committee would be called by the name of the faculty e.g., Faculty of Agriculture Research Ethics Committee.

#### 4. Purpose of the Research Ethics Committee

The purpose of the ethics committee would be to promote, not prevent, research and teaching. In so doing, it would seek to ensure that all researchers and teachers are aware of the ethical issues of research or teaching activities involving human subjects. The committee would recognize that individual researchers and teachers, working in and familiar with their own disciplines, are generally in the best position to assess their proposed activity. Nevertheless, to ensure consistency and impartiality in considering the interests of potential subjects, as well as to provide a degree of protection for the researcher or teacher, it is important that certain categories of research and teaching activities be approved in accordance with the Human Ethics Policy and these Guidelines before being conducted.

#### 5. Responsibilities of the Research Ethics Committee

Each Faculty Research Ethics Committee (FREC) in conjunction with AE-FUNAI-REC is required to:

- (i). draw up guidelines for the ethical conduct of all research undertaken under the auspices of the faculty, appropriate to the academic disciplines within the faculty and in accordance with recommendations made by relevant outside bodies.
- (ii). ensure that staff and students in the faculty have adequate training in the ethical conduct of research
- (iii). ensure that staff and students are aware of health and safety issues and insurance implications
- (iv). establish procedures for handling ethics issues of all research in the faculty ethics committees or, where appropriate, through other ethics committees outside the University
- (v). report annually to the AE-FUNAI Research Ethics Committee (AE-FUNAI-REC) and AE-FUNAI Directorate of Research on research ethics activities and outcomes, and on procedures within the Faculties and their operations.
- (vi). the AE-FUNAI-REC will refer cases to the University Research and Development Board where necessary through the Directorate of Research.

## 6. The Functions of the Research Ethics Committee

The functions of the Ethics Committee are as follows:

- (a) To foster awareness of ethical principles in the teaching and research activities.
- (b) To provide guidance to researchers and teachers with regard to ethical standards.
- (c) To protect the rights of individuals and groups who are the subject of research, experiments set up for teaching purposes, and other similar activities under the auspices of the faculty.
- (d) To consider and, where the Committee considers it proper to do so, to approve and monitor any proposals, protocols, or pilot projects, including contracts, submitted to the Committee, where the proposal, protocol, pilot project or contract relates to research.
- (e) To review and, where it considers it proper to do so, to approve and monitor any proposal relating to research which involves people (whether student members of the class, University staff, or others) as the subject of experiments.
- (f) To ensure that all research conducted by members of the faculty conforms to ethical principles and to known safety procedures.
- (g) To ensure that teaching groups which regularly carry on teaching and research of the kind referred to above operate ethical review procedures which are acceptable to the Committee.
- (h) To delegate authority to sub-committees to approve research proposals
- (i). To authorize research to proceed
- (j). Require clarification or modification of parts of a research submission
- (k). To authorize significant deviations from any approved research proposal
- (l). To defer consideration of a proposal
- (m) To reject a research proposal as a whole or in part
- (n). To revoke approval of research if dissatisfied with the conduct of the research
- (o). To refer students or staff under the University's research misconduct or disciplinary procedures
- (p). To report annually to the University Research and Development Board

(q). To maintain records on all activities and decisions of the Committee.

The committee would give reasons for its decisions and might call for reports on the conduct of research during the project and on completion. The committee would also review significant deviations from an approved project proposal. Faculties should ensure that any applicants for project approval by an ethics committee, and in the case of students, their supervisors, should not take part in decisions on their applications. Where research is being conducted by members of staff or students in more than one faculty in the University, the research need undergo ethics review in only one faculty. Any decision should be communicated by the researcher to all faculties involved. Where research is being conducted by members of staff or students in more than one institution, the research should gain formal ethics approval in one of them. The decision on which is the most appropriate should take into account the location of principal investigator and the formal ethics review structures in place in each institution. However if ethics approval is given by another institution, this does not remove the responsibility of researchers to comply with the University's ethics policies and to provide their faculty with the outcome of the approval, and the research proposal should receive sufficient scrutiny by the faculty ethics committee to ensure that this is the case.

#### 7. Membership & Quorum of the Research Ethics Committee

Anyone to be appointed into the research ethics committee in AE-FUNAI shall have the qualifications and experience to review and evaluate the science, health/socioeconomic aspects and ethics of the proposed research. Experienced academics from the level of Lecturer I are eligible to be appointed. Sixty percent (60%) of the members shall constitute a quorum. The research ethics committee shall ensure that it is adequately informed on all aspects of a research protocol, including its scientific and statistical validity, that are relevant to deciding whether the protocol is both acceptable on ethical grounds and conforms to the principles of this document.

## 8. Working Procedures of the Committee

- a. The ethics committee may approve, require amendment to, or reject a research proposal on ethical grounds.
  
- b. The ethics committee shall record decisions in writing and should include reasons for rejection. In considering a research protocol, the research ethics committee may seek assistance from experts, but the committee must be satisfied that such experts have no conflicts of interest in relation to the research project under consideration.
  
- c. The research ethics committee shall ensure that no member of the committee adjudicates on research in which that member has any conflict of interest in relation to the research project under consideration.
  
- d. A researcher must disclose to the research ethics committee the amount and sources, or potential sources, of funding for the research and must declare any affiliation or financial interest when proposing and when reporting the research.
  
- e. A research proposal must include a statement of the ethical considerations involved in the proposed research.
  
- f. The ethics committee must be satisfied that the research protocol gives adequate consideration to participants' welfare, rights, beliefs, perceptions, customs and cultural heritage.
  
- g. The Research ethics committee shall ensure that members receive initial and continued education in research ethics and science, and are kept aware of current issues and developments in the broad area of ethics and science

## 9. Recording of Decisions

The research ethics committee shall maintain a record of all research protocols received and reviewed including the following:

1. Name of responsible institution or organization;
2. Project identification number;
3. Principal investigator;
4. Title of the project;
5. Date of ethical approval or non-approval;
6. Approval or non-approval of changes to the protocol;
7. Approval or non-approval of changes to the information sheets and informed-consent forms;
8. Approval or non-approval of changes to advertising materials, letters and notices;
9. Complaints from researchers whose protocols were not approved;
10. The terms and conditions of approval of any protocol;
11. Whether approval was by expedited review;
12. Whether the opinion of another ethics committee was considered;
13. Action taken by the ethics committee to monitor the conduct of the research.

## 10. Suspension or Discontinuation of Research

Where the research ethics committee is satisfied that such circumstances have arisen that a research project is not being conducted in accordance with the approved protocol and that, as a result, the welfare and rights of participants are not or will not be protected, the research ethics committee may withdraw approval. The research ethics committee shall also inform the researcher and the institution or organization of its action, and shall recommend that the research project be discontinued or suspended, or that other appropriate steps be taken. Where ethical approval has been withdrawn, a researcher must discontinue the research and comply with any special conditions required by the ethics committee.

#### 11. Types of research to be assessed

Virtually all research will have ethical implications however there are some areas of research where the ethical implications will be particularly important. The following is not an exhaustive list, however some examples of such areas of research are: where it involves human subjects (particularly children and vulnerable adults); where it uses human data or human material; where there are serious health and safety implications; where animal experiments are involved; where there is a risk of damage to the environment; where the impact of the research may be emotionally damaging; where the research is politically or socially sensitive; where the source of funding for the research has the potential to compromise the University's position.

#### 12. Conflict of Interest

A researcher must disclose the sources and extent of funding to the research participants, the ethics committee and, where appropriate, to the regulatory authority. Commercial affiliations or financial interests at the time of proposing and reporting the research must also be disclosed.

#### 13. Safety Monitoring

Safety monitoring of research activities is imperative, particularly in a clinical trial. This involves the prompt reporting of serious adverse events, including post-study events. It is the researcher's responsibility to ensure that adequate provisions are made to deal with any adverse event. The processes for this should be outlined in the research protocol.

#### 14. Whistle blowing and complaints

a. Anyone suspecting misconduct on the part of a researcher has an obligation to report this in accordance with the procedures described in the following "Witness Protection Programme (Establishment etc), SB 157 (2015). Such 'whistleblowers' must not investigate or take action on their own account but must observe appropriate procedures.

b. No one reporting such suspicions shall suffer any disadvantage or action for doing so. The Public Interest Disclosure Act 1998 provides protection for the whistle blower against subsequent victimization by an employer. This protection does not extend to malicious acts of whistleblowing. The University is wholly committed to the protection of all bona fide whistle blowers whatever their status and will regard any subsequent victimization as a disciplinary offence.

c. Where there is a genuine concern about disclosing their own identity, a confidential approach may be made directly to the Dean of Research and Innovation, who will then consider whether to refer the case on through the normal procedures. Where allegations concern or involve the Director of Research, an approach may be made to the Vice-Chancellor for consideration. Allegations raised anonymously will be considered only at the discretion of the Vice-Chancellor.

## 15. Research Misconduct

Research misconduct includes the following, whether deliberate, reckless or negligent:

- a. failure to obtain appropriate permission to conduct research
- b. deception in relation to research proposals
- c. unethical behaviour in the conduct of research (the University's policy Ethical Principles for Research Involving Human Participants applies but other ethical issues may also be involved)
- d. unauthorised use of information which was acquired confidentially
- e. deviation from good research practice, where this results in unreasonable risk of harm to humans, other animals or the environment
- f. fabrication, falsification or corruption of research data
- g. distortion of research outcomes, by distortion or omission of data that do not fit expected results
- h. dishonest misinterpretation of results
- i. publication of data known or believed to be false or misleading
- j. plagiarism, or dishonest use of unacknowledged sources

- k. misquotation or misrepresentation of other authors
- l. inappropriate attribution of authorship
- m. fraud or other misuse of research funds or research equipment
- n. attempting, planning or conspiring to be involved in research misconduct
- o. inciting others to be involved in research misconduct
- p. collusion in or concealment of research misconduct by others
- q. failure to comply with relevant legislation, including that relating to health and safety, data protection, intellectual property and animal experimentation.

The above list is not exhaustive and other misconduct specifically related to research activity may be dealt with under this procedure.

#### 16. Procedure for Addressing Cases of Suspected Misconduct

- i. Research misconduct cannot be tolerated and will be firmly dealt with when found to exist.
- ii. The University has a responsibility to investigate allegations of research misconduct fully and expeditiously. It also has a responsibility to protect researchers from malicious, mischievous, or frivolous allegations.
- iii. Charges of research misconduct shall be promptly reviewed and a copy of this policy shall be made available to the complainant. Allegations must be made in writing, and signed and dated by the complainant. If health or safety is involved, prompt remedial action shall be taken.
- iv. Every effort shall be made to protect the rights and the reputations of everyone involved, including the individual who in good faith alleges perceived misconduct as well as the alleged violator(s). A good faith allegation is made with the honest belief that research misconduct may have occurred. Persons making a good faith allegation shall be protected against retaliation. However, persons making allegations in bad faith will be subject to disciplinary action, up to and including termination or expulsion. An

allegation is made in bad faith if the complainant knows that it is false or makes the allegation with reckless disregard for or wilful ignorance of facts that would disprove it.

v. All members of the university community are expected to cooperate with committees conducting inquiries or investigations.

vi. Care will be exercised at all times to ensure confidentiality to the maximum extent possible and to protect the privacy of persons involved in the research under inquiry or investigation. The privacy of those who report misconduct in good faith will also be protected to the maximum extent possible. Files involved in an inquiry or investigation shall be kept secure and applicable state and federal law shall be followed regarding confidentiality of personnel records.

vii. All cases of research misconduct shall be referred first to the Faculty Research Ethics Committee. The Committee shall investigate the allegations and make recommendations to the University Research and Development Board for appropriate action.

viii. Anyone who has good reason to suspect misconduct should report it in confidence as appropriate to their Head of Department/School/Graduate School, Faculty Dean or the Director of Research. Those who raise concerns in good faith will not be penalized in any way for doing so. The safeguards for individuals raising genuine concerns are detailed in the University's Public Interest Disclosure Procedure. Allegations should normally be made in writing, accompanied by any available supporting evidence. All allegations will be dealt with under the appropriate Plymouth University procedure (staff or student).

ix. In cases where an allegation implicates someone who is not subject to the University's procedures, the Vice-Chancellor shall bring the matter to the attention of their employer or any other appropriate body.

x. Where the research is funded in whole or part by an outside grant, the Vice-Chancellor shall have regard to the guidance issued by the relevant funding body. The

Vice-Chancellor shall ensure that any such body is given appropriate and timely information as to the instigation and progress of an investigation and any referral under disciplinary regulations.

xi. In the event of a finding of misconduct, where the person responsible is subject to the regulation of a professional body such as the Nigerian Medical Association or COREN the Vice-Chancellor shall consider whether it is appropriate to inform the professional body of any finding.

xii. Where the person responsible has published research, especially research to which the misconduct relates, the Vice-Chancellor shall consider whether it is appropriate to inform journal editors or others of any finding.

xiii. If an allegation has been made publicly, the Vice-Chancellor shall consider whether it is appropriate to make public the outcome of its investigation into the matter.

xiv. If at any stage an allegation is found to have been malicious or mischievous in nature, the matter may result in disciplinary action being taken against those making the allegation.

## 17. Research Termination & Dissemination

### a. Completion of Research Projects

The University maintains that every research project that has commenced in FUNAI whether funded or not must be completed within the stipulated time for the research. The University will not tolerate the abandonment of research project especially funded projects. The Principal Investigator of all projects must ensure that this directive is complied with. If for any reason a project faces the challenges of possible abandonment apart from ethical issues, the Principal Investigator must inform the University Research & Development Board through the Directorate of Research. The Board is then expected to take appropriate action.

## b. Dissemination of Research Findings

Researchers are expected to publish/exhibit the findings of their research with full responsibility and with an awareness of the consequences of any such dissemination in the public realm. The University works to ensure that research sponsors understand that researchers must have academic freedom and that sponsors should not discourage publication or dissemination of research and research findings. Every effort must be made to inform sponsors ahead of any potential publication or dissemination of the research findings. This will allow sponsors adequate time and accurate information to protect any arising intellectual property or to plan their own public relations together with the University, especially since media publicity is increasingly important to industry, civil society organizations and the University itself. Researchers should make every effort to ensure that their research or research findings are peer reviewed before it is published, publicized or disseminated. If research is placed in the public realm before any peer review has been undertaken, this must be made clear by the researcher. Researchers should acknowledge all fellow research collaborators and all sources of funding openly in any publication or publicity.

## References

1. Ebonyi State University Research Policy.
2. Plymouth University Research Ethics Policy
3. Heriot-Watt University Research Ethics Policy

# Chapter 6

## Financial Management in Research

### 6.1 Award of research Grants

As soon as the PI receives the letter of award, he/she is required to complete the following procedures:

1. In the case of University Research Grants, e.g. TETFund Institution Based Research Grants, the PI should write application to the Vice Chancellor through the Director of Research & Development for the release of the first installment of the Grant. The following documents should be attached to the application:
  - i) Letter of Award
  - ii) Letter of Ethical clearance
  - iii) Work plan/project time table for the first phase
  - iv) Budget table showing the three instalments and their percentages  
e.g. (1<sup>st</sup> phase (40%), 2<sup>nd</sup> phase (40%), 3<sup>rd</sup> phase (20%))
2. In the case of external research grant award, the PI should inform the Vice-chancellor and University Research and Development board through the Directorate of Research & Development and identify any special implications that the award may have on the University. The letter should be accompanied with the award notice, abridged version of the proposal, approved budget and any special guidelines and other relevant information concerning the award.

In the event of securing external research grant by staff of the University, the grant would be transferred into a designated AE-FUNAI account to be provided by the university bursar depending on the currency<sup>1</sup>. A unique budget code and an accounting officer shall be assigned to the project. The accounting officer shall be responsible for keeping financial records of

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<sup>1</sup>Prevailing exchange rate will be applied or as may be agreed with grantor.

the project and will undertake account reconciliation using the cash book and bank statement (cheques not credited and cheques not presented will be considered). The frequency of account reconciliation shall be on monthly basis. The reconciliation report shall be submitted to the Director of Research and University Bursar.

A formal written agreement (i.e. a grant contract, or cooperative agreement) would be entered by AE-FUNAI and the sponsor and generally contains the following financial accountability elements:

- i) An agreement that binds the university to a specified project plan with "start" and "stop" dates;
- ii) A project schedule and a line-item budget, both of which are essential to financial accountability;
- iii) A requirement to return any unexpended funds at the end of the project funding period or as described in the binding agreement;
- iv) Regular financial reporting and audit;
- v) The university's full negotiated Facilities and Administrative (F & A) indirect cost rate, unless a waiver of those costs have been approved; and
- vi) Terms and conditions for the disposition of tangible properties (e.g., equipment, records, specified technical reports, theses or dissertations or intangible properties (e.g., rights in data, copyrights, inventions).

## 6.2 Responsibilities of Principal Investigators

- PIs are overall accountable and responsible for:
- The research funding awarded to them

- Delivering the research outcomes in a timely manner while ensuring that funding received is expended as per the grant rules and conditions
- Achieving and maintaining a financially sustainable position for the University
- Promptly informing the DRD with regard to variation of research deliverables
- Providing timely notification on achievement of milestone deliverables to enable prompt recovery of research funding (invoicing)
- Monitoring the status of shared funding funds sent to other institutions (for compliance with funding rules and reporting to Sponsors)

### 6.3 Researcher Accountabilities

The Principal Investigator (PI) is the lead researcher who is responsible for carrying out research activities. The Account Holder is the individual under whose name or title the research project is held. The Account Holder is most often the Principal Investigator; however, there are instances where a Department Chair or Dean is the Account Holder. The Account Holder responsibilities apply regardless of the role within the research project. As funds are awarded, the Account Holder assumes responsibility for using the funds for the purpose for which they were awarded and for complying with the guidelines and policies of the sponsor and the University. The Account Holder shall access the fund using the unique budget code. It is also important that the PI understands the allowable expenses that can be charged to a research project based on the budget, funding source and program.

#### 6.2.1 PI Authorization

Account Holders/Principal Investigators are the primary signing authority on research projects and they must approve all expenditures that are applied to their research projects. Proof of authorization and related supporting documentation must be retained for audit purposes.

### 6.3 Research Budgeting and Financing

Research budgeting and financing are very crucial to every funded project in AE-FUNAI be it from the University Research Grants or External Research Grants, consequently, every expenditure must be properly accounted for AE-FUNAI may decide to proceed with a contract if it can be demonstrated that the work fits the research, education, and public service mission of the university, and if the work will advance the research, creative or scholarly activities of the faculty, staff and students who will undertake it. If it proceeds, then the university must fully recover its costs (direct costs plus indirect costs) in performing the services, and it can neither set out to generate a profit nor be in a deficit when the project ends. For audit purposes, the university PI must document all expenditures to show they comply with the terms and conditions of the award, ensure that all costs are fully expensed to the sponsor, provide evidence that all personnel costs reflect actual effort, and carefully handle any residual funds. In proposing budgets for External Research Grants, the PI must ensure that AE-FUNAI and the potential sponsor of the project are represented as accurately as possible with regard to all financial matters. The following are important policy issues that must be considered:

- i) **Commitment of University Resources:** Sponsored awards are made to the university. To accept awards, the university must legally commit itself to the conditions of the award document and the provision of the resources necessary to fulfil the award. The Vice Chancellor or Chairman of the University Research Development Board is the official authorized to approve grants documents, contracts and inter-governmental agreements
- ii) **Allowability:** Proposals should not include expenses which the sponsor has identified as unallowable. Similarly, expenses which are to be considered as indirect expenses (e.g., certain types of office supplies and clerical salaries) may not be proposed and budgeted as direct expenses.
- iii) **Commitment to Effort:** Proposals should accurately represent the amount of time that key personnel are committing to the project. In preparing

proposals, PIs must be cautious to not over commit themselves or others. Effort to the project must take into account the time required for teaching and other academic and administrative duties of staff.

- iv) Cost Sharing: Cost sharing is the contribution made by the university to the total sponsored project cost. Two types of cost sharing may occur in a grant: a) Mandatory cost sharing required by the sponsor as a condition to obtaining an award; and  
b) Committed cost sharing, which is an agreement by the university to use some of its own resources for related research, but not required by the sponsoring agency.
- v) Travels: If not specified otherwise in the agreement with grantor, travel costs shall be based on the University approved rates as specified in the Condition of Service and Federal Government Civil Service Rules.

Note: The AE-FUNAI will not hesitate to recommend to the University the cancellation and full recovery of the released grant and even stiffer sanctions in the event of violation of the grant contract terms.

## References

1. Ebonyi State University Research Policy and Framework, 2013
2. UNWS Sydney <https://www.fin.unsw.edu.au/roles-involved-research-financial-management>
3. University of Queensland. <https://www.fbs.uq.edu.au/contractandgrant>

## Chapter 7

# Conflicts of Interests

### 1. Introduction

AE-FUNAI encourages its faculty, staff, and students to participate in research activities and to do so with the highest ethical standards. Here at AE-FUNAI (and indeed globally) an institutional conflict of interest refers to a situation in which the financial interests of AE-FUNAI or an official of AE-FUNAI, acting within their authority on behalf of AE-FUNAI, may directly or remotely affect, or appear to so affect, the research, teaching and learning, business interests and transactions, or other activities of AE-FUNAI. Such situations often create the likelihood for inappropriate influence over an institution's activities. Owing to the fact that AE-FUNAI needs to continually balance many competing pressures, this policy is set forth with a view to protecting AE-FUNAI and her staff against exposure to risks related to conflicts of interest in the course of performing research at or under the auspices of AE-FUNAI. This is very important as AE-FUNAI necessarily needs to have relationships with sponsors (individual and corporate), and engage with university-industry relationships which are critical to research, development and innovation, engagements which often have financial and economic implications. Such relationships with internal and external agents and agencies or individuals cannot be allowed to compromise, or appear to compromise, the integrity of AE-FUNAI's research, education and community outreach goals.

### 2. Definitions

#### Investigator

Investigator refers to all those who are responsible for engaging in research design, conduct, and reporting. They must be free from bias resulting from conflicts of interest. Investigators have an obligation to undergo the AE-FUNAI conflict of interest training and must comply with the conditions of conflict of interest management plans, if applicable.

## Supervisor/Administrator

This refers to a member of the research team who is responsible for leading the team – the principal investigator. The official takes responsibility for the research, its design, execution, reporting, and all other matters related to it, including financial matters associated with the research.

## Institutional Conflict of Interest (COI) in Research:

An Institutional COI in Research may occur whenever the financial interests of AE-FUNAI, or of an official of AE-FUNAI who has authority to act on her behalf, might affect—or reasonably appear to affect—institutional processes for the design, conduct, reporting, review, or oversight of research.

## Significant Financial Interest:

This includes an external financial interest [in the form of payments, honoraria, royalties (even through the institution), equity, gifts, gratifications, etc.] of an Investigator (and those of the Investigator's immediate family members) related to their work at AE-FUNAI. This is especially so when the annual value of the financial interest is in excess of the officer's monthly salary and comes from a single Entity.

## Significant Financial Interests do NOT include:

- (1) Salary, royalties or other remuneration paid by AE-FUNAI to an Investigator if the Investigator is currently employed or otherwise appointed by the University;
- (2) Intellectual property rights assigned to AE-FUNAI and agreements to share in royalties accruing therefrom;
- (3) Equity interests through investment vehicles, such as mutual funds and retirement accounts, as long as the Investigator does not directly control the investment decisions made in these vehicles;
- (4) Income from approved seminars, lectures or teaching engagements sponsored by a federal, state or local government agency, a qualifying institution of higher education, an academic teaching hospital, a medical centre or a research institute that is affiliated with a qualifying institution of higher education;
- (5) Income from service on advisory committees or review panels for a federal, state or local government agency, a qualifying institution of higher education, an academic

teaching hospital, a medical centre or a research institute that is affiliated with a qualifying institution of higher education; or

(6) Sponsored or reimbursed travel sponsored or paid by a federal, state or local government agency, a qualifying institution of higher education, an academic teaching hospital, a medical centre or a research institute that is affiliated with a qualifying institution of higher education.

Covered Officials:

This Policy applies to the Governing Council, Vice Chancellor, Deputy Vice Chancellor, Provosts, Directors, Deans, and any other institutional administrators/functionaries, especially those saddled with research oversight functions, at AE-FUNAI.

### 3. Establishment of a Conflict of Interest Committee

In order to review and manage Conflict of Interest, a 7-member committee will be established by the Vice-Chancellor in consultation with the Director of Research. The Committee shall include senior AE-FUNAI staff drawn from diverse backgrounds and representing the research scope of AE-FUNAI. A member of the legal unit will be a non-voting participant. There must be on the Committee, people of different sexes.

The Committee is charged with:

- 1) evaluating Investigator Financial Interest reports related to specific research proposals
- 2) determining whether Financial Interests rise to the level of Significant Financial Interests that could directly and significantly affect, or could appear to affect, the design, conduct, or reporting for the research
- 3) developing a resolution, including a management plan, as appropriate, and
- 4) monitoring compliance.

The Conflict of Interest Committee shall ensure that Investigators submit an annual conflict of interest form at the beginning of every new session, even if there are no changes in the previous disclosures. Investigators however have a responsibility to declare any conflict of interest within 30 days of its arising, and in any case before

beginning any new research. The Committee must review cases within 30 days of their report and make their verdict known to affect parties promptly thereafter.

#### 4. Appeals for Conflict of Interests Determination

An appeal of a determination made by the Conflict of Interest Committee can be made directly to the Vice Chancellor by the conflicted Investigator. The Investigator must notify the Vice Chancellor of their appeal within 5 days of receiving notice of determination by the Committee. The Vice Chancellor will form an ad hoc Appeal Panel comprised of the Chairperson of the Conflict of Interest Committee (who should not Chair the panel) and three other senior faculty who will have 30 days to review the relevant materials. The Appeal Panel's recommendation is made to the Vice Chancellor and there shall be no further appeal within the University. That is, the Appeal Panel will hold final authority regarding questions of Institutional Conflict of Interest.

#### 5. Training

All AE-FUNAI Investigators involved in research funded by the University or other sponsors subject must complete conflict of interest training before engaging in research in AE-FUNAI. The training should be done again every four years following the previous one. AE-FUNAI may demand for training more frequently if there is a substantive conflict of interest Policy change or specific instances of noncompliance.

#### 6. Identification of Potential Institutional Conflicts of Interest

Significant financial interests on the part of covered officials responsible for the oversight of research should always be investigated. These include situations when an investigator, research administrator, or any other AE-FUNAI official with research oversight authority participates materially in any procurement process with a company sponsoring research at FUNAI, or whose product is being studied or tested in AE-FUNAI. Additionally, any financial relationships with research sponsors should warrant formal scrutiny, depending on the circumstances. In general, AE-FUNAI should assess the potential for conflict of interest and weigh the magnitude of any risk to the research's integrity and the overall objectives of the institution. In applying these principles, care must be taken not to preclude FUNAI from accepting philanthropy from companies that sponsor research, or those that seek to have their products studied and

validated. Rather, the policy should serve to ensure that conflicts of interests are identified, examined, and managed with a view to securing disclosures, and mitigating any actual or apparent conflicts of interest that may result.

## 7. Principles for the Management of Potential Conflicts of Interest

The reasons to manage COIs include:

- 1) To uphold and preserve the highest possible research standards;
- 2) To comply with all applicable national and local regulations;
- 3) To maintain the objectives of AE-FUNAI's mission and vision;
- 4) To protect the name and image of AE-FUNAI, its faculty and staff.

Therefore, the following principles will be applied in the management of potential COI:

A. When AE-FUNAI as an Institution has a significant financial interest:

i. Human Subjects Research: Human subjects' research should not be carried out at AE-FUNAI when and if AE-FUNAI has a significant financial COI. If however due to the particular competence of AE-FUNAI faculty, or owing to the availability of state-of-the-arts resources, a deliberate formal management plan must be put in place before the research may be performed at AE-FUNAI. Such a management plan will include, without being limited to, the establishment of an oversight board for the project, comprised of external members.

ii. Non-Human Subjects Research: The safety of subjects is often not an issue in the case of non-human subjects research. Therefore the protection of the integrity of the University's research and educational missions is the primary focus here. If a decision is made by the Conflict of Interest Committee that the potential value of a line of research exceeds the potential risks related to COI, the research should go on. Some form of oversight shall nonetheless be required to ensure that declarations are made and boundaries respected. The level of oversight should normally be proportional to the risk to FUNAI's mission and vision.

B. When an individual with supervisory/oversight responsibility has a COI :

i. Human Subjects Research: In this situation, the Conflict of Interest Committee should review the individual's role in relation to the research and to the researchers, the

nature of their COI, and the impact it could have. Based on their assessment, if the COI is significant, an appropriately objective supervisor or administrator shall be assigned to oversee the research for AE-FUNAI (after due consultations with appropriate Deans and senior Professors in the affected Faculty of Faculties). Otherwise, an independent competent Investigator shall be required to assess the integrity and authenticity of the data generated from the research.

ii. Non-Human Subjects Research: In this type of circumstance, the conflicted administrator should voluntarily recuse themselves. The Conflict of Interest Committee should review the case and assign an appropriate administrator (after due consultations with appropriate Deans and senior Professors in the affected Faculty or Faculties). The Committee should ensure that no bias will be introduced that could negatively affect the research, the researchers, or any students working on the research project.

## 8. Noncompliance

The following shall constitute noncompliance with this Policy:

- a) Failure to submit a timely disclosure;
- b) Submission of an incomplete, erroneous or misleading initial, updated or annual disclosure;
- c) Failure to disclose information as required by this Policy; or
- d) Failure to comply with prescribed management plans.

Any of the above instances of Investigator noncompliance shall warrant that the Investigator repeats the AE-FUNAI conflict of interest training at a fee to be determined by the Conflict of Interest Committee. Additional disciplinary action may be applied in line with the Conditions of Service, and other relevant policies. In severe cases of deliberate noncompliance, the Committee may impose restrictions on proposing and engaging in research and/or an internal review of research on the Investigator in AE-FUNAI.

## 9. Confidentiality

Access to information collected in connection with this Policy shall be restricted to only AE-FUNAI officials who need to know in order to perform their official duties.

## CHAPTER 8

### Research Project Proposals and Project Management

This section summarizes the AE-FUNAI policy and procedures with respect to the preparation, review, and submission of proposals for external sponsorship.

#### APPLICABILITY

AE-FUNAI depends to a large extent on external sources to support programmes of research, instruction, and scholarship. Due to the growing complexity of conditions attached to sponsored projects, plus a trend toward greater diversity in sources of support, this policy will apply to the preparation, review, and submission of proposals for external sponsorship.

This policy applies to all proposals for work to be carried out in AE-FUNAI academic departments, laboratories, administrative units, and at FMC. In addition, the terms of this policy also apply to proposals which commit AE-FUNAI resources for projects to be performed off-campus, including affiliated institutions.

#### SUBMITTING PROPOSALS

The Directorate of Research and Development (DRD) and the Senate Research Grants Committee (SRGC) are responsible for submitting proposals and accepting awards on behalf of AE-FUNAI. The DRD and the SRGC can grant various levels of signature authority to others to submit proposals and/or accept awards, as appropriate. Sponsored project proposals must be submitted and awards accepted only by individuals authorized to sign the necessary documents. Questions in this regard may be directed to DRD or SRGC staff.

The SRGC requires sufficient time to undertake review of the proposal in consonance with established guidelines on sponsored research within the University. Also, proposals are to be submitted with complete application documents and components or

requirements to the DRD or SRGC through the approved channels (either via electronic systems [FURA] or/and manual submission) at least five working days in advance of the sponsor's deadline. Proposals that do not follow approved channels and deadlines will be rejected.

#### PROPOSALS INVOLVING POLICY EXCEPTIONS

Proposals which involve any exception to University policy, e.g., requests for PI exceptions or Facilities and Administrative (F&A), i.e., indirect cost waivers, are subject to the approval of the appropriate authorities, and, in some cases, the approval of the Office of the Director of RD. Such approvals should be sought as soon as practical, and must be received prior to submission of the proposal to DRD or SRGC.

#### BUDGET JUSTIFICATIONS

The primary purpose of a justification is to provide support for the funds requested to ensure adequate funding. Experience has shown that including budget justifications in the proposal increases the likelihood that the sponsor will award the cost.

Budget justifications will be included in sponsored project proposal budgets for costs normally treated as Facilities and Administrative (F&A) costs that are proposed as direct costs, except when not required by the sponsor. This requirement includes proposed direct costs for equipment, operations and maintenance, and administrative salaries. Particular care must be given to the federal requirement that costs incurred for the same purpose in like circumstances shall be treated consistently as either a direct cost or an F&A cost.  The following are key elements that are to be included in budget justifications:

- a description of the expense or service
- how it relates to and benefits the project
- the anticipated cost

- the time-period in which it will be utilized
- any other information that will aid the sponsor in evaluating and funding the proposed item of cost

For administrative charging to federal sponsors only: describe how the administrative role is integral, i.e., essential, vital or fundamental, to the project.

Some sponsors provide re-budgeting authority that would allow a PI, after an award is received and the project is in progress, to re-budget awarded dollars within the project scope.

If, during the course of the project the PI becomes aware of other expenditure needs that were not included in the proposed budget, re-budgeting within the sponsor's provisions is permitted. This includes equipment, operations and maintenance, or administrative costs that are normally treated as F&A costs. Of course, all other provisions of Stanford and sponsor policy for acceptability of the costs as a direct charge must be met. 

When costs are explicitly listed and justified in the sponsor accepted budget, grant/contract administrators, auditors, and sponsoring agencies can easily understand the nature of the costs and their allowability under the regulations.

#### STUDENT-INITIATED RESEARCH

In the circumstances where a student has initiated a research project, a proposal will normally need to be submitted with a faculty member as PI. The provisions for rare exceptions to the policy on PI eligibility are applicable.

#### SUCCESSFUL APPLICATION REPOSITORY

AE-FUNAI is currently in the process of establishing an online repository of successful research funding applications from academics at AE-FUNAI. This repository is only

available to staff and students at AE-FUNAI (login required). If you would like to submit your own application for inclusion, or if you have any questions about the repository, then please contact the office of the Director of Research and Development.

## QUALITY ASSURANCE

Researchers in AE-FUNAI are to note that research funding is highly competitive and funders often receive more highquality proposals than they are able to support. Therefore, it is advisable to devote quality time to writing and submitting proposals.

There is a growing level of pressure from funders/sponsors on research organisations to manage the numbers of applications submitted and to improve quality control. AE-FUNAI has a peer review process to help ensure the quality of proposals submitted which funders encourage. Peer reviewers have a responsibility to ensure that proposals are of high quality, meet the strategic aims of the University and the funder and represent good value for money.

## PROJECT MANAGEMENT

Prospective awardees are expected to prepare an outline for their project from the start date onwards, showing when they expect to conduct periods of fieldwork (if applicable) and the time required for data analysis, experimentation and writing up of results. A chart is preferable.

## RESEARCH MANAGEMENT

Advice and policy in research matters is coordinated through a number of bodies and committees, including the following:

(a) The Senate Research Grants Committee, chaired by the Director of RD on behalf of the Vice Chancellor, is the University's highest research management body.

(b) Postgraduate School and Faculties are required to establish research committees to support the research activities of their staff and postgraduate thesis/dissertation students.

## REFERENCES

Francis Chan , Research Proposal: Project Management Application

<https://embedded.eecs.berkeley.edu/Alumni/fchan/doc/prop.html>

University of Plymouth, Application guidance,

<https://www.plymouth.ac.uk/research/support/funding/guidance>

Stanford University (2017) Research Policies, cited [1/11/17], available online at [www.doresearch.stanford.edu](http://www.doresearch.stanford.edu)

Ahmadu Bello University Research Policy, <https://abu.edu.ng/research-policy.html>

# Chapter 9

## Risk Analysis and Management of Research Projects

### 9.1 Risk Analysis

The principal investigator for any research project must demonstrate evidence that a comprehensive risk analysis has been carried out prior to commencement of the investigation. Risk analysis should take cognizance of aspects and impacts beyond the duration of the research. A subject specific template for risk assessment must be developed by each faculty for guidance. The principal investigator has the ethical duty to exclude participants who might be exposed to significant risk in addition to implementing appropriate mitigation measures where adverse impacts arise.

Researchers must actively consider any risk that their research could potentially generate outcomes which could be misused for harmful purposes. Research which involves potentially harmful agents, or which generates knowledge which might be misused should be identified as a risk. As examples, this might be research which demonstrates how to render a vaccine ineffective, or research which enables weaponization of a biological agent or toxin. Where such risks are predicted, concerned Faculty Research Ethics Committee are required to seek advice from the University Research Committee as to which steps might be taken to minimise such risks.

Health and safety risk assessment shall be carried out using FUNAI checklists on the following

- a) Biological Safety
- b) Chemical Safety
- c) Ionising Radiation Safety
- d) Non-ionising Radiation Safety,

The university's research safety approval procedures shall be followed in all cases. Staff shall receive requisite trainings on risk analysis and management of research projects

## 9.2. Management and Ownership of Research

Prior to commencement of any research, the principal investigator should seek clarification from appropriate Dean of Faculty/Research Coordinator on management and ownership of:

- Data and other intellectual properties from the research; equipment and samples used or created in the course of the research; and any other benefit that may arise.

Researchers are required to seek guidance from their immediate supervisor if clarity is needed on any aspect of such management or ownership. It is generally the case that the University will own the data, samples, equipment and results arising from research in the first instance, though there may be contractual arrangements with third parties which govern the ownership.

Researchers have a responsibility to keep clear and accurate records of the procedures followed and approvals granted during the research process, including records of the interim results obtained as well as of the final research outcomes. This is necessary not only as a means of demonstrating proper research practices, but also in case questions are subsequently asked about either the conduct of the research or the results obtained. The maintenance of accurate records is also important for potential subsequent commercialisation of research.

Data generated in the course of research must be kept securely at the departmental/unit level in paper (e.g. lab book or equivalent) or electronic format, as appropriate and in accordance with good practice in the storage of primary data, record-keeping and ethical issues. Back-up records should always be kept for data stored on a computer (e.g. a duplicate record stored on a separate drive). These guidelines are in place to manage the storage and backup of all electronic data generated through research within individual academic departments. They are also

designed to ensure that researchers fulfil their obligations to funding bodies, for management of research data.

Financial records (documents and data) shall be retained for a period of five years beyond the life span of the project before disposal.

## Chapter 10

### Use of Humans and Animals in Research

Details of the university policy on use of human and animals in research are outlined in a policy document on Human and Animal Research Ethics. The document is available for use as a separate volume, in conjunction with this research policy.

## Chapter 11

# Health and Safety in Research Environments

The Alex Ekwueme Federal University, Ndufu-Alike (AE-FUNAI) is committed to the provision and maintenance of a healthy and safe research environment with a view to enhancing the wellbeing for all its staff and students and all those who use her research facilities. The Vice-Chancellor shall have the ultimate responsibility for ensuring implementation of this Policy. All staff and students nonetheless have a responsibility to promote a healthy and safe research environment. Failure to do so may warrant disciplinary action.

The objectives of this Policy are:

1. to comply with requirements of relevant national legislation and international best practice;
2. to identify significant potentials for harm in research environments, assess risks from activities involving such hazards and manage them;
3. to ensure that all those engaged in research at AE-FUNAI are adequately trained and informed of the relevant identified risks;
4. to ensure that adverse events emanating from research activities are reduced to the barest minimum;
5. to monitor actively the management of risks to health and safety in research environments.

Research Safety Advisory Committee (RSAC)

In order to implement the Health and Safety in Research Environments, clear lines of responsibility at University and Faculty levels are needed. Individual Faculties are required to make arrangements for dealing with the research risks encountered within their peculiar sphere of research activities. The University shall have a Research Safety

Advisory Committee (RSAC) to advise the Vice-Chancellor on research safety issues. The RSAC shall be headed by the Director of Research and Development and shall have five other Professors of different disciplines, and a Chief Technologist, as members. All members shall be appointed by the Vice-Chancellor for a term not exceeding four years. A staff of the Directorate of Research shall serve as Secretary to the RSAC.

Terms of reference for the RSAC are as follows:

1. To formulate and keep under review research health and safety policies;
2. to ensure that this Policy is fully implemented by means of monitoring and evaluation;
3. to receive annual research safety reports from Faculties for evaluation;
4. to receive safety complaints from individuals or groups within the University
5. to receive reports (where necessary) from the relevant statutory authorities outside the University;

#### Faculty Research Safety Officer

At the Faculty levels, each Dean shall appoint a Faculty Board member to be responsible for research safety. Such a member must be a senior academic with requisite research experience and well versed in research safety matters. The duties of such persons should be agreed by the College Board in a written statement of duties and responsibilities, reflective of the essence and spirit of this Policy. The Officer in conjunction with the Dean shall prepare the annual research safety report, present it to the Faculty Board for approval before submission to the RSAC. He shall additionally serve as the eyes of the RSAC in the Faculty.

#### Departmental Research Safety Officer

Each Head of Department shall appoint a Departmental Board member to be responsible for research safety. Such a member must be a senior academic with requisite research experience and well versed in research safety matters. The duties of

such persons should be akin to that of the Faculty Research Safety Officer. The Officer in conjunction with the Head of Department shall ensure that the Health & Safety in Research Environments Policy is implemented in the Department and that the directives of the Vice-Chancellor and RSAC are carried out.

## Chapter 12

# Publication and Intellectual Property

### Preamble

The primary functions of a university are education, research, the expansion of knowledge and the application of that knowledge to advance the common good. It is in the context of advancing the common good that Alex Ekwueme Federal University Ndufu Alike (AE-FUNAI) supports and encourages efforts directed toward bringing the fruits of AE-FUNAI research in diverse fields of knowledge to public use and benefit.

It is the policy of Alex Ekwueme Federal University Ndufu Alike (AE-FUNAI) to publish research results and to foster the use of university inventions, discoveries and other works for the common good. In many cases, publication of research results and other scholarly works will be sufficient to serve this purpose. In other cases, to serve the common good, it will be necessary to secure protection of university intellectual property to encourage commerce and industry to invest their resources to develop and distribute products and processes for public use. AE-FUNAI has established this intellectual property policy (“policy”) for the management of intellectual property to:

- a. Promote, preserve, encourage and aid scientific investigation and research;
- b. Provide an organizational structure and procedures through which inventions and discoveries made in the course of university research may be made readily available to the public through channels of commerce;
- c. Establish standards for determining the rights and obligations of the university, creators of intellectual property (e.g., inventors, developers, authors) and their sponsors with respect to inventions, discoveries and works created at the university;
- d. In its broad discretion and consistent with its overall mission, encourage, assist and reasonably attempt to 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 policy;

- e. Ensure compliance with applicable laws and regulations and enable the university to secure sponsored research funding at all levels of research; and
- f. Enhance the reputation of the university as an academic research institution and 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.

## 2. Application of Policy

This policy applies to faculty, staff (including student employees), graduate students, postdoctoral fellows and nonemployees (including visiting faculty, affiliate and adjunct faculty, industrial personnel, fellows, etc.) who participate in research projects at AE-FUNAI.

### Works Eligible for Patent and Copyright

Any or all of the following works produced or invented in Alex Ekwueme Federal University Ndufu Alike shall be eligible for copyright.

- a) Academic researches
- b) Journal publications
- c) Literary works
- d) Artistic works
- e) Inventions
- f) Cinematography
- g) Musical works, sound recordings and broadcasts.

Provided, always that sufficient effort has been expended on making the work to give it an original character.

Copyright shall be conferred on every eligible work, publication or invention of which the author/inventor or, in case of joint authorship, who at the time of production is governed by the laws of AE-FUNAI and by extension the Laws of the Federal Republic of Nigeria.

#### General Nature of the Copyright Over All Intellectual Properties

Subject to the exceptions specified in the second schedule of the copyright Act I.F.N 2004, copyright in a work shall be the exclusive right to control the doing of any of the following, that is to do and authorize the doing of any of the following.

- a) Reproduce the work or invention in any material form
- b) Publish the work.
- c) Perform the work in public
- d) Produce, reproduce, perform or publish any translation of the work
- e) Make any cinematograph film or a record in respect of the work
- f) Distribute to the public for commercial purposes, copies of the work by way of rental, lease, hire, loan or similar arrangement
- g) Broadcast or communicate the work to the public by loud speaker or any similar device.
- h) Make any adaptation of the work or invention.

#### Dealing with and Creation of Patents

The provisions of the Copyright Act 1988 Cap C28 Laws of the Federation of Nigeria 2004 shall apply to inventions, patents and licensing of all original works of scholars and academics of AE-FUNAI. More specifically:

- a) Researchers, students and visiting scholars- /adjunct and part time are to sign the FUNAI Patent and Copyright Agreement as contained in Appendix 1 and 2 of this instrument before engaging in any research which is intended to be covered and protected by the intellectual property rights of this research policy.

- b) Head of departments or units are responsible for knowing who is working in research facilities under their control, and for ensuring that all such researchers have signed the patent and copyright agreement of the university.
- c) Title to such invention or work commissioned by the university shall be assigned to the university, while royalties shall be shared with the inventors in an approved manner of 60/40 respectively.

### 3. Ownership of Intellectual Property

Consistent with global practice and the provisions of WIPO, the university is expected to own any intellectual property that is made, designed, discovered or created by a member of staff, students, guest researchers etc., in the course of their employment and responsibilities or which makes significant use of the institution's resources (including institution-administered funds, facilities, or equipment) in connection with its development.

However, in the spirit of academic freedom, ownership of intellectual property shall be with the creator/inventor. If intellectual property is created by a faculty or department as a unit, then ownership should be that of the AE-FUNAI. In the event that intellectual property arises from a contract between the University and an outside body, the terms of the contract determines who takes ownership between the two.

The following classes of agreement shall be used for establishing the ownership status of intellectual property in AE-FUNAI:

- a) Participation agreement – which shall bind transactions between AE-FUNAI on one side, and the staff, students and guest lectures/researchers on the other side.
- b) Service agreement – which shall be in evoke in transactions between AE-FUNAI and outside parties.

- c) Material Transfer agreement – which shall cover the transfer of proprietary tangible property (e.g. biological materials) from the industry to the university or from the university to the industry.

- i. Disclosure

It shall be the duty of all the parties in each class of IP agreement to disclose all potentially patentable inventions conceived or first put into practice either entirely or partly in the course of their institution responsibilities, or with more than incidental use of the institution's resources.

As a preliminary step towards obtaining intellectual property right in AE-FUNAI, a researcher shall be obliged to duly fill and submit a disclosure form. The said disclosure form shall cover issues relating to invention title; names of the inventors; description of the invention; sponsorship, if any; design date and date put into practice; publication dates, existing or projected, if any.

- ii. Distribution of Royalties and other Benefits

Where an invention made by a AE-FUNAI staff (using university resources) is patented/copyrighted and commercialized, 100% of the amount arising there from shall be paid into the university account pending when all out-of-pocket expenses (e.g. fees associated with patent filing and copyright registration and any other continuing costs associated with licensing and other commercialization of the intellectual property) associated with protection and exploitation of the patent or copyright have been reimbursed. Thereafter, the net proceeds shall be shared between the university and the inventor/creator as they accrue, in the following order:

- a. First payment – 60% to inventor and 40% to AE-FUNAI
- b. Second payment – 35% to the inventor and 75% to AE-FUNAI
- c. Third payment – 20% to the inventor and 80% to AE-FUNAI
- d. From fourth payment – 10% to the inventor and 90% to AE-FUNAI

### iii. Rights and Obligations of Creators and the University

The University's policy on intellectual property should be viewed in the context of other University policies that define the rights and obligations of its faculty, staff and students, and especially policies that deal with aspects of research and other creative professional activity.

a) Ownership of pedagogical, scholarly, or artistic works including that of students, created in the course of their study or education, such as dissertations, papers and articles shall remain with the creator. However, if the work was commissioned and funded by the university for pursuit of a special project, or makes significant use of university resources and, or personnel, or is a work-for-hire, or is otherwise subject to contractual obligation, the copyright shall be vested in the university, as hereinabove stated in 4(d) of this present.

b) Videotapes, CD-ROMS and related ICT materials developed under the university sponsorship are properties of the university. Courses taught and developed for teaching at AE-FUNAI are properties of the University and may not be further distributed without the permission from appropriate unit of the university.

c) Ownership of a creation or invention developed during an internship or research project performed as part of a relationship/linkage with an outside entity should reflect the relative roles and contributions of the students, the outside entity and AE-FUNAI to the creation of the work or the development of the invention.

d) Scholars and visitors who make more than incidental use of AE-FUNAI'S research facilities and equipment shall disclose inventions created here in AE-FUNAI, and AE-FUNAI shall share ownership of such inventions with the visitor or his commissioner, or otherwise manage the intellectual property in a mutually agreed manner.

e) Copyrightable works that are subject to sponsored research agreements or other contractual obligations of the university shall be owned by the university, so that the university may satisfy its contractual obligation.

#### 4. Sensitive Research and Conflict of Commitment

The university reserves the right to know about all research activities undertaken by students and persons working under its aegis.

The onus is on those carrying out the research at, or under the umbrella of the university, to draw the attention of the university's research committee to every case of potential conflict with the university's philosophy. Where in the opinion of the chairman it may be inappropriate for the proposed research undertaken, clarification should be sought and obtained from the university Research and Development Board.

#### Copyright Notices and Trade Marks

a) The following notice should be placed on university owned materials in order to protect the copyright.

Copyright@ [year] Alex Ekwueme Federal University Ndufu Alike Ebonyi State, Nigeria. All Rights Reserved.

The name and address if the relevant unit, department or faculty where the work was done may be listed below the copyright seal just for enquiry purposes.

b) Trade or service marks relating to goods or service distributed by the University shall be owned by the university.

c) Proprietary information arising out of university work (e.g. actual and proposed terms of research agreements, financial arrangement or confidential business information) shall be owned by the university.

## Re-Conveyance of Copyright.

The copyright assigned to the University as a result of any provision of this policy may on application by the creator be reconvened. The creator of the intellectual property may make an application to the Vice chancellor through the University Research committee that ownership be reconvened back to him. The application can be granted if it receives the support of the university Research committee; provided always that:

- a) it does not violate any legal obligation
- b) it does not stop the University from using the material while in need if granted
- c) it does not create a real or potential conflict with university vision, mission and philosophy.
- d) it will not be un reasonable to recovery to a creator who had immensely contributed in creating the intellectual property.

## Administrative Structure:

The AE-AEFUNAI-IPTTO shall exist as an office under Directorate of Research. Administratively, the activities/operation of the Office, as provided above, shall be broadly executed under three units. Namely,

- Technology Transfer Unit – charged with the responsibility of undertaking patent searches to assess the novelty of innovations, paying the cost of processing patent applications and taking care of the marketing of the invention and its commercialization, as well as the negotiation of the licenses and royalties.
- Intellectual Property Management Unit (IPMU) to provide services such as identification, evaluation and assessment of the novelty of the inventions/creations as well as filing of patent applications to obtain patent grants from industrial property office in Nigeria and abroad.
- Marketing Unit (MU): the commercial side of IPR management, i.e. the licensing operations and the acquisitions of R & D contracts, consultancy agreements and joint venture participants, are management services and issues this unit is responsible for. The MU in addition to finding markets for potential IPRs, will also

be responsible for negotiation and drafting of technology transfer agreements between the University and respective transferees, e.g. industries, government institutions, etc.

### Mandate

The AE-FUNAI-IPTTO shall aim to be one of the foremost IPTTO centres in Nigeria with an excellent platform for promoting research, innovations and inventions, facilitating and promoting intellectual property rights, and ensuring speedy technology transfers to public- and private-sector end-users.

The philosophy of the centre shall be in line with that envisaged by the World Intellectual Property Organisation (WIPO), which is summarised in the following words:

- i. Most universities and R&D institutions in developing countries are now entering a stage where they will be expected to interact more with industry as well as governmental and nongovernmental organizations, in terms of consultancy, research contracts and commercialization of inventions, innovations and research findings. Collaboration between universities and industry or other bodies is not a new phenomenon. What perhaps will be new is the increased reliance of universities and R&D institutions on industry as a source of income.
- ii. AE-FUNAI-IPTTO shall focus on providing the enabling environment for the University to use intellectual property system as a source of technology information, a source of generating wealth and income to support research activities, and as a medium for promoting interaction and strengthening closer ties between the University and industries/private entrepreneurs.

### Duties of the AE-FUNAI -IPTTO

The responsibilities of the centre shall be specifically be:

- i. To protect the traditional rights of scholars to control the products of their scholarly work;

- ii. To establish standards for determining the rights and obligations of the University, the creators of intellectual property and their sponsors, with respect to inventions, discoveries and works created at the institution;
- iii. To determine the patentability or copyrightability of the outcomes or outputs of research studies and other scholarly efforts in the University;
- iv. To facilitate the process of commercializing inventions and intellectual property emanating from the AE-FUNAI, and manage the commercial dissemination of intellectual property in the University
- v. To facilitate the process of protecting, licensing and marketing of intellectual property in AE-FUNAI
- vi. To initiate and manage an Innovation Endowment Fund as may be established by the University.
- vii. To attract funding for the promotion and protection of intellectual properties in AE-FUNAI
- viii. To partner with relevant agencies, such as the National Office for Technology Acquisition and Promotion (NOTAP) Abuja, the World Intellectual Property Organization (WIPO), funders, industries and governments, in order to promote and protect entrepreneurial activities in and from AE-FUNAI
- ix. To facilitate the resolution of conflicts arising from intellectual property ownership and uses between AE-FUNAI and her staff, and between AE-FUNAI and external consultants, and between AE-FUNAI employees and external commercial users of intellectual property.
- x. To manage all documentations relating to the intellectual property creations, patented research outcomes, and inventions from AE-FUNAI.

#### Note

A substantial aspect of this document is drawn from relevant provisions of intellectual property policies of the following universities and the WIPO guidelines:

Ebonyi State University Abakaliki Research Policy (2012)

University of Benin, Nigeria

(<http://www.uniben.edu/centers/intellectual-property-and-technology-transfer-office>)

University of Ibadan

(<http://www.ui.edu.ng/sites/default/files/INTELLECTUAL%20PROPERTY%20POLICY%20AS%20APPROVED%20BY%20THE%20COPD.pdf>)

University of Chicago (<http://tech.uchicago.edu/about/mission/>)

Intellectual Property Policy Washington University in St. Louis (2014)  
<https://wustl.edu/about/...policies/intellectual-property...policies/intellectual-property/>

World Intellectual Property Organisation (2004), Guidelines on Developing Intellectual Property Policy for Universities and R&D Organizations, WIPO, Geneva

## Appendix 1

### Patent and Copyright Agreement of Alex Ekwueme Federal University Ndufu Alike

Pursuant to the Research Policy of Alex Ekwueme Federal University Ndufu Alike (AE-FUNAI), applicable laws and regulations of Federal University Ndufu Alike Ikwo and general terms of my employment/hire, I understand that all intellectual properties made in the university are governed by the Alex Ekwueme Federal University Ndufu Alike Research Policy; and I pledge to abide by the terms of the policy, or as may be periodically amended.

In view of the foregoing, and in consideration of the receipt remuneration from Alex Ekwueme Federal University Ndufu Alike (AE-FUNAI) participation in projects administered by Alex Ekwueme Federal University Ndufu Alike, access to, or use of facilities provided by Alex Ekwueme Federal University Ndufu Alike and/or other valuable considerations, I hereby agree as follows:

- 1) I will disclose to AE-FUNAI all potential patentable inventions conceived or first reduced to practice in whole or in part in the course of my University responsibilities or with more than incidental use of University resources.
- 2) I further agree to assign to Alex Ekwueme Federal University Ndufu Alike all my right, title and interests in such patentable inventions and to execute and deliver all documents and do any and all things necessary and proper on my part to effect such assignment.
- 3) I am free to place my inventions in the public domain as long as in so doing neither Alex Ekwueme Federal University Ndufu Alike nor I violate the terms of any agreements that governed the work done.
- 4) Alex Ekwueme Federal University Ndufu Alike Policy states that all rights in copyright shall remain with the creator unless the work is:
  - a) A work-for-hire, which case copyright vests in the University under Copyright Law.

b) Supported by direct funding by or through the University for the pursuit or execution of a specific project(s).

c) Commissioned by the University for the benefit of University or mankind.

d) Made with significant use of University or her personnel, or otherwise subject to contractual obligations binding the researcher/inventor with University.

5) I am now under no consulting or other obligations to any third party or organization in respect to rights in invention or copyrightable materials which are, or could be reasonably construed to be in conflict with this agreement.

6) Subject to professional rights which are conferrable by researcher's professional body. I will not enter into any agreement creating copyright or patent obligation in conflict with this agreement.

7) This agreement takes effect from 1<sup>st</sup> of January 2018 or any such date that of hire, enrolment or participation in projects or research administered by the University.

Signed this .....day of ..... 20.....

Name ..... AE-FUNAI ID No .....

Signature: ..... Department .....

Date.....

\*Agreement to be in triplicates: original to be with Directorate of Research while party to this agreement retains one, and the last copy for the non-AE-FUNAI employer

## Appendix 11

Patent and Copyright Agreement for staff of Alex Ekwueme Federal University Ndufu Alike with conflicting intellectual property agreement with another employer.

Pursuant to the Research Policy of Alex Ekwueme Federal University Ndufu Alike, applicable laws and regulations of Federal University Ndufu Alike Ikwo and general terms of my engagement or/hire, I understand that all intellectual properties made in the University are governed by the Federal University Ndufu Alike Ikwo Research Policy; and I pledge in the course of my activities, to abide by the terms of the policy, or as may be periodically amended.

In view of the forgoing, and in consideration of my participation in projects Administered by Federal University Ndufu Alike Ikwo, access to, or use of facilities Provided by Federal University Ndufu Alike Ikwo and/or other valuable considerations. I hereby agree as follows:

1. I will disclose to Alex Ekwueme Federal University Ndufu Alike all potential patentable Inventions conceived or first reduced to practice in whole or in part in the Course of my University responsibilities or with more than incidental use of University recourses.
2. I further agree to assign to Alex Ekwueme Federal University Ndufu Alike (AE- FUNAI) all my right, title and interests in such patentable inventions and to execute and deliver all documents and do any and all things necessary and proper on my part to effect such assignment.
3. I will not use any information defined as confidential or proprietary by my non-AEFUNAI employer in the course of my AE-FUNAI responsibilities and I will not do consulting or any work for my non-AEFUNAI employer while at or using the facility owned or leased by AEFUNAI.
4. I am free to place my inventions in the public domain as long as in so doing neither Alex Ekwueme Federal University Ndufu Alike (AE-FUNAI) nor I violate the terms of any agreements that governed the work done or by my agreement with my non- EBSU employer.
5. Alex Ekwueme Federal University Ndufu Alike policy states that all rights in copyright shall remain with the creator unless the work is:
  - a. a work-for-hire, in which case copyright vests in the University under copyright Law.
  - b. supported by direct funding by or through the University for the pursuit or execution of a specific projects).
  - c. commissioned by the University for the benefit of University or mankind.
  - d. made with significant use of University or her personnel, or otherwise subject to contractual obligations binding the researcher/inventor with University.
- e. I will assign and confirm in writing to AE-FUNAI all my right, title and interest, including copyright, in and to copyrightable materials falling under items (a) to (e) above.

6. I am now under no consulting or other obligations to any third party or organization in respect to rights in invention or copyrightable materials which are, or could be reasonably construed to be in conflict with this agreement.

7. Subject to professional right which is conferrable by researcher's professional body, I will not enter into any agreement creating copyright or patent obligation in conflict with this agreement.

8. This agreement takes effect from 1<sup>st</sup> of January 2018 or any such date that of hire, enrolment or participation in projects or research administered by the University.

Signed this .....day of ..... 20 .....

Name ..... AE FUNAI ID No .....

Signature..... Department: .....

Date:.....

Non-AEFUNAI employer:

Signed this:.....day of ..... 20.....

Name:.....

Signature:..... Institution/Organization: .....

Date:.....

\*Agreement to be in triplicates: original to be with AEFUNAI Directorate of Research while party to the agreement retains one and the last copy for the non-AEFUNAI employer.

## Chapter 13

### Faculty & Contract Research Staff

AE-FUNAI position on Faculty and Contract Research Staff:

#### 1. Introduction

AE-FUNAI recognizes its responsibility to support research staff including those on contract in managing their careers and fulfilling their responsibilities in carrying out research. To meet specific externally funded research needs, AE-FUNAI establishes positions designed to attract and retain highly competent and prominent researchers. The people holding such positions are known as contract research staff.

#### 2. Contract Research staff

Persons hired by AE-FUNAI to work on research activities on a limited basis, for a limited purpose as specified by AE-FUNAI.

#### 3. Persons covered

Contract research staff may include Post-doctoral researchers, full-time or part time graduate, and postgraduate student regardless of whether he/she receives financial aid from university or from external sources. Others may include visiting faculty, industrial personnel and fellows who participate in university-administered research, regardless of obligations to other companies or institutions.

#### 4. Appointment of Contract Research Staff:

Appointments may be made for periods not to exceed twelve months for individuals who are permanently employed by another institution at a level at least equivalent to

the academic faculty members of staff at AE-FUNAI. If the individual ceases to hold a regular position elsewhere prior to or during the AE-FUNAI appointment, he or she is not eligible to continue as a contract research staff. Rather, the person may be recommended for a regular contract research staff appointment.

Contract Research staff may be appointed in an academic or research unit. Recruiting and appointment procedures must comply with all University policies. Application materials should include a complete resume with a list of publications or other scholarly works, evidence of research ability, and letters of recommendation from recognized individuals in the candidate's field of expertise. Appointments must be approved by the dean(s) of the cognizant faculty(s) (when appropriate), and the Director for research, prior to an offer being extended to a candidate.

Contract Research staff receive a letter of appointment and a copy of the standard terms and conditions of service, together with other important policy statements from the university management.

## 5. Period of Employment

Contract Research staff appointments are terminal appointments conterminous with the period of the sponsored project, and there is no AE-FUNAI.

Contract research staff is appointed for a fixed, renewable term of up to two years, contingent on continued programmatic need and funding. Professorial scholars may be appointed on either a fixed-term or a continuing basis.

Requests for reappointments of fixed-term appointments must be reviewed at the faculty level and approved by the Director of Research. A written notice of either renewal or non-renewal must be given to the employee at least 90 days in advance of the term end date. The conclusion of a fixed term does not constitute layoff nor is it accompanied by layoff benefits.

## 6. Considerations When Making a Grant Application

When making a grant application exact contract research staff requirement should be considered. The salary element of grants must provide for pay appropriate to the responsibility. These should be identified in the grant application or be allowed for in the cash limiting of the award, enabling the funding bodies to meet them within the framework of cash limited grants.

An application for funding for one or more named members of Contract Research staff should include provision for salary costs which takes account of the research responsibilities within the grant, and also, where relevant, the previous experience and professional contribution of those staff. Such applications may seek provision for promotion during the lifetime of the grant where the possibility is foreseen by the employing institution, the grounds are justified in the application, and the promotion will be made in accordance with the policies and procedures of AE-FUNAI.

Where a grant application includes provision for named Contract Research Staff, the funding bodies will normally expect to announce funds at the level requested; however, they reserve the right to offer support at an alternative level if considered appropriate to the research responsibilities of the project.

## 7. Salary and Promotion

AEFUNAI salary support for contract Research Staff shall be funded from sponsored research projects, typically at a level based on the individual's salary from his or her home institution. In any event, minimum full-time equivalent salaries for contract research staff shall be established annually by the University management and Director of Research & Development.

Promotion will not normally be considered unless the nominee:

- i. is the principal (though not necessarily the first named ) author of a significant number of publications in peer reviewed journals
- ii. has obtained grants or fellowships supporting his or her own salary on his or her own, or has played a leading part in successful applications for grants and fellowships; and
- iii. has achieved a measure of professional recognition in his or her own right, evinced , for example, by invitations to give papers or expert advice or to act as a referee for journal articles or research grant applications.

The candidate must also be capable of:

- iv. formulating research proposals and carrying them out either on his or her own or as a member or a research team;
- v. supervising junior post-doctoral research staff and PhD students (in the case of the latter, under the guidance of an academic member of staff) and;
- vi. leading a small project team or assisting in the running of a large research group.

## 8. Salary Structure/Job Titles

AEFUNAI applies the national salary agreement for Research and analogous staff. The following levels of responsibility are normally applicable to the titles and levels listed below.

### Graduate researchers

For graduate researchers with little or no experience, the job title used will normally be that of Research Assistant.

### Post graduate researchers

For postgraduate researchers, usually Ph.D. holders, but sometimes used for graduates with Masters degrees and /or membership of a professional body where the appointee

has a considerable level of work experience, normally 3 to 6 years, the job title include Post Doctoral Research Assistant, Research Associate or Research Fellow.

Salary will be in accordance with qualifications and experience. If an existing member of staff is appointed or has a contract renewed, then a starting salary not less than the final salary under the earlier contract should be provided where possible, to allow progress up the salary scale.

### Senior researchers

For senior academic researchers, they should meet the following requirements:

- i. they are the principal author for a significant number of publications in peer reviewed journals;
- ii. they obtained grants of fellowships supporting their own salary, or have played a leading part in successful applications for grants and fellowships; and
- iii. they have achieved a measure of professional recognition in their own right, evidenced for example by invitations to give papers or expert advice or to act as a referee for journals or articles or research grant applications.

Researchers at this level will be required to formulate research proposals, supervise staff and students and lead small project teams; and they could be known as Research Fellow and Senior Research Fellow.

### Professorial researchers

For professorial researchers, it would be expected that they meet the following requirements:

- i. they are the principal author of a substantial number of publications in peer reviewed journals;
- ii. they are the holder of several major grants or a program grant, and is almost certainly

- iii. financing their own research group and funding their own research group and funding their own salary; and
- iv. they have achieved professional recognition in their field.

Researchers at this level will be expected to develop their own area of independent research, supervise staff and students and contribute to its research strategy of the discipline and Faculty. The job title at this level would usually be professorial Research Fellow.

#### Rights, Privileges and Responsibilities

Contract Research Staff shall be eligible for staff benefits, including vacation and sick leave, if employed at 50% time or more for an anticipated length of six months or more. AE-FUNAI courtesies and privileges commensurate with the contract research staffs' rank at their home institutions may be granted by the Vice –Chancellor on an exception basis.

#### 9. Maternity

Paid maternity leave is available to members of staff who fulfill the qualifying conditions for the AE-FUNAI's Maternity Scheme. Staff with more than one year's service is eligible to receive up to six month's maternity leave and 8 weeks' full pay and 16 weeks' half pay. For members of staffs who are funded from other external sources and whose maternity costs will not be met by these, the University will provide funds to ensure that additional costs are met.

#### 10. Annual Leave

Research staffs are entitled to the annual leave allowance as other academic and related staff in AE-FUNAI.

## 11. Sick Leave

Contract Research staff are entitled to paid sick leave providing they meet the conditions of the AE-FUNAI's sick pay scheme. Where a period of paid Sick Leave in excess of 3 months is likely to affect the completion of a grant body funded project, the grant holder may apply to the grant agency to discuss the possibility of funding a temporary appointment to safeguard the work of the project, or an extension to the duration of the grant where the period of leave can be predicted. Any additional payment will be made at the end of the grant.

## 12. Renewal or Extension of Grants

AE-FUNAI and funding bodies will work to ensure as far as possible that applications are submitted, decisions taken and new grant announcements made so that fair recruitment procedures can be followed; and that the renewal or extension of the existing grant will be as early as possible so that career insecurity is reduced and disruption to the research ethic is minimized.

Where a contract is renewed any changes in the original terms and conditions of employment will be notified in writing and subject to the agreement of the individual to whom the contract applies.

Contract Research staff will be consulted before the expiry of their contract concerning the prospect of a renewal of contract, the possibility of alternative employment or training and career development and any issues of concern.

## 13. Career Guidance / Retraining

Contract research Staff should be encouraged to discuss their career progress and plans in their subject areas both inside and out with the faculty and AE-FUNAI. Staff should also be encouraged to get links for information, use ICT facilities, career seminars and

training events and other facilities available in the Human Resource and development Centre.

#### 14. Career Development

On appointment contract research staff should be provided with a clear job description. In addition to being offered career guidance, staff should be aware that it is in their own interests to be responsible for their own career development. Staff should consider their long-term career aims including whether they wish to continue in research - whether within AE-FUNAI, government institute or industry - or become an academic or transfer to another field all together.

Staff should take advantages of opportunities to develop as many transferable skills as possible and attend conferences and workshops to further their careers opportunities.

#### 15. Representation and Participation in University Affairs

Contract Research staff are members of AE-FUNAI academic community and are therefore, entitled to participate in departmental and faculty meetings.

##### References

Policy and Procedure for Appointment and Promotion: Academic Staff-Research. DoResearch. 2017. Stanford University. <http://doresearch.stanford.edu/policies>

University College Cork (UCC). Human Resources Strategy for Researchers Action Plan. <http://eceuropa.eu/euraxess/data/usqu>

University of Cambridge. Human Resources. Procedure for Assistant Staff, Contract Research Staff and Unestablished academic and Unestablished Academic and Related staff. 2017.

University of Dundee. Human Resource. <http://www.dundee.ac.uk/hr/hrexcellenceinresearch/conditions> of service

Western Michigan University. Human Resource. Research Staff Policy. <http://wmich.edu/hr/policies>. 2009.

# Chapter 14

## Research Property Management

### 1. Introduction

The following policy and procedures are directed toward the management of Tangible Research Property (TRP), which is owned and/or controlled by Alex Ekwueme Federal University, Ndufu-Alike (AE-FUNAI). The policy and procedures are subject to AE-FUNAI's contractual obligations and are to be interpreted and applied consistent with and complementary to AE-FUNAI's other policies affecting the administration of research.

### 2. Definition of Tangible Research Property (TRP)

TRP is defined for purposes of this Policy as tangible items produced in the course of research projects supported by AE-FUNAI or by external sponsors. TRP includes such items as: biological materials, engineering drawings, computer software, integrated circuit chips, computer databases, prototype devices, circuit diagrams and sundry equipment.

TRP is separate and distinct from intangible (or intellectual) property such as inventions, patents, copyright and trademarks which are subject to other policies and guidelines (please refer to Chapter 12 of this policy on Publication and Intellectual Property). Individual items of TRP may be associated with one or more intangible properties such as copyright or patents.

### 3. Ownership of TRP

TRP normally is either owned by AE-FUNAI or is subject to the ownership and other provisions of contracts and grants. For example, items such as microorganisms produced under a government grant or contract would normally belong to AEFUNAI as expendable property, subject to the terms and conditions of the grant or contract. Equipment which is fabricated at AE-FUNAI for subsequent off-campus use by a research sponsor is usually owned exclusively by the sponsor.

## 4. Management of Tangible Research Property

### A. Freedom of Access

It is AE-FUNAI's policy to promote the prompt and open exchange of TRP and associated research data with scientific colleagues outside the investigator's immediate laboratory.

### B. Control Responsibilities

This will be the responsibility of the PI (or Head of Department, 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 applicable grants or contracts and University policy. Such control includes determining if and when distribution of the TRP is to be made beyond the laboratory for others' scientific use.

### C. Commercial Considerations

Because TRP may have potential commercial value as well as scientific value, the investigator may wish to make TRP broadly available for others' scientific use by means which do not diminish its value or inhibit its commercial development or public use. Although valid non-commercial reasons such as safety considerations may exist for the temporary delay of TRP distribution outside the laboratory for other's scientific use, scientific exchanges should not be inhibited due to potential commercial considerations.

## 5. Income from TRP

### A. Recoverable Costs

TRP may not be sold for profit, although licensing agreements which include provision for royalty income may be negotiated for commercial use of the intangible property rights associated with the TRP (please refer to sections 6 and 15 of this policy). When distributing TRP to research colleagues outside the research location, costs of

consumables and handling may be recovered from the recipient, with the income returned to the account which funded those costs.

## B. Contractual Obligations

If any of the initial costs were funded from sponsored agreements, the Directorate of Research and Development should be asked to advise on the contractual obligations regarding distribution of the TRP and disposition of the recovered costs. If any costs are charged for TRP distribution, adequate documentation must be maintained for audit purposes.

## 6. Identification of TRP

### A. Identification System

Each item of TRP should have an unambiguous identification code and name sufficient to distinguish it from other similar items in the university or elsewhere. 

### B. Ownership Marks

Where applicable (e.g. computer software), each item should also carry the name of the TRP owner and such other marks and legends as may be required to meet AE-FUNAI's contractual obligations and administrative needs, including notice of copyright, trademark, government right etc.

## 7. Distribution of TRP for Research Purposes

### A. Biological TRP

#### 1. Transmittal Letter

Each distribution for non-commercial research purposes should be accompanied by a letter of transmittal

#### 2. Precautionary Language

If there is a possibility of biohazard or other risk associated with the transport, storage or use of a particular TRP, or if the recipient is likely to use the TRP for clinical research,

the Directorate of Research/Legal Unit should be approached to obtain legal counsel regarding appropriate precautionary language in the TRP distribution agreement.

## B. Software TRP

TRP  Distribution, for research purposes only, of computer software owned by AE-AEFUNAI may be made without restrictions if control of subsequent use by the PI is not desired. For example, a PI may wish recipients to follow a specific research protocol. Any such distribution is subject to the applicable contract or grant provisions and an agreement by the recipient that commercial development of the software is not to be undertaken.

### 1. Distribution Agreement

If software owned by AE-FUNAI has commercial value or if it is considered desirable to control subsequent use, distribution for research purposes must be coordinated with the Directorate of Research and Development and must be accompanied by an appropriate agreement with the recipient.

### 2. Contractual Obligations

When software results from sponsored research, the University legal Unit should be consulted regarding contractual obligations and regulations affecting ownership, disposition of various rights, and restrictions on the distribution and use of TRP and any associated income.

## C. Other Forms of TRP

Distribution of TRP other than biological products should normally follow the procedures outlined above for the example of computer software.

## 8. Distribution of TRP for Commercial Purposes

### A. Distribution Agreement

If TRP developed by AE-FUNAI as a result of research activities is to be distributed to outside users for commercial purposes, the distribution agreement must contain provisions negotiated by the Legal Services Unit covering the terms under which the property may be used, limits on the University's liability for the property or products derived therefrom, and disposition of any royalty income to AE-FUNAI from licensing of intangible property rights associated with the use of the tangible property.

#### B. Income Distribution

Distribution of any TRP-related royalty income other than patent royalties will be similar to the patent royalty income distribution policy (see Chapters 12 & 15 of this policy) except that the "inventor's share" will normally be distributed to a research account held by the faculty which produced the TRP (subject to any contractual obligations regarding distribution of income). Any distribution to individuals must be subject to prior approval by the Vice Chancellor through the Director, Directorate of Research and Development.

#### C. Contractual Obligations

If the TRP results from sponsored research, the Legal Unit should be consulted regarding contractual obligations and regulations affecting ownership, notices, acknowledgements, disposition of various rights, and restrictions on the distribution and use of the TRP and any associated income.

#### References

1. Stanford University (2017) Research Policies, cited [1/11/17], available online at <[www.doresearch.stanford.edu](http://www.doresearch.stanford.edu)>
2. University of California (2017) Research Policy, cited [2/11/17], available at <[www.ucop.edu/research](http://www.ucop.edu/research)>

## Chapter 15

# Financial Administration and Management of Sponsored Research Programs

1. The purpose of this policy and its procedures is to ensure that funds provided from either internal or external sources to sponsor research projects are administered in accordance with both institutional and sponsor policies. External sponsors include both governmental and private organizations.
  
2. All internally and externally sponsored research projects will be administered through the Directorate of Research & Development. The Directorate provides comprehensive services to AEFUNAI staff on the preparation, review, approval, management, non-financial reporting requirements, and close out procedures of sponsored project proposals.
  
3. Award Acceptance Procedure-When notice of funding is received by the University, the Directorate of Research & Development will set up an account and assign a budget number for the grant funds, and send a summary of the grant terms and conditions to the Principal Investigator.
  
4. Grant Account Establishment and Management-Principal Investigators (PIs) should allow one to two weeks for the assignment of the budget number once the application is approved by the funding agency. PIs are expected to spend grant money according to the budget approved by the funding agency. Some agencies, however, permit the Department to transfer funds from certain categories to other categories without prior agency approval. PIs wishing to move funds from one budget category to another should contact the Directorate of Research & Development. PIs should be aware that sponsor and University budgeting guidelines apply to rebudgeting as well. In particular, equipment must

be necessary to the research and not available or easily accessible. Ordinarily, the purchase of general purpose equipment is not allowed.

5. Fulfilling Sponsor Expectations-Award documents (e.g. Notice of Grant Award) will outline sponsor expectations and will generally reference terms and conditions, timelines for financial and technical reports and deliverables, compliance and other valuable information related to the project. They may also reference when sponsor approval must be sought for modifications/changes to budgetary/administrative or technical work. Knowledge of government guidelines, sponsor referenced documents, and university policies are the responsibility of the Principal Investigator. The notification or award letter should be reviewed at the time of receipt by the Principal Investigator and his/her assigned research administrator. For questions related to the terms and conditions of the award, contact the Directorate of Research & Development.
  
6. Roles & Responsibilities-The Principal Investigator has overall responsibility for the conduct of the project described in the proposal. The PI must monitor the budget to ensure that over-expenditure of grant funds does not occur. PIs are expected to spend their project funds according to the categories specified in the approved grant budget and within the time frame defined in the award. PIs are also responsible for ensuring that anyone performing work supported by the grant also understands the relevant guidelines. The other primary PI responsibility is the filing of interim and final project reports as required by the funding agency. Since sponsor funds are provided to PIs only for the advancement of their research projects, personal expenses should never be charged to a grant, even if it is the intention of the PI to reimburse the grant. Nor should grant funds be borrowed and paid back.
  
7. Reporting responsibilities of PIs - Interim Reports: Many agencies require annual (or semi-annual) technical progress reports. The award document usually

identifies the due dates of such reports. The PI is responsible for keeping track of reporting deadlines. In some instances, the progress report is required before the agency will release the second or third tranche of funding. Final Reports: Almost all agencies require final technical reports. The award document identifies the due date of the report, usually 30 to 120 days after the termination date of the project. Final progress or technical reports normally include: a summary of the progress made toward the goals stated in the proposal; a description of significant results; a list (and sometimes copies) of publications or products resulting from work on the project; disclosure of patents or inventions resulting from the project. Failure to file a final report when due may jeopardize the PI's eligibility for future funding from the University/ external agency.

8. Responsibility for Grant Administration-The Directorate of Research & Development has overall responsibility for maintaining financial records for the grant, posting charges as they are incurred, and sending monthly budget reports to the PI. In addition, the Directorate of Research & Development requests payment from funding agencies as appropriate, files financial reports, and serves as a link between the PI and the grants management section of the funding agency. The PI can expect to be contacted by the Directorate of Research & Development at least three times: (1) when the grant is awarded, a budget number is assigned, and the grant budget is entered into the University accounting system; (2) three months before the end of the grant budget period, as a reminder that the grant is ending, that remaining funds may need to be returned to the agency, and that a no-cost extension may be requested from the University or the agency (see discussion below); and (3) when the grant is closed and the final financial report is filed.
9. Processing of Sponsored Research Project Expenditures – The Directorate will review and approve transactions received from a department that are associated with sponsored research projects as appropriate. The Directorate

will Review, approve and process requests for cost transfers, including salary reallocations related to sponsored projects and monitor expenditure activities on sponsored research funds to ensure compliance with federal regulations, agency specific requirements, and University policies and procedure.

10. Equipment Inventory-The Directorate of Research & Development maintains a record of all equipment purchased with project funds (fixed or consumables). If not specified otherwise in the agreement with grantor, every year an inventory is taken to identify the current location, use, and condition (useful economic life and depreciation) of all equipment purchased with grant funds. The methods for issuing inventory are "Last-In-First-Out" (LIFO) and/or "Simple Average" (SAM) except otherwise agreed with the grantor. Sales and disposal of fixed property shall be in line with the agreement made with grantor. The research directorate shall investigate any loss or abnormal consumption patterns of inventory items. Unjustified explanation shall be reported to the University management for necessary action.

11. Major Project Changes-Events or problems may require changes in the project. Most of these changes will be minor (a transfer of funds among budget lines, different travel plans, or the purchase of equipment other than that included in the approved budget) and are easily accomplished. Major changes, such as a change in PI or a new objective, may also be made but usually require approval by the funding agency. The Directorate of Research & Development can provide information about whether an anticipated change is considered minor or major. A PI who plans either a short-term or long-term absence from the project or who anticipates devoting substantially more or less effort to the work than outlined in the proposal should contact the Directorate of Research & Development as soon as possible. Such a change would be considered a major change and might result in the naming of a replacement PI. In any case, agency

notification and/or approval will be required. A PI who is leaving AEFUNAI for another institution should contact the Directorate of Research & Development as soon as possible. In most cases the grant can be transferred to the new institution without problems, but early planning is essential since the process can be quite lengthy. A PI who wants to change the phenomena under study or the objectives of the project as stated in the proposal will have to get approval for such changes from the funding agency. The Directorate of Research & Development can provide information about the mechanism for requesting such major changes. Neither the pursuit of "interesting and important leads" which arise during the course of research nor the adoption of an "alternative approach" which appears to be more promising constitutes a change in objectives or scope, but significant changes in methods or procedures do.

12. Award Closeout – The Directorate will send PI Award Expiration Notifications via email, as appropriate b. Coordinate financial closeout and termination of an award with Principal Investigators (PIs) and departmental staff. Reconciliation of any deficit or other corrections would then be processed by the responsible grant accountant based on applicable cost transfer/salary reallocation paperwork received by the PI and or departmental staff. Complete final reporting, if required. Complete Property Report, if required. Close out grant/fund(s) in the Financial System. Assist PIs to review project expenditures to ensure timely closeout and submission of financial reporting.

## References

University of Wellesley research policy

Illinois Institute of Technology research policy

## Chapter 16: University Committees on Research

The university has a research committee structure that delineates different research-related functions to designated committees. However, all the committees work collaboratively to synergistically support each other in order to achieve the university's overall goal of Excellence and Integrity in research. The University Senate Research Committee oversees the function of several subcommittees. Table 16.1 shows details of AEFUNAI research committee structure, including the respective responsibilities.

Table 16.1: Research Committee Structure @ AE-FUNAI and Responsibilities

Research Policy Body	Subcommittees	Responsibilities
University Research Committee  Chair – VC  (VC's Office Unit Responsible: Directorate of Research & Development DRD)		Terms of Reference  1 Role  1.1 The University Research Committee is the senior management body that is responsible for research and development at AE-FUNAI. Its major roles is to: <ul style="list-style-type: none"> <li>i. provide strategic leadership in research and development</li> <li>ii. advice the university on all matters related to research strategy, policy and management.</li> <li>iii. monitor the allocation of University and Faculty research grants</li> <li>iv. monitor the reporting, evaluation and assessment of research performance in AE-FUNAI using some validated and globally acceptable Key Performance Indicators (KPIs)</li> <li>v. refer major matters of policy to the Senate through the Vice-Chancellor</li> </ul> 2 Scope  2.1 To advice the Vice-Chancellor on the implementation of the university strategy to: <ul style="list-style-type: none"> <li>i. improve the performance of AE-FUNAI in research-based rankings by both national and global agencies.</li> <li>ii. improve the income generated through National and International</li> </ul>

		<p>research grants</p> <p>iii. achieve good success rates in competitive research grant applications</p> <p>iv. Periodically review progress against the set objectives</p> <p>.</p> <p>2.2 To advice on and implement university-wide processes to improve AEFUNAI research performance including internal research evaluation/assessment:</p> <ul style="list-style-type: none"> <li>i. design and implement research evaluation/assessment at approved periods</li> <li>ii. address issues including corrective measures that arise from analysis of internal and external research evaluation/assessment exercise</li> </ul> <p>2.3 To determine the terms of reference and composition of the Committee's subcommittees:</p> <ul style="list-style-type: none"> <li>i. set policies and associated parameters for the subcommittees</li> <li>ii. ensure provision of adequate and appropriate operational support to the strategic role of the Research Committee</li> </ul> <p>2.4 To review research grant allocations to the faculties and report to University Management</p> <p>2.5 To provide annual report to the University</p> <p>Note: This committee has an overall oversight function on the administration of university research funds and activities of its sub-committees.</p>
	<p>University Research Grants</p>	<p>1 Role</p> <p>1.1 To develop university policy on application and management of research funded by local and international agencies cum private sector. The local agencies include; Tertiary Education Trust Fund (TETFund), Petroleum Technology Development Fund (PTDF), while the international agencies include; National Science Foundation (NSF) USA, National Research Foundation (NRF) South Africa Horizon2020</p> <p>1.2 To monitor and success rates in such research funding and design sustainable strategies to improve on the success rates</p> <p>1.3 To report to the University Research Committee on its activities</p> <p>2 Scope</p> <p>2.1 To receive reports related to international research funding and/or collaboration at AE-FUNAI</p> <p>2.2 To design sustainable strategies to improve on the university's success rates in attracting international research funding and/or collaboration</p>

	Intellectual Property & Technology Transfer (IPTT)	<p>1 Role</p> <p>1.1 To develop university policy on IPTT</p> <p>1.2 To oversee and moderate AE-FUNAI's Intellectual Property and Technology Transfer (IPTT) policy.</p> <p>1.3 To report to the University Research Committee on its activities</p> <p>2 Scope</p> <p>2.1 To receive reports from Intellectual Property and Technology Transfer Office - IPTTO (domiciled in the Directorate of Research &amp; Development) on IPTT notification and more generally on matters concerning IPTT within the university and on the operation of the IPTT policy</p> <p>2.2 To consider and rule on disputes concerning the application of IPTT policy in AE-FUNAI</p>
	Research Ethics & Integrity	<p>1 Role</p> <p>1.1 To develop university policy on Research Ethics &amp; Integrity</p> <p>1.2 To monitor and moderate the implementation of AE-FUNAI's policy on Research Ethics &amp; Integrity.</p> <p>1.3 To report to the University Research Committee on its activities</p> <p>2 Scope</p> <p>2.1 To receive reports related to violation of ethical and integrity principles in research</p> <p>2.2 To ensure that corrective measures are taken to address any violation of the policy</p>
	Health & Safety	<p>1 Role</p> <p>1.1 To develop university policy on Health &amp; Safety in research environment</p> <p>1.2 To monitor and moderate the implementation of AE-FUNAI's policy on Health &amp; Safety</p> <p>1.3 To develop a university-wide health and safety approval procedures, including risk analysis and management in research at AE-FUNAI</p> <p>1.4 To report to the University Research Committee on its activities</p> <p>2 Scope</p> <p>2.1 To receive reports related to Health and Safety in the research</p>

		<p>environment ( examples of areas of Health &amp; safety covered include: general health and safety of staff in research environment, Biosafety, Radioactive materials, Chemical hazards among others)</p> <p>2.2 To ensure that corrective measures are taken and/or implemented whenever critical Health &amp; Safety related incidents occur</p>
	Humans & Animals in Research	<p>1 Role</p> <p>1.1 To develop university policy to ensure that research involving use of human and animal subjects at AE-FUNAI, follow international standards and global best practices</p> <p>1.2 To monitor and rigorously moderate the implementation of AE-FUNAI's policy on Humans and Animals</p> <p>1.3 To report to the University Research Committee on its activities</p> <p>2 Scope</p> <p>2.1 To receive reports related to use of human and animal subjects in research at AE-FUNAI</p> <p>2.2 To critically examine and investigate issues related to protecting patients, preserving integrity, and advancing health in human and animal subjects research.</p> <p>2.3 To ensure that corrective measures are taken and/or implemented whenever critical violations occur, including possible institutional and personal conflicts of interest</p>
	Conflict of Interest Committees	See chapter 7
	Faculty-Level Research Committees	<p>Faculty-level research and postgraduate research committees have several functions that may be allocated to different committees within the Faculty. These committees at the faculty level are responsible for:</p> <p>1. Creating appropriate terms of reference for their committees and having them approved by the VC/Dean and the Faculty Board</p> <p>2. Formulating recommendations for Faculty specific research policy, including policy for postgraduate research, forwarding research issues to the DRD, and considering policy issues referred to them by DRD or other appropriate unit in the university.</p> <p>4. Making recommendations to the Dean concerning the approval of conference leave and research and study leave if requested</p> <p>5. Advising on projects being developed for bids for external research funds</p> <p>6. Producing an annual report for the DRD, on behalf of their Dean on research taken in their Faculty</p>

		<p>7. Recommending to Dean the award of faculty research grants to academic staff and research students</p> <p>Note: the research funds they administer include; Faculty Research Grants (where applicable), and Conference Grants</p>

References:

Research Policy Handbook - Stanford University USA

Research Policy Handbook - Harvard University USA

Research Policy Handbook - University of Hong Kong, HKSAR

Research Policy Handbook – University Oxford UK

Research Policy Handbook – Imperial College London UK

Research Policy Handbook - University of Cambridge UK

Research Policy Handbook – Massachusetts Institute of Technology (MIT) USA

Research Policy Handbook – California Institute of Technology USA

Research Policy Handbook – Loughborough University, UK

Research Policy Handbook - University of Cape Town, Republic of South Africa

# APPENDICES

## Appendix 2.1 – AE-FUNAI Research Output System – Input Form

### ALEX EKWUEME FEDERAL UNIVERSITY NDUFU-ALIKE (AE-FUNAI)

#### Research outputs by Academic Staff/Research PG Students

Only ONE item of research output can be entered on each form. Outputs which have been submitted for publication but have not yet been published should not be entered on this form.

(1)	Title of publication (book/monograph/journal/conference)	
	Title of contribution (paper/chapter/report/study/review/patent etc. or description of other output)	
(2)	Output categories (tick <u>one</u> only):	
	<p><b>Scholarly books, monographs and chapters</b>            Research book or monograph (as author)            Chapter in an edited book (as author)            Textbook (as author)</p> <p>Edited book (as editor)</p> <p><b>Journal publications</b>            Publication in refereed journal            Publication in policy or professional journal            Article for newspaper or popular journal</p> <p><b>Conference papers</b>            Invited conference paper</p> <p>Refereed conference paper            Other conference paper            Working paper</p> <p><b>Creative &amp; literary works, consulting reports &amp; case studies</b>            Authored play, poem, novel, story            Painting, sculpture, drawing, photograph</p> <p>Film, video            Performance and participation in exhibits            Translation of other's work            Engineering, architectural, graphic designs            Computer software or system            Consulting or contract research report            Written teaching case study or extensive note</p>	<p><b>Patents, agreements, assignments and companies</b>            Patents issued            Licensing agreements            Assignments of intellectual property rights            Companies</p> <p><b>All other outputs</b>            Journal editor            Review of books or software            Postgraduate research theses            Other outputs            High level public and professional service</p> <p><b>Special outputs</b>            Honours and personalia            Consultancy service offered to external bodies            Speech or other prestigious public presentation</p> <p><b>Prizes and awards</b>            Prizes and awards bestowed by an external source</p>
(3)	Type of output ( <i>circle one only</i> ):	

	A. academic research: refereed B. academic research: not refereed C. contract research *****D. other output				
(4)	Volume No.:		Place of publication:	(city and country)	
	Publisher:				
	ISBN/ISSN no:				
	<u>either</u> Starting page:		Ending page:		
	<u>or</u> Number of pages:				
(5)	Publication date (dd/mm/yyyy):				
(6)	All author(s) - <i>to be listed in the same order as they appear in the publication:</i>				
	<u>Surname</u>	<u>Initials</u>	<u>Department</u>	<u>AE-FUNAI staff</u>	<u>AE-FUNAI student</u>
					<u>Ot</u>
					<u>hers</u>
					<u>Aff</u>
					<u>iliation*</u>
	1.				
	2.				
	3.				
	4.				
	5.				
	6.				
	7.				
	8.				
	* It refers to multiple institutional affiliations of author(s).				

## Classification of research output categories

### 1 Scholarly books, monographs and chapters

- 11 *Research book or monograph (author)* – Authored work generally arising from an academic research project although contract research can produce such results if findings are in the public domain
- 12 *Textbook (author)* – A full-length authored work used for instructional purposes; include revisions if they involve "substantial" (say 20%) new material
- 13 Chapter in an edited book (author) – A paper, essay, or other material authored specifically for inclusion in an edited book; does not include an opening or summary chapter prepared by an editor for inclusion in a work counted in (13)

### 2 Journal articles

- 21 *Article published in refereed journal* – A paper in a refereed journal devoted to reporting the results of basic or applied research
- 22 *Article for policy or professional journal* – An article for a policy or professional journal: that is, a refereed or unrefereed journal publishing policy or educational material for a professional audience
- 924 *Article for newspaper or popular journal* – An article, column, or other work in a newspaper or popular journal: that is, an unrefereed journal devoted to the dissemination of news and commentary for a broad audience

### 3 Conference papers

- 31 *Invited conference paper* – A paper invited for presentation at an academic or professional meeting: the paper may or may not be published in a conference "Proceedings", but any such publication should be considered part of this entry and not be counted as a separate item
- 32 *Refereed conference paper* – A paper accepted for presentation at an academic or professional meeting on the basis of a formal peer review process external to the institution; "Proceedings" should be handled as in (31)
- 33 *Other conference paper* –  
Any other paper presented at an academic or professional conference
- 34 *Working paper* – A research paper distributed for comment to academic colleagues inside or outside the institution ;"Proceedings" should be handled as in (31)

### 4 Creative and literary works, consulting reports and case studies

- 41 *Authored play, poem, novel, story* – Fictional or similar works, published in a form appropriate to the type of work
- 42 *Consulting or contract research report* – Report on work performed under an institutional consulting or research contract: reports counted here generally will be prepared for the client, and they may be proprietary if institutional rules permit
- 43 *Written teaching case study or extensive note* – Material prepared for teaching purposes with applicability beyond one's own course needs; short notes and descriptions prepared for immediate class use should not be included.
- 44a *Painting, sculpture, drawings, photos* – Creation of artefacts capable of being reviewed for merit, generally but not exclusively of an artistic nature (excluding categories covered below)

- 44b *Films, videos* – Creation of films, videos, multimedia, and similar productions for research, educational, cultural, or entertainment purposes
- 45a *Performance* – Dramatic, musical, and similar performances
- 45b *Participation in exhibits* – Participation as an exhibitor of paintings, sculpture, films, videos, or other artefacts: the exhibit may be sponsored by the institution or externally; it should attract significant public or professional attention
- 46a *Engineering, architectural, graphic designs* – An engineering, architectural, graphic, landscape, or interior design (or the equivalent), whether prepared for a client or in the public domain
- 46b *Computer software or system* – Development of a shareable computer software program, computer language, expert system, computer-aided instruction package or the equivalent
- 47 *Translation of other's work* – Translation of an item of type (?) through (?) above, written by other: translation of one's own work is considered part of the authoring process and should not be included

## **5 Patents, licensing agreements, assignments and companies**

- 51 *Patents obtained* – the patents obtained in the year on work done within the institution, not patents filed, not patents held in previous years, and not patents obtained/held on work done elsewhere
- 52 *Licensing agreements* – the licensing of technology/invention **from** the institution within the specified assessment period
- 53 *Assignments of intellectual property rights* – the assignment based on technology/invention **from** the institution within the specified assessment period
- 54 *Companies* – companies in which the institution holds an equity by virtue of technology transfer, where the acquisition of such equity (including any increase in equity) by technology transfer occurred during the assessment period

## **6 Students trained**

- 61 PhD or equivalent degrees awarded by the institution
- 62 MPhil degrees awarded by the institution

## **7 All other outputs**

- 71 *Speech or other prestigious public presentation* – A public presentation not classified as teaching or falling under the "conference" headings given above: the presentation may be within the institution or to an external audience; "prestigious" means "significantly enhancing the reputation of the individual and his/her institution" as opposed to (say) a routine lecture
- 72 *High-level public or professional service* – High-level service external to the institution: for example, on a Committee such as, an officer of a professional body, or as a senior advisor to gov't or business

## **Special outputs**

- 701 Honours
- 702 Consultancy service offered to external bodies *Journal, series or book editorship* – An edited book of essays, readings, research papers or the equivalent, compiled for

research, teaching or other purposes. Editor, associate editor, or the equivalent of a journal, book series, or similar on-going publication venture: do not include one-time edited-book projects which are counted under (13), or service on an editorial board

971 *Speech or other prestigious public presentation* – A public presentation not classified as teaching or falling under the "conference" headings given above: the presentation may be within the institution or to an external audience; "prestigious" means "significantly enhancing the reputation of the individual and his/her institution" as opposed to (say) a routine lecture

### **Prizes and awards**

81 Prizes and awards bestowed by an external source

**Appendix 2.2: AE-FUNAI Internal Research Assessment Form**

**ALEX EKWUEME FEDERAL UNIVERSITY NDUFU-ALIKE**

**Internal Research Strategy Exercise**

**Individual Researcher's Summary Proforma**

**Period of Assessment: 1 January 2014 to 31 December 2017**

Full name of Staff  
Member: \_\_\_\_\_

Position: \_\_\_\_\_ Department:  
nt: \_\_\_\_\_

I. Main Area(s) of  
Research: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

II. Details of up to Best Five Research Output Items and One Exceptional Item published outside the Period of Assessment.

**Notes: (a) Please underline the name(s) of the co-author(s) from the same department; and  
(b) Please circle the name(s) of the co-author(s) from the same department who will submit the same output item for assessment.**

Titles; Name(s) of Author and/or Co-Author(s), Year of Publication, Name of Journal/Publisher, Volume Number, Page Numbers

(1) \_\_\_\_\_

\_\_\_\_\_

(2) \_\_\_\_\_

\_\_\_\_\_

(3) \_\_\_\_\_

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(4)

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(5)

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Exceptional Item (if any)

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(Please turn over)

III. Self Assessment of Research Achievements (not more than one side of A4, and not smaller than font size 10)