Framework for KNUST Research Fund (KReF) Kwame Nkrumah University of Science and Technology

1.0 BACKGROUND

This framework describes the KNUST Research Fund (KReF) and the procedure for application.

The Kwame Nkrumah University of Science and Technology (KNUST) Research Fund was established to contribute to the generation of new knowledge and research-based solutions to national challenges. Recent global developments have made it clear that, science and technology for development thrive better when they collaborate with other disciplines. For many decades, KNUST has been at the forefront of the development of the needed human resources for the establishment and management of industries in the country and other African countries. To continue fulfilling this strategic role, KNUST has been developing wide-ranging disciplines of study and research in order to enhance the institution's impact on Ghana and Africa.

As a university, we recognize the need to continuously conceive and develop interdisciplinary research interventions in partnership with external stakeholders, especially industry and policy actors, for the human and economic development of Ghana. This is expected to encourage researchers and students of KNUST to be more innovative in identifying research themes, and develop projects with readily implementable outputs and uptake. To enhance KNUST's contribution in this direction, the University has established the KNUST Research Fund to support applied research especially problem-solving interdisciplinary research. It is expected to contribute to the reduction of poverty, and to the improvement of the livelihoods of Ghanaians through the application of science and technology and other allied specializations.

The KReF has successfully implemented three funding cycles, funding thirty-five (35) projects in the past three years. The fund looks forward to supporting many more research projects and helping build research capacity at KNUST.

Fund recipients will be expected to execute problem-solving research, which will lead to implementable outputs such as business startups, inventions and patents, new ways of doing things, and policy and practice influence. Principal Investigators and research teams should also consider and facilitate bridging the gap between university and industry, as well as other stakeholders in finding these solutions.

2.0 THE KNUST RESEARCH FUND (KReF)

2.1 Motivation for Establishing the KNUST Research Fund (KReF)

- a) The university's commitment to building research capacity of staff and departments;
- b) The desire to encourage interdisciplinary research among staff as most academics are used to working individually;
- c) The need to enhance communication and linkage among disciplines within the University; and
- d) The need to harness the expertise within the University to help in the socio-economic development of Ghana in particular and Africa in general.

2.2 Expected Outcomes

- a) Staff capacity in research and proposal writing skills built, thereby enhancing the chances of KNUST in attracting more externally funded projects and making more impact.
- b) Interdisciplinary teams writing proposals and working together;
- c) Better utilization of the available expertise in jointly working on research that will lead to ready uptake in Ghana.
- d) Research outcomes applied to policies, practice and developmental interventions

3.0 GUIDE FOR IMPLEMENTATION

3.1 Guidelines

- a) There shall be two levels of funding by KReF i.e. the seed grant awards and the interdisciplinary grant awards.
- b) The **Seed Grant** is for small pilot or exploratory research projects focusing on exploring the feasibility of new research approaches, allowing investigators to collect preliminary data to subsequently develop major grant applications, or for completing short-term research studies.
- c) The **Interdisciplinary Grant** is for research projects that specifically address a national developmental issue and are also capable of shaping or influencing policy and practice in Ghana.
- d) Each research project must be led by a lead researcher (Principal Investigator) who must be a staff of KNUST and who will also serve as the budget holder;
- e) For interdisciplinary projects, the Principal Investigator will be required to lead a research team, which should include at least one experienced researcher.
- f) A minimum of three disciplines shall be involved in any interdisciplinary project to enhance the skill of collaborative research and proposal writing.
- g) Applicants are encouraged to involve all team members as well as external partners in the whole process, from inception to the end of project;
- h) Applicants are required to involve named postgraduate student(s) as members of their team and provide mentoring to the student(s). The involved student(s) are allowed to base their thesis on the project;

- i) Payment for staff time **cannot** be included in the budget.
- j) Experienced reviewers will be assembled to evaluate proposals;
- k) Items purchased with funds from this award with a useful life beyond the project period shall remain the property of the Principal Investigator's Department or Unit
- I) Awardees are expected to produce publications in peer-reviewed journals as one of the outputs of their research.

3.2 Implementation

- a) Call for proposals will be made once a year;
- b) Funding for proposals for the Seed Grant shall be up to GH¢10,000 per award.
- c) Funding for proposals for the Interdisciplinary Grant shall be up to GH¢30,000 per award.
- d) The project implementation period should not be more than one year
- e) A mid-term report should be submitted to OGR six months from the award date and a final report should be submitted at the end of the project

3.3 Fund Management and Disbursement

- a) The Office of Grants and Research (OGR) will be responsible for the application, review and award process.
- b) Upon granting of the awards, funds will be released to the College of the Principal Investigator (PI).
- c) The PI shall be the grant holder, and shall request for and account for funds through the College accounting processes.
- d) The disbursement of the funds shall be as follows:
 - i) 50% of funds shall be released upon award of the Grant;
 - ii) 50% upon submission and approval of the mid-term (halfway) report;
- e) If awarded, the PI will be expected to:
 - i) Use the grant funds only as specified in the approved grant proposal
 - ii) Revise your budget to correspond with the awarded amount, if applicable
 - iii) Maintain all records to show and account for the use of grant funds
 - iv) Allow KNUST Auditors to unlimited access to project records to verify grant activities and expenditure
 - v) Repay any portion of the funds not used for the specified purposes
- f) No-cost extension PIs may apply for a 6-month no-cost extension within three months to the end of the project period. This may be granted on a discretionary basis and will be at no additional cost to the KReF. A further extension of this period may not be granted.
- g) Closeout of project PIs are to ensure that final project and financial reports are submitted to OGR at the end of the project. If this is not done, a forcible closeout will be carried out by OGR and penalty may be imposed on the PI.

4.0 EVALUATION OF PROPOSALS

4.1 Criteria Definition

The evaluation process shall consist of three major criteria:

- a) **Relevance**: the proposal sufficiently addresses issues of national concern.
- b) **Effectiveness:** the proposal is clear with respect to adhering to specified conditions, such as budget limitations, attraction of co-funding and collaboration with other departments.
- c) **Proposal Quality**: the proposal is innovative, has a clear problem definition, adequate project methodology, and a credible research team.

4.2 Scoring Criteria

The **Relevance Criterion** shall carry 30% of the total score, and focus on the following areas:

- a) Relevance of the theme and its degree of priority to national development;
- b) Link and added value to ongoing research or efforts in the theme area;
- c) Likelihood of uptake and impact of proposed project on the improvement of policy or practice.

The **Effectiveness Criterion** shall carry 20% of the total score, and focus on the following areas:

- a) Financial effectiveness;
- b) Potential for future development for the seed category
- c) Number of departments, their appropriateness and level of involvement for the interdisciplinary category

The **Proposal Quality Criterion** shall carry 50% of the total score, and focus on the following areas:

- a) Clarity and quality of problem definition and embedding of project into national development;
- b) Originality and innovation;
- c) Clarity and adequacy of project methodology;
- d) Access to the appropriate resources or populations required to achieve the project objectives; and
- e) Credibility of the research group.