No: $\underline{50}$/18th Acad./46th/ Syn/Reg/SBBWUP
Dated: Friday, 22nd September, 2023

NOTIFICATION

Subject: **Research Policy of Shaheed Benazir Bhutto Women University Peshawar**

Upon the recommendation of Academic Council made in its 18th meeting held on 24th May, 2023, the Syndicate in its 46th meeting held on 10th August, 2023 & 16th August, 2023, approved the **"Research Policy"** of Shaheed Benazir Bhutto Women University Peshawar

Sd/-
Assistant Registrar Academics

Enclosure: Research Policy of SBBWUP

No: 22 40 - 43 Acad/SBBWUP
Copy to:
1. Controller of Examinations / Director Advanced Studies & Research Board, SBBWUP
2. Manager University, Linkages (Liaison Manager) SBBWUP
3. PS to Vice-Chancellor, SBBWUP
4. PA to Registrar, SBBWUP

Assistant Registrar Academics

RESEARCH POLICY

1. Introduction and Overview

This document presents the Research Policy of Shaheed Benazir Bhutto Women University Peshawar, which is based on the University's statutes and regulations. It aims to provide policies and practices that support and enhance research activities. It should be read in conjunction with relevant Rules and Regulations, as well as any other policies, procedures, or guidance issued by the University.

The Academic Council, acting upon recommendations from the Advanced Studies and Research Board (ASRB) and through the ORIC Steering Committee, shall review and update this document. The Academic Council, being the regulatory body of the University, shall approve research policies and programs in accordance with the Act's provisions as provided under Section 25(2)(b)&(g) of the Act.

In today's globalized world, research plays a significant role in the sustainability and development of academic institutions. It is essential to foster knowledge-driven growth through innovation. The pursuit of knowledge is the fundamental principle underlying research. The quality of research directly impacts the quality of teaching and learning, benefiting students, society, and the country as a whole. Promoting research in Pakistan can position the nation as a knowledge hub on the international stage.

However, many institutes lack mandatory research goals for faculty members, and adequate systems or infrastructure to support high-quality research which are often lacking. Factors such as an unsupportive academic environment, inadequate libraries and labs, insufficient funding, faculty shortages, and inadequate infrastructure contribute to the underdeveloped state of research in Pakistani academic institutions. To establish research universities capable of engaging with top global institutions, these universities must receive adequate support to participate in the global knowledge economy at a comparable level. International student mobility, faculty exchanges, research collaborations, and teaching programs require a globally competent academic workforce. Therefore, research-oriented teaching is crucial as educators engaged in research, stay updated with the latest developments in their fields and can guide students in research activities.

This commitment to research aligns with the national imperative to encourage more postgraduate studies and expand the pool of researchers who can contribute to knowledge production and innovation in society. Given the current academic landscape, the purpose of this Research Policy Document is to:

a. Present a policy framework for the management, support, and development of research at the University.

b. Provide a strategy for achieving research goals.

c. Address applied and basic research, innovation, and technology development.

d. Outline guiding principles for managing, supporting, and developing research at the University, applicable to all employees and registered students.

e. Promote research and development through the provision of resources, effective communication, support for consultancy, collaboration, outreach activities, and integration of undergraduate and postgraduate research into the mainstream research.

The Research Policy encompasses various sections:

- Introduction and Overview of the University
- Strategic Plan for promoting research activities
- Structure of Research and Development activities
- Code of Conduct for research
- Policies and schemes for research promotion, resource mobilization, innovation ecosystem, research publications, consultancy, collaborations, and outreach activities
- Formats and guidelines for operational aspects of research and development activities.

The structure and content of this research policy document will be reviewed and revised by the Steering Committee during regular meetings and placed before the Academic Council for approval. Moreover, the Academic Council has the authority to amend these policies and guidelines as it deems necessary and appropriate.

2. Strategic Plan

In order to remain relevant and meet the changing demands of global economies, higher educational institutions must continuously innovate. Apart from delivering quality education, these institutions are expected to focus on research and innovation, undergo transformation in

their societal role, operational methods, and economic structure. The strategic plan outlined in this document is derived from the university's commitment to outstanding learning experiences, impactful research, and societal engagement, which form the interconnected strands of a triple helix. Our aspirations and focus are defined by teaching, research and engagement that shape and reinforce one another.

The second theme of the strategic plan focuses on impactful research. It involves setting strategic research goals, identifying necessary resources, and determining the actions required to achieve those goals. This plan aligns with the Research Mission statement and core values, taking into account both external and internal imperatives within the framework of the National R&D Strategy.

2.1 Goal: Research with an Impact

The institutional goal of ORIC-SBBWUP is to actively nurture and organize research efforts and creative endeavors to have a regional, national, and global impact, thus helping in building the reputation of a research-intensive University.

Improving research performance based on various standard metrics is essential for gaining credibility and obtaining the resources needed to elevate SBBWUP within the higher education system. The research efforts will primarily focus on areas of national interest, and strategic investments, research leadership, and support will be allocated to interdisciplinary and disciplinary areas to develop substantial research strength.

2.2 Focus

The strategic plan aims to develop significant research strengths by aligning areas of current expertise with national interests through selective strategic investments, leadership, and support.

This includes:

a) Creating a strategic research roadmap for each Department of the University, identifying research focus areas (RFAs) that build on present strengths and future opportunities.
b) Implementing an integrated and coherent University-wide approach to planning, delivering, managing, rewarding, and funding research across all Schools.
c) Enhancing the number of research-active faculty members.

d) Establishing metrics to measure and reflect research output and impact at both individual and institutional levels.

2.3 Interdisciplinary Research

To compete for large funding opportunities and address societal needs with innovative solutions, strategic aggregations of people and programs will be established to strengthen interdisciplinary research and development. This involves:

a) Promoting and supporting interdisciplinary research and development centers that leverage the breadth of expertise to tackle complex problems faced by the nation and the world.
b) Prioritizing problem/opportunity-focused projects/products in these centers that demonstrate successful interdisciplinary collaboration and address market needs.

2.4 Funding

Creating a supportive research environment by facilitating access to internal grants and providing strategic expertise to maximize external grants

This includes:

a) Creating a University Research Fund to aid ORIC and departments in increasing their research activity and prominence.
b) Creating the necessary procedures to give initial funding for research projects that can win outside grants.
c) Seeking money from governments, organisations that conduct research, and businesses to support ongoing research activities and make certain projects possible.
d) Encouraging the commercialization of research and technology transfer by supporting outside entrepreneurs and using tools like licensing, patents, spin-off businesses, and spin-off enterprises.

2.5 Programs

Enhancing the quality and relevance of doctoral research programs to position the institution as a preferred choice for researchers

This involves:

a) Ongoing expenditure on the development of research capabilities to draw and aid more doctorate candidates in disciplinary and transdisciplinary Research Funded Areas (RFAs).

b) Involving undergraduate and graduate students in the university's research programmes to further the integration of research and teaching/learning.

c) Employing creative enrollment tactics to bring in and support full-time industry personnel and researchers.

3. Structure of Research and Development (R&D) Activities

The research promotion and development activities of the university will be managed and supported by the Research and Development (R&D) section of the Office of Research, Innovation, and Commercialization (ORIC). This section will provide administrative and managerial support for sponsored research, consultancy, and related activities of the University. It will facilitate interactions with external agencies at both national and international levels, promote and manage University-Industry collaborations, externally funded research and development projects, and patents. The R&D section will act as a liaison between the University and funding agencies for sponsored projects.

The Academic Council, as the regulatory body of the university, shall recommend to the Syndicate for approval, research policies and research programs to enhance research activities.

3.1 Academic Council

The Academic Council, as the academic and research regulatory body of the University, is responsible for regulating research policies and programs. It reviews and oversees the implementation of research strategies and policies recommended by the Steering Committee.

The objectives of the Academic Council are:

a) Provide guidance on the strategic direction required to advance the research profile of the University.

b) Advise departments on developing their strategic research roadmaps.

c) Review policies and regulations to enhance the quality of MS/Ph.D programs.

d) Regularly review the research progress of departments based on appropriate parameters.

3.2 Funding Policy of R&D Activities

The University shall allocate 5% of its total revenue for R&D activities, duly recommended by the Academic Council to the F&PC.

3.3 Components of R&D

Research at the university is conducted through three different components:

(i) **University-sponsored research:** The University promotes research at the individual faculty level, as well as among groups of faculty within departments or interdisciplinary research groups. Each year, the University identifies, reviews, and provides funds for research at the individual faculty level, research groups, research clusters, product design and development groups, etc. This depends upon the availability of funds under the Research Head of the duly approved budget of the particular fiscal year. More details regarding these are provided separately under initiatives to promote R&D activities.

(ii) **Research programs:** The departments offer research programs in various areas aligned with the disciplines and expertise of the faculty. These programs, such as MS and PhD degrees, contribute to imparting research experience to undergraduate and postgraduate students.

(iii) **Externally funded projects:** Faculty members can write proposals and secure external funding for research and consultancy projects as Principal Investigators (PIs). These projects are funded by external sources.

4. Initiatives to promote R & D activities

To promote research and development (R&D) activities, the university has identified several challenges and established objectives, initiatives, and research promotion schemes. Here are the details:

4.1 Challenges: The University recognizes the following challenges in enhancing the research culture:

- Lack of synergy in research initiatives
- Lack of visibility to attract funding
- Lack of experience with funded projects

- No tradition of research
- Inadequate support facilities
- Insufficient reward system for research

4.2 Objectives to promote R&D activities: The objectives of the university's initiatives are as follows:

4.2.1. Identification of faculty groups: Faculty groups for research clusters (RCs), research groups (RGs), or product design and development groups (PDDGs) will be selected based on the university's needs, talent, passion, and sustainability to evolve into Clusters of Competency (CoCs).

4.2.2 Human resources: Each RC/RG may recruit research assistants/associates to support the research activities as per their research proposals.

4.2.3 Roadmap: RCs/RGs and PDDGs should provide a roadmap for three years. The release of funds for the first year is subject to the acceptance of the roadmap, and subsequent funding depends on the success of the projects.

4.2.4 PDDG roadmap: Faculty or groups applying for PDDGs can recruit research associates and have to provide a three-year roadmap. Similar to RCs/RGs, subsequent funding depends on the success of the roadmap.

4.2.5 Budgeting: The budget for each RC/RG or PDDG will be stipulated annually in the budget to be presented to the Finance and Planning Committee (F&PC).

4.3. Research promotion Schemes: To promote research in emerging and high impact areas, the R&D of the University is required to undertake initiatives to identify and nurture research clusters/research groups (RC/RGs) and provide funds for Product Design and Development initiatives. The university shall undertake initiatives to provide seed money to individual faculty through capacity building projects. The aim is to develop these clusters/groups to a level of competency called Cluster of Competency (CoC).

For the promotion of research, the following research promotion schemes are proposed:

- Capacity building projects
- Research Groups and Clusters

- Facility creation for Product design
- Incentive for R & D activities

Every year the call for proposals will be sent to all faculty for the different internal funding schemes of the University. The Steering Committee will review these proposals and approve the funding. The fund will be for one year and faculty or group will have to write fresh proposal for continuation or new proposals. The following section gives brief details about these activities.

4.3.1. Capacity Building fund: The capacity building fund is the first financing that must be given to each faculty member in order to start new research projects and expand existing ones in areas that are in line with the department's priority areas.

The goals of these projects are to:

• Improve the faculty's research capacity and that of the research centre, cluster, or group;

• Provide research project experience; and

• Simplify the procedure of asking for financing from outside funding organisations.

4.3.2. Research Cluster (RC): The research cluster is focused on a particular issue, such as energy, material science, data analytics, SDGs, nanoscience, preventing climate change, cosmetics, textiles, food, and drinks, etc. These clusters combine the efforts and areas of expertise of academics from other departments and build a foundation for higher inter-disciplinary research, development, technology-translation, and production levels. Gaining attention and notoriety within a selected theme is the goal.

4.3.3. Research Group (RG): Similar to RC, the faculty members who collaborate here may come from the same department or from different departments. Over time, the formation of research clusters in the area of collaboration is a result of research groups.

4.3.4. Clusters of Competency (CoC): Based on the needs of the university, talent, enthusiasm, and the ecosystem, which will continue to develop into Clusters of Competency (CoC), RCs/RGs will be identified. As they will go through two phases before becoming CoC, this will aid in identifying the research competency.

RCs must establish a roadmap, focus research, and develop capacity during Phase 1. Before being promoted to a CoC in Phase-2, RCs must contribute to publications,

financed research and consulting initiatives, patents, etc. For the development of products, the CoCs will cooperate with the university's Business Incubation Centre, which fosters innovation and entrepreneurship..

4.3.5. <mark>Product Design and Development Grant (PDDG</mark>): A faculty member or group of academic members who participate in product innovation, design, and development activities at the university and help start-ups and industry will be awarded the Product Design and Development Grant (PDDG). For the purpose of technology translation, product design, and development, these faculty groups will assemble the skill set and expertise of diverse groups of researchers from Departments, RCs/RGs, and industry.

4.3.6. Faculty student start-up grant (FSSG): A faculty member or group of academic members who work with a startup and students on product development and implementation can apply for this funding.

4.4 Research Courses for Students: Undergraduate students will be offered research courses by the institution to promote a culture of inquiry. Students from the Faculty of Sciences may enrol in these courses, which carry a 6 credit weight, in lieu of two electives. Courses in research include:

4.4.1. Research Experience for Undergraduates (REU): This course has the following details:

4.4.1.1. Objectives:
- To give students practical, hands-on research experience.
- To offer a chance to collaborate closely with a professor on a legitimate research project.
- To collaborate with research teams in the sector to find creative solutions for regional issues.

4.4.1.2. Faculty Supervisors: Through the format provided by the University, Research group proposal can be submitted individually by Faculty with doctoral degree individually or in a group.

4.4.1.3. Process of REU: While taking the course, the UG/PG students will be required to work on a research topic that exhibits understanding of the course substantially alongwith the capability to apply the same. A dissertation will be submitted by the candidate at the culmination of the work which will be evaluated

by a committee comprising of 3 members- Head of the department, an external examiner and supervisor.

4.4.2. Institute research projects (IRP): These will be submitted by the respective Department or cluster departments, duly approved by the university ORIC- R&D through Steering Committee. Usually IRP goals are defined for 3 to 5 years with objectives for each year.

The UG/PG students, during these courses shall work in teams on a research project as identified by the university R&D center. A report shall be submitted by the candidate at the culmination of the work which will be evaluated by a committee comprising of 3 members- Head of the department, an external examiner and supervisor.

4.4.3. Institutional Sponsored Projects (ISP): The respective Department or cluster departments shall submit the Institutional approved projects duly approved by the university ORIC- R&D through Steering Committee (funding for which shall be identified in the budget, duly approved by the F&PC). Usually ISP proposals need institutional support as they have short term goals for a year

    4.4.3.1. While taking the course, the UG/PG students will be required to work on a research topic as a team. The concerned department will identify the research project and will route it through ORIC-R&D. A report will be submitted by the students' team at the culmination of the work which will be evaluated by a committee comprising of 3 members- Head of the department, an external examiner and supervisor.

4.4.4 Sponsored Research Projects (SRP): These are Research projects funded by external sources, where students work on project objectives defined by the Principal Investigator (PI).While taking the course, the UG/PG students will be required to work on a research project as team, the objectives of which will be defined by the Principal Investigator (PI) of that externally funded project. A report will be submitted by the students' team at the culmination of the work which will be evaluated by a committee comprising of 3 members- Head of the department, an external examiner and supervisor.

4.5. Financial assistance for Conference(s): To support the faculty and enhance the research culture and collaborations, the university will establish a financial assistance program for organizing and attending conferences and faculty development programs. The university has a

review process in place to evaluate the policies related to financial assistance. Faculty members who wish to avail financial support under this scheme need to submit their proposals to the Office of Research, Innovation, and Commercialization (ORIC-R&D). A review committee will assess the proposals and make recommendations. Funds allocated for a specific activity will not be used for any other program.

4.5.1. Organizing and attending Conferences: Financial assistance will be available for organizing conferences at the national and international levels across various fields, subject to the availability of funds under research head. The objective is to promote high standards in education by providing a platform for academicians and working professionals to share their knowledge, experiences, innovations, and inventions. Preference will be given to interdisciplinary topics and emerging areas of research. The university will provide financial support for both students and faculty to present their papers at conferences held within Pakistan as well as outside the country, subject to the availability of funds under research head. The university shall have policies in place regarding conference attendance, both within and outside Pakistan. Additionally, faculty members are encouraged to seek financial support from external agencies to attend conferences.

4.5.2. Organizing and attending Faculty Development Programs (FDPs) and Staff Development Programs (SDPs): The university shall offer financial assistance to conduct and attend Faculty Development Programs (FDPs) and Staff Development Programs (SDPs). These programs aim to upgrade knowledge and skills and provide opportunities for induction training to teachers and staff members of the university. The objective of this grant is to enhance the teaching and other skills of faculty members, familiarize them with modern teaching tools and methodologies, and help them acquire knowledge about current technological developments in relevant fields.

Overall, these initiatives and financial assistance programs promote research culture, collaboration, and the professional development of faculty members and staff, contributing to the overall growth and success of the university.

5. Resource Mobilization

The university recognizes the importance of a transparent and well-planned financial management system. The main sources of funds for the university are the government and the management. The resource mobilization policy aims to align with the goals and targets of the institution, ensuring accountability and transparency in the financial processes.

6. Innovation Eco-system and IP Policy

To foster a favorable environment for innovation, the university is committed to establishing an innovation eco-system within its campus. Concrete steps will be taken to enhance innovation and entrepreneurship. The university has a policy in place to protect intellectual property rights and ensure the safeguarding of intellectual property.

6.1 Innovation Eco-system

The university's Office of Research, Innovation, and Commercialization (ORIC) shall establish a Business Incubation Centre (BIC) in accordance with the guidelines provided by the Higher Education Commission (HEC). The incubator will be driven by an entrepreneurial mindset, encouraging and supporting entrepreneurship among the university community. By collaborating with the university ecosystem, the ORIC-BIC will attract entrepreneurs and provide them with the necessary support, including manpower, a conducive business/technology environment, mentorship, and resources to test and scale up their products. The ORIC-BIC will accept applications for potential incubation from students, faculty, alumni, and aspiring entrepreneurs. Its charter includes:

i.   Enabling student startups on campus by providing comprehensive support within a conducive business/technology ecosystem.

ii.   Creating and nurturing a culture of innovation that leads to the development of Pakistan-specific products and services.

iii.   Leveraging student-faculty teams to build world-class technology solutions.

iv.   Supporting faculty participation in startups as a policy.

v.   Collaborating with state/central support systems to bring talent from cities into the mainstream.

vi.   Encouraging and supporting women entrepreneurs and female students in all aspects of innovation and entrepreneurship initiatives of ORIC-BIC.

6.2 IP Policy

The university has an approved Intellectual Property (IP) policy, which has been reviewed and authorized by the Competent Forum. The details of the IP policy can be found in the attached annexure.

The university's focus on resource mobilization, innovation, entrepreneurship, and intellectual property protection demonstrates its commitment to creating a vibrant and progressive academic environment that fosters research, development, and collaboration.

7. Research Publications and Awards

The university recognizes the importance of research and aims to improve its overall research performance by promoting research activities across various departments, faculty members, and students. To support and reward research endeavors, the university shall establish the Research Incentive Scheme (RIS) which will be placed in budget of every fiscal year for approval. The RIS will provide assistance for research activities and reward faculty members for the successful publication or presentation of their research outputs. The following points may be outlines for details of the awards:

7.1. Review and Revision of Guidelines: The guidelines for the Research Incentive Scheme will be periodically reviewed and revised as needed during Academic Council meetings. In case revised guidelines are not available, the existing guidelines will continue to apply for each academic year.

7.2. Application Process: The guidelines and application process for the Research Incentive Scheme will be presented during the Academic Council meeting. Information regarding the guidelines and application formats will be shared with all stakeholders after the meeting.

7.3. Award Application: Faculty members interested in applying for the awards will need to submit their applications in the format provided by the Quality Enhancement Cell (QEC) office or ORIC, as the case may be.

7.4. Review and Recommendation: The Incentive Committee will review all award applications and make recommendations for the awards/incentives accordingly.

7.5. Categories of Awards: The awards provided under the Research Incentive Scheme will fall into the following categories:

7.5.1. Awards for Quality Publications: Financial incentives shall be provided to encourage faculty members to produce high-quality scientific publications or for their publications in HJRS category 'W' journals. Authors of international journal papers, books, or book chapters shall be eligible for incentives based on the university's/HEC's guidelines.

7.5.2. Awards for External Funded Research Projects: To encourage and facilitate applications for external funded research projects, the university will have an award scheme for Principal Investigators (PIs) of such projects. PIs can apply for the award after the successful completion of an external funded research project and submission of the utilization certificate.

7.5.3. Award for Supervising Doctoral Students: In order to encourage faculty members with doctoral degrees to supervise doctoral students, the university will provide awards and incentives to supervisors. The doctoral students themselves will be working as Research Assistants or Research Associates in the university. Supervisors can apply for the award after the successful completion and award of the doctoral degree to their doctoral students.

By offering incentives and recognition through the Research Incentive Scheme, the university aims to foster a research-focused culture and motivate faculty members to engage in high-quality research activities, publish their work, secure external funding, and effectively supervise doctoral students,

8. Research Consultancy and Consultancy Policy

The university recognizes the importance of research consultancy and aims to promote collaboration with other reputable institutions and industries through Memoranda of Understanding (MoUs). Additionally, the university shall formulate a consultancy policy to facilitate outreach activities and engage faculty members in consultancy work. The policy will outline different categories based on the financial involvement of the institution and the distribution of financial gain. The following points provide details about the consultancy policy:

8.1. MoUs: The university actively encourages research consultancy and collaboration with other esteemed institutions and industries through the signing of MoUs. These MoUs serve as a platform for promoting research consultancy and fostering partnerships and collaborations.

8.2. Consultancy Policy: To enhance outreach activities, consultancy is recognized as a key component. The university acknowledges that its faculty members possess the potential to undertake consultancy work. Therefore, permission will be granted to faculty and staff to engage in consultancy activities, with any financial gain resulting from such endeavors being shared between the institution and the faculty/staff involved. The policy suggests three categories based on the level of financial involvement and specifies different distribution shares for each category:

8.2.1. Category I: Under this category, faculty and staff members are permitted to use the institution's infrastructure, including buildings, electricity, water, and materials for testing, prototyping, and material preparation. The distribution of the financial gain is proposed as follows:

Institution: 50%

Faculty/Staff: 43%

Administrative Cost: 7%

8.2.2. Category II: In this category, faculty and staff members are allowed to utilize the institution's infrastructure, including buildings, electricity, and water. The distribution of the financial gain is proposed as follows:

Institution: 30%

Faculty/Staff: 60%

Administrative Cost: 10%

8.2.3. Category III: Under this category, faculty members have the opportunity to visit and work outside the institution, utilizing the institution's intellectual property sparingly. They are granted duty leave for these engagements. The distribution of the financial gain is proposed as follows:

Institution: 20%

Faculty: 70%

Administrative Cost: 10%

It is important to note that the internal distribution of the financial gain may vary depending on the specific project and agreement reached on a case-by-case basis. Special cases may also have different distribution shares based on specific agreements. The administrative cost share is allocated to the Head of the Institution.

By implementing the consultancy policy, the university aims to leverage the expertise of its faculty and staff for consultancy work, facilitate outreach activities, and create a mutually beneficial relationship where both the institution and the faculty/staff members can share in the financial gain resulting from consultancy projects.

9. Code of Research and Ethics

The purpose of the Research Code of Conduct is to establish and maintain the highest standards of rigor and integrity in research conducted by the University and its members. The University is committed to upholding these standards and expects all individuals involved in research, including students and staff, to adhere to the principles outlined in the Code. The Code covers various areas of research, including approval procedures, publication and authorship, research data, reviewing research, supervision and management of students or researchers, and intellectual property.

The Code emphasizes the values associated with responsible conduct in research, such as honesty, trust, justice, integrity, intellectual probity, respect, responsibility, and benevolence. It highlights the importance of promoting these values within the scientific community to foster a research environment that upholds ethical standards and strives for research excellence.

The Code applies to all individuals involved in research under the University's auspices, including staff, students, emeritus professors, honorary staff, visiting staff, and external research collaborators. Compliance with the Code is a condition of employment or affiliation with the University, and any breach of the Code may be subject to the University's disciplinary procedures.

The Code also emphasizes the principles of integrity and accountability in research. It outlines the responsibilities of individuals involved in research, including the ethical basis of research, safety, financial management, project management, data management, confidentiality, protection of intellectual property rights, informed consent, and avoidance of harm to participants and the

environment. It also highlights the importance of peer review and the obligation to disclose conflicts of interest and areas of limited competence.

The Code addresses the proper handling and retention of research data, including the need for clear and accurate record-keeping, durable and auditable data storage, accessibility of data for verification purposes, and compliance with data protection regulations. It also emphasizes the ethical considerations in publications, including the acknowledgment of sources, appropriate citation practices, co-authorship guidelines, and disclosure of similar or previously published work.

The University is committed to reviewing and updating the Research Code of Conduct on an annual basis to incorporate changes and recommendations from external research funders, relevant regulations, and Acts of Parliament. Heads of departments have a responsibility to ensure compliance with the Code, and the University provides induction processes and relevant training to raise awareness of the Code and best practices in research.

Overall, the Research Code of Conduct serves as a guiding framework to promote responsible conduct, uphold integrity, and ensure ethical standards in research conducted within the University. It underscores the University's commitment to research excellence and the advancement of knowledge.

The University Research Code of Conduct shall lay out the standards expected from all those carrying out research under its auspices. The Code shall cover areas such as:

1. Approval procedures
2. Publication and Authorship
3. Research Data
4. Reviewing research for journals or funding bodies or internal purposes
5. Supervision and management of students' or researchers'
6. Intellectual property (to be read in conjunction with the IP policy)

9.1. Principles and Application

9.1.1. It is expected that highest standards of integrity shall be conducted in all research carried out at the University or in its name. This is enunciated in this Research Policy for

every kind of research carried out throughout the University, and serves as a framework for governance of research. Adherence to the highest standards of ethical conduct and performance is required by all undertaking and/or contributing to research with good practices embedded in every aspect of their work. Honesty and openness is required with respect to not only their own action, but in response to the actions of others involved in research.

9.1.2. University requires all Emeritus Professors, staff, Honorary Staff, visiting staff and all registered students (whether undergraduate or postgraduate) involved in research to abide by this Code. Where any other individual who collaborates in research with the University's Staff and Registered Students is not bound by an equivalent Code through their Employer or other organisation, the individual shall be expected to abide by this Code when working with the University unless otherwise agreed.

References hereafter to 'researcher or workers' include all Staff (including Emeritus Professors, Honorary Staff and Visiting Staff), Registered Students and external research collaborators who are involved with research in connection with or as part of the University.

9.1.3. This Code is linked to and operates in conjunction with conditions of employment for the relevant staff groups and other related University policies and procedures. Failure to abide by this Research Policy may lead to the matter being considered under the University's disciplinary procedures.

9.1.4. Any alleged breach of this Code shall be dealt with in accordance with the appropriate University disciplinary procedures.

9.1.5. The Research Policy and its implementation will be reviewed by the ORIC Steering Committee and recommendations thereof placed before the University's Academic Council on an annual basis in consultation with appropriate and relevant individuals or groups. The review will take into account recommendations and changes from external research funders, Acts of Parliament and other regulations. Where any proposed change to this Research Policy would affect Staff Terms and Conditions of Service the University will follow the appropriate normal procedures of consultation and/or negotiation.

9.1.6. All research workers undertaking or involved in research must familiarise themselves with this Research Policy. Heads of Department have a responsibility to seek to ensure compliance with the Research Policy. The University will draw attention to the Research Policy in its induction processes for newly appointed Staff and Registered Students. Supervisors of Registered Students will seek to ensure compliance with the Research Policy on the part of students. The University will draw attention to relevant training and development modules to ensure that all research workers are aware of best practice requirements.

9.1.7. The University recognizes and protects the principle of academic freedom in its Act & Statutes.

9.2. Integrity and Accountability

9.2.1. Everyone involved in research in the University owes a duty of accountability to the University, to all participants in their research, and to their research funders commensurate with their involvement in that research. Individuals must accept responsibility for their own conduct of their part in any research and for providing direction for the activities of any Staff or Registered Student under their supervision.

9.2.2. The Primary Researcher or Principal Investigator in any research shall identify clear roles and accountabilities for all those involved in any research project, and should ensure that all involved are informed of their responsibilities.

Areas of accountability include:

i. the ethical basis of the research and the research design

ii. the safety of all involved in the research,

iii. the probity of financial management of all projects and for seeking to provide the optimum value for the public or private funders who have invested in them,

iv. effective project management to agreed project plans and appropriate quality standards, including timely delivery of any scheduled, tangible outcomes,

v. management of research data in accordance with the Data Protection Act (DPA), 1998 and university legal provisions,

vi. seeking to ensure timely and wide dissemination of research findings,

vii. as appropriate undertaking professional development relevant to the research and ensuring that all others involved in the research have received relevant training,

viii. maintaining personal records of research progress, including authorised laboratory books, to the recommended or required standards,

ix. maintaining confidentiality in order to achieve protection of intellectual property rights where appropriate,

x. ensuring research participants participate in a voluntary way, free from any coercion and are properly informed of any risks, the broad objectives and of the identity of any sponsors of the research,

xi. using all best endeavors to avoid unnecessary harm to participants, other people, animals and the natural environment, having taken due account of the foreseeable risks and potential benefits of the research,

9.2.3. Research workers must maintain the confidentiality of the information given, disclose any conflicts of interest and any areas of limited expertise, and refrain from misusing or misappropriating the content of the material being reviewed when peer reviewing research proposals or results (including manuscripts submitted for publication).Research workers must maintain the confidentiality of the information given, disclose any conflicts of interest and any areas of limited expertise, and refrain from misusing or misappropriating the content of the material being reviewed when peer reviewing research proposals or results (including manuscripts submitted for publication).

9.2.4. In their interactions with other research workers and in their conduct of their own work, research employees must be truthful and law abiding. This is true for the full spectrum of research activities, products, and deliverables, including grant applications, experimental planning, data collection and analysis, publishing findings, and honouring the direct and indirect work of coworkers, collaborators, and others reviewing.

9.2.5. Advice should be sought from a member of the relevant Ethical Review Committee if a research worker has questions about whether the accountability obligations outlined in clause 9.2.2 can be met, is unsure whether the provisions of the Code apply to their participation in any research, or about the best course of action to be taken in relation to it. The Committee will provide written responses to all inquiries, which will be kept on file for future access as necessary. Any issues a registered student may have regarding this research policy should be directed immediately to their immediate supervisor.

9.3. Research Data

9.3.1. Researchers are required to retain thorough records of the steps they took to conduct their studies, as well as the outcomes they found, even preliminary findings.

9.3.2. In order to be easily retrievable, research data must be recorded in a long-lasting, auditable format with the proper citations.

9.3.3. Primary research data and research evidence must be available in confidence to other authorised researchers for verification purposes for a reasonable amount of time after the research is completed, unless already prohibited by law or confidentiality agreements, or where there are good ethical reasons not to. Data should typically be preserved and accessible for ten years, but for projects of clinical or significant social, environmental, or historical importance, this may be extended. These times are consistent with the most recent university policies.

9.3.4. Data should be retained in their original form unless there are specific reasons, including any legal or regulatory requirements (including without limitation the needs of a research ethics committee), for not doing so. Data should be safely stored on the most recent storage medium.

9.3.5. Any research project's principal investigator is responsible for adhering to the DPA. The DPA is applicable to all personal data processing.

9.3.6. In relation to personal data, some key concerns for researchers include:

a. **Every member of staff and registered student who uses personal data for research has a duty of secrecy to the subjects,**

b. Research personnel must guarantee that they acquire each study participant's explicit informed written consent before obtaining, retaining, or using their personal data, unless there are ethically or legally compelling reasons to do differently.

c. Data security measures must be adequate to prevent unauthorised disclosure of personal information or breaches of confidentiality.

d. The Academic Section of the University will create and put into effect processes for adhering to the University's Data Protection Policy and the University's

Records Management Policy through the Departments. Heads of Departments are in charge of making sure that all Staff and Registered Students are aware of these procedures once they have been authorised by the University.

9.3.7. Subject to any restrictions imposed by the confidentially of personal data, the Academic Section of the University shall be responsible for developing acceptable processes for security and retention of research data in a manner that would enable retrieval by an authorised third party.

9.3.8. When it is contractually required, certain safeguards should be taken to safeguard the security of research data.

9.3.9 Except when confidentiality rules apply, research data associated with publications should be available for discussion with other researchers. In cases where the researcher has made or granted confidentiality pledges to third parties, including study subjects, or where confidentiality is necessary to preserve intellectual property rights, confidentiality restrictions relating to publications may apply. The Principal Investigator is responsible for familiarising himself or herself with any confidentiality clauses pertaining to a specific research grant or contract and for informing research assistants under his or her supervision of their responsibilities with regard to these clauses. ORIC-R&D can provide guidance on specific grant or contract terms.

9.3.10. Additionally, the principal investigator must make sure that no one else's intellectual property rights are violated.

9.4. Publications

9.4.1. Publication is the distribution of scholarly and research findings in a variety of media, including electronic media in addition to the traditional paper format. The university encourages registered students and staff to publish their research findings in a timely and suitable manner. Books, chapters, articles, conference proceedings, reviews, patents, catalogues, compositions, the creation of creative works, software, and databases are all considered publications in this sense.

9.4.2. All forms of publication and external communication, including as websites, e-bulletins, press releases, media briefings, and other events, must take ethical considerations into account. In addition to adhering to the University's basic values of openness, transparency, and responsibility, research workers are expected to adopt the

proper ethical and professional standards and obligations in their publications, as detailed below.

9.4.3. According to the appropriate protocols for recording that information, it is good practice for all University Staff to enter the specifics of their research outputs in the pertinent University research publishing databases. Staff and Registered Students should work with the University to incorporate their outputs in a publicly accessible repository when appropriate in order to help ensure wide distribution of their publications.

9.4.4. Authors have a fundamental ethical responsibility to acknowledge and credit outside sources of information. The Harvard reference system, which the university has chosen as its standard, or the house style of the relevant publisher and/or the accepted conventions of the discipline in question, should be followed for citing sources. Citations not only acknowledge the work of others but also help readers locate specific passages in the text and understand the author's or writers' contributions in light of earlier writing. Failure to cite sources may, among other things, be considered plagiarism and subject to disciplinary action.

9.4.5. The University shall not support citation practices that go against accepted academic practices (such citation clubs or the overuse of self-citation). The Supervisor will offer advice regarding appropriate self-citation usage. Membership in Citation Clubs may be considered improper behaviour.

9.4.6. The dissemination, comprehension, and observance of appropriate co-authorship practice is in the best interests of teachers, registered students, and the university..

9.4.7. A publication must make adequate reference to all individuals who have made contributions that could be considered significant to the pertinent study. Any person who has made a significant contribution by conceptualising, carrying out, or interpreting even a small portion of the pertinent research should be given the chance to be listed as an author in a work that results from that study. Accepting the title of co-author signifies that you are totally committed to having your name and reputation associated with the publication's content.

9.4.8. There is a general ethical requirement that contributors to the work being reported in a publication be named and their contributions acknowledged. Therefore, it might be appropriate to point up people who contributed significantly to the work that is described

in a publication. Financial backers, advisors from colleagues both inside and outside the University, and anybody else who made it easier to gather the information or data used to produce the papers are all examples of this. If it is planned to recognise those mentioned for their aid in the publishing, they should be asked for permission and given the chance to view the publication.

9.4.9. An appropriate reference to the other publications must be included in any publication that is significantly comparable to those other publications resulting from the same study. When submitting work, a researcher is required to notify publishers of any (a) substantially identical work that is also being submitted to another publisher at the same time, or (b) previously published material. Authors should be aware that, in cases of contract research and collaborative projects, it may be necessary to obtain advance written consent from each party to the agreement before submitting the work to a publisher.

9.5. Sponsored Research

9.5.1. Sponsored Research Projects In a sponsored project, the principal investigator (PI) does not receive an honorarium or consulting fee. Amount may be used by the PIs in accordance with the funding agency's approval in the relevant budget head. If a faculty member wants to pursue sponsored projects in the fields of their chosen research interests, they may choose to contact various national and international funding bodies and corporations. No honorarium of any kind may be claimed for a project funded by a government body. The project is carried out in accordance with the sponsoring organization's policies.

9.5.2. Collaborative Research Projects Additionally, faculty members may take part in joint initiatives with other domestic or international partners. Even though there may be an overall project in such cases, the faculty and staff of the Institute must create a distinct budget and scope of work statement. The component that needs to be completed by the Institute should form the bulk of the summary statement that is given to the Institute. This sponsored project will be handled by the Institute the same as any other.

9.5.3. Project execution Guidelines

9.5.3.1. Project responsibility: The projects that have been approved are led by a Principal Investigator (PI), who may be assisted by Co-Principal Investigators

(CoPIs) or an Administrative PI (to run the project in the event that the PI is absent). The PIs are also in charge of producing the deliverables for the projects.

9.5.3.2. Every sponsored initiative must use funds supplied by the sponsoring agency to cover every cost associated with running the project. The PI is the only person in charge of running the project..

9.5.3.2. Preparation and Submission of the Proposal: The project proposal should be written in accordance with the format required by the relevant funding agency and submitted to the university's R & D Cell for further consideration. The principal investigator (PI) may not submit a proposal to a funding organisation without first communicating with the R&D cell.

9.5.3.3. Ethics/ (Intellectual Property Rights) IPRs: The ethical concerns of scientific testing on humans, animals, etc. are a concern for funding organisations. During the course of the studies, PIs are accountable for preserving academic integrity, Non-Disclosure Agreements (NDA), the University Research Policy, and the MoU requirements of the funding agency. The PIs are in charge of submitting the project's utilization/completion certificates, statement of expenditures, and progress reports.

9.6. Ethical Review The University mandates that all research projects undertaken by staff and postgraduate registered students undergo an ethical self-assessment and, where additional scrutiny is necessary, an ethical review by an internal or external ethical review committee as recommended by the university regulatory committees. All researchers utilise software tools to check their work for plagiarism.

9.7. Additional Requirements: This Code is believed to apply to anyone doing any unique job performance or conduct requirements that may be required by law or by the University with regard to particular areas of research.

9.8. Adverse Events: Each Department must have processes in place to guarantee that all adverse events are recorded and, if necessary, investigated. Research staff have a responsibility to monitor and report any adverse events occurring during the research. An adverse incident in this context is one that causes harm to the researcher, the research subjects, or the environment.

9.9. Misconduct

9.9.1. Misconduct in research is a failure to comply with the provisions of this Code and, without limiting the generality of the foregoing provisions, is taken to include: Fabrication, Falsification, Plagiarism, Misrepresentation, Mismanagement of Data and/or Primary materials etc., and general Misconduct.

9.9.2. Researchers and other members of Staff have a duty to report any breach of this Code where they have good reason to believe it is occurring, to the Head of College or some other person in authority.

9.9.3. The University considers an accusation of research misconduct to be within its remit and suitable for consideration according to its relevant disciplinary procedures.

10. Research Extension and Collaboration Activities

10.1 Goal: The University's strategic theme for Societal Engagement focuses on actively contributing to the socio-economic development and benefit of the region. The goal is to enhance the quality of life in the region through expertise, experience, and leadership provided by the university. The engagement with society is seen as mutually beneficial, enriching both the community and the students. The university aims to pursue this agenda through sustained partnerships with public, private, non-governmental, and professional bodies.

Here are the key activities outlined in the theme:

10.2 Student - Society

10.2.1. Create educational experiences that foster a greater understanding of social issues among students and encourage them to develop innovative solutions to address these issues.

10.2.2. Support students in taking up projects that involve community engagement and have a positive impact on the local and regional communities.

10.2.3. Encourage and support students in undertaking entrepreneurial initiatives that are relevant to society.

10.3 Institute- Society

10.3.1. Act as a leader in a network of local and regional organizations, government entities, educational institutions, and private foundations, establishing strong partnerships that positively impact the community.

10.3.2. Address the needs, challenges, and perspectives of the region through services, applied research, and collaborations with appropriate organizations.

10.3.3. Support educational institutions and students in the region through outreach programs and services to enhance the quality of education.

10.4 Entrepreneurship

10.4.1. Provide formal and informal opportunities for students and faculty to engage in entrepreneurial activities that lead to the creation of startup companies and employment opportunities.

10.4.2. Engage with entrepreneurial communities to create a vibrant entrepreneurial ecosystem both on campus and in the region.

10.4.3. Promote and support technological innovation and research by students and faculty, resulting in solutions that address societal needs and create value for new enterprises.

Overall, the university aims to actively engage with society, contribute to regional development, and foster an entrepreneurial culture that drives innovation, economic growth, and social impact.

11. Formats and Guidelines

According to the document, the formats and guidelines for the various research and development (R&D) activities outlined in the previous sections will be prepared and approved by the competent academic bodies of the university. These bodies will periodically review and update the guidelines as needed. Once approved, the guidelines will be shared with the faculty to ensure they have the necessary information and instructions for conducting their research and development activities.

The purpose of these formats and guidelines is to provide a framework and set of instructions to ensure consistency, quality, and compliance with the university's objectives and standards. They serve as a reference for faculty members, researchers, and students who are involved in R&D projects, outlining the specific requirements, procedures, and expectations for each type of activity.

By establishing and sharing these formats and guidelines, the university aims to streamline its R&D efforts, promote best practices, and ensure that the activities align with the strategic goals

and vision of the institution. Regular updates and communication with faculty members help to keep them informed and provide clarity on how to carry out their R&D work effectively within the university's framework.