Establishment of a Multidisciplinary Research Centre (MDRC) for Health-Science Research at the University of Peradeniya

Introduction

The University of Peradeniya stands as a distinguished research institution in Sri Lanka, housing nine faculties, four postgraduate institutes, and various centers spanning arts, allied health sciences, agriculture, medicine, dental, engineering, management, science, and veterinary disciplines. With a student body exceeding 18,000 and a dedicated academic and non-academic staff of over 3000, the university is poised to elevate its research endeavors.

Justification

While the University of Peradeniya has made notable strides in individual, departmental, and faculty-level research, there exists a crucial need for intensified attention to multidisciplinary research. While some efforts have been made, the full potential remains untapped. Addressing this gap through enhanced coordination, resource sharing, and support systems for researchers is essential for unlocking the institution's true research capabilities.

The Faculties of Medicine, Dental Science, and Allied Health Sciences have staff and students directly working on research related to human health. Further, the faculties of Veterinary Medicine and Animal Sciences, Science, and Agriculture also collaborate on this research while the Faculties of Arts and Management add to the same area with their expertise in anthropology and economics.

Thus, a multi-disciplinary research center where a concerted effort is put for research on human health is very much a reality at Peradeniya. Further, when one analyses the ongoing health science research at the university, the majority of projects are translational or applied research rather than basic or exploratory research.

Strengths

A wealth of human resources, including highly qualified academic staff across diverse fields related to human health.

Technical resources within faculties, PGIs, and centers.

Weaknesses

Limited coordination and cooperation among departments/faculties/PGIs/Centers.

Underutilization of available resources.

Challenges in accessing research equipment.

Repetition of research projects.

Lack of basic or exploratory research.
Objectives

In relation to multidisciplinary research in health sciences

**Conduct Comprehensive Research:** Undertake research activities across diverse subject areas, including life sciences, biomedical science, social science, agriculture, veterinary, and engineering, with a focus on solving public health issues and enhancing the quality of life through sustainable development.

**Establish State-of-the-Art Facilities:** Develop cutting-edge experimental infrastructure to facilitate advanced research.

**Promote Collaborative Research:** Foster a culture of collaboration among faculties, encouraging interdisciplinary research initiatives.

**International Collaboration and Funding:** Actively seek and cultivate international partnerships to diversify higher education and research and development, while pursuing funding opportunities.

**Industry Collaboration:** Collaborate with industry partners to bridge the gap between academia and practical applications, fostering innovation, and contributing to new product development and commercialization.

Implementation Plan:

**Establish a Centralized Research Coordination Unit:** create a dedicated unit to facilitate communication and coordination among faculties, promoting resource sharing and reducing redundancy.

**Invest in Research Infrastructure:** Allocate resources to build state-of-the-art laboratories and provide researchers with access to cutting-edge equipment.

**Capacity Building:** Provide training programs to enhance the skills of academic and technical staff, ensuring optimal utilization of available resources.

**Promote Interdisciplinary Research:** Develop incentive structures and recognition systems to encourage interdisciplinary collaboration.

**Internationalization:** Actively seek partnerships with international institutions and explore opportunities for joint research projects and academic exchanges.

**Industry Outreach:** Establish mechanisms for collaboration with industry partners, promoting knowledge transfer, and facilitating research-driven innovations.

**Innovation:** contributing to new product development and commercialization.
**Service component:** Offering community support through diagnostic services and engagement.

**Expected Outcomes:**

Enhanced research output and impact.

Strengthened academic-industry partnerships.

Increased visibility and recognition of the University of Peradeniya as a leader in multidisciplinary research.

This proposal aims to position the University of Peradeniya as a hub for cutting-edge research, fostering collaboration, and addressing societal challenges through multidisciplinary approaches.

**Self sustainability.**

**Operationalization and management plan for the Multidisciplinary Research Center (MDRC)**

**Management Committee** (deciding on scope of activities in relation to administration, authority, sustainability and viability plan of health-related multidisciplinary research)

Chairperson (from the Faculty of Medicine)

Chairperson (URC)

Representatives from all faculties

Representatives from research related centers of the university

Representatives from the PGIs

Representatives from Teaching Hospitals/ Ministries/ Dept. etc

**Board of Management** (Governinig body)

Vice Chancellor/ Deputy Vice chancellor

Chairperson (MDRC),

Deans of all faculties

**Financial administration**

Directly under bursar – to facilitate and expedite clearance etc.,
Direct link – to legal and documentation division

**Human resource**

Management assistant (secretarial work)

Technical officers (to assist research activities and maintenance of equipment)

Research assistants

System analyst (online booking/reservation systems)

Biomedical engineers – for repair related – linked to the Engineering faculty

**Operationalization**

Establishing the board of management and management committee

Identification (via URC) the available equipment

Request for willingness to include in the functional arrangement

Needs assessment survey for other required equipment

Establishing a database of people who are willing to come onboard for studies, and their interests

Match-making session for research teams – researchers present their area of interest etc and they are to be free to decide with whom they would like to work – the collaborations should naturally flourish

Identification and training technical officers in the different areas of the university to function the given equipment and their maintenance

Establish the booking system

Establish charges – competitively – to recover service cost