POSITION DESCRIPTION

Position Title	Principal Research Officer (Human Metabolic Chamber)		
Organisational Unit	The Faculty Of Health Sciences		
Functional Unit	The Mary Mackillop Institute For Health Research		
Nominated Supervisor	Director, The Mary MacKillop Institute for Health Research		
Classification	HEW 9		
CDF Level	HEW 9 CDF1	**Position Number**	10611867
Attendance Type	Full Time	**Date reviewed**	31-AUG-2023

ABOUT AUSTRALIAN CATHOLIC UNIVERSITY

Mission Statement: *Within the Catholic intellectual tradition and acting in Truth and Love, Australian Catholic University is committed to the pursuit of knowledge, the dignity of the human person and the common good.*

At ACU we pride ourselves on offering a welcoming environment for everyone. At the same time, we are a university committed to standing for something clear. We stand up for people in need and causes that matter. ACU's Mission is central to the University and informs every area – integrating the dignity of the human person, the common good, and ethical and social justice considerations into our core activities of student learning and teaching, research and service.

We are a publicly funded university which has grown rapidly over the past few years. We're young, but we are making our mark: ranking among the top universities worldwide. We have seven campuses around Australia, more than 200 partner universities on six continents, and a campus in Rome, Italy.

We know that our people make us a university like no other. It's your values, action and passion that makes the difference. Whatever role you may play in our organisation: it's what you do that defines who we are.

We value staff, offering excellent leave and employment conditions, and foster work environments where they have the ability to grow and develop. We continue to invest in our facilities and workplaces, and actively involve staff in shaping the future direction of the organisation.

Each portfolio consists of several Faculties, Research Institutes or Directorates. The Vice President drives both the Identity and the Mission of the University. In addition, Campus Deans focus on the University's local presence and development of the University at the local 'campus' level. For further information about the University please refer to the Organisation Chart.

All our staff contribute to the achievement of our goals set out in the Strategic Plan 2020-2023 and aim to provide high quality services with a strong focus on service excellence. Several frameworks and standards also express the University's expectations of conduct, capability, participation and contribution of staff.

ABOUT THE FACULTY OF HEALTH SCIENCES

The Faculty of Health Sciences comprises three schools:
- Allied Health
- Behavioural and Health Sciences
- Nursing, Midwifery and Paramedicine

There are currently approximately 14,000 students (EFTSL) and 530 (FTE) staff in the faculty under the disciplines: occupational therapy, speech pathology, social work, exercise science, exercise physiology, nutrition science, biomedical science, nursing, midwifery, paramedicine, physiotherapy, psychology and public health. The Faculty is represented across seven ACU campuses.

The Faculty's current research priorities focus on Cardiovascular Disease and Metabolism, Health Services Research, Nutrition, Sports Performance and Rehabilitation, Psychology and Mental Health.

An expanding portfolio of postgraduate courses is also available in coursework and research. Many postgraduate courses within the Faculty have been developed in conjunction with industries in order to meet specific needs of the professions and industry. Some postgraduate units are offered in flexible learning mode by online study. All students have professional and clinical experience that is supervised by specially qualified practitioners. Catholic hospitals and other public, private and specialty organisations, as well as schools and the health and sports industry, are involved with preparing for promoting and offering this valued and essential experience.

The goals of the Faculty are closely linked to and emanate from the Mission of the University. The areas of achievement by the Faculty include the key areas of teaching and learning, research and scholarship, community engagement in addition to specific objectives regarding internationalisation, quality and resource management. It has well-established procedures for evaluating performance and ensuring quality which involve students and representatives of the various statutory registration authorities and professional organisations, as well as recent graduates and employers.

Further information about the Faculty can be found at:
https://www.acu.edu.au/about-acu/faculties-directorates-and-staff/faculty-of-health-sciences

ABOUT THE MARY MACKILLOP INSTITUTE FOR HEALTH RESEARCH

The Mary MacKillop Institute for Health Research (MMIHR) is focused on finding and advocating for effective strategies to create healthier societies. Our research aims to address critical public health issues by identifying and responding with innovative programs that deliver better health outcomes and transform lives.

ACU provides MMIHR with world-class research infrastructure that facilitates large-scale research studies. The research environment is outstanding in terms of resources (world-class research facilities, infrastructure support, research support staff with experience in collecting data for large-scale projects, and secondary databases), intellectual capital (critical mass of world-class researchers, postdoctoral researchers, international visiting scholars and collaborators, and external linkages), and research mentoring and PhD supervision. www.mmihr.acu.edu.au.

POSITION PURPOSE

The Principal Research Officer (Human Metabolic Chamber) will oversee the day-to-day running and maintenance of the human metabolic chamber by utilising a range of technical skills and knowledge including mechanics, electronics, I.T. and human metabolism. This will require liaison with Maastricht Instruments (The Netherlands) to coordinate software and hardware updates, problem-solve technical issues and provide technical and research support to end-users of the metabolic chamber.

KEY RESPONSIBILITIES

Introduction

A number of frameworks and standards express the University's expectations of the conduct, capability, participation and contribution of staff. These are listed below:

- ACU Strategic Plan 2020-2023
- Catholic Identity and Mission
- ACU Capability Development Framework
- Higher Education Standards Framework
- ACU Service Delivery Model
- ACU Staff Enterprise Agreement including provisions in relation to Performance Excellence and Academic Career Pathways.
- ACU Staff Reconciliation Action Plan

The Capability Development Framework in particular is important in understanding the core competencies needed in all ACU staff to achieve the University's strategy and supports its mission.

Responsibility	Scope
Lead and manage the day-to-day operations of the metabolic chamber facility, including overseeing the setup, calibration, and maintenance of the chamber to ensure optimal research quality and effectiveness. - Draft and submit reports to the Director to provide progress updates relating to regular servicing , and maintenance of the facility. - Oversee repairs and technical improvements and ensure proper maintenance of onsite equipment relating to the running of the metabolic chamber.- Coordinate the planned use of the unit and related resources and perform all research interventions and maintenance tasks as required to ensure optimum chamber running.	The position mainly contributes to activities; outcomes and goals within the faculty/directorate/organisational unit
Implement quality control measures to uphold data integrity throughout the analysis process, ensuring data accuracy through proper labelling, timestamping, and linkage to corresponding experimental conditions.	The position mainly contributes to activities; outcomes and goals within the faculty/directorate/organisational unit
Collaborate with researchers and scientists to design experiments that necessitate metabolic measurements, ensuring a comprehensive understanding of the research objectives, selecting appropriate protocols, and taking into account ethical and safety considerations.	The position mainly contributes to activities; outcomes and goals within the faculty/directorate/organisational unit

Responsibility	Scope
Identify and address any issues or outliers in the raw data produced from the chamber. Conduct data cleaning by removing irrelevant or corrupted data points, correcting errors, and preparing the data for subsequent analysis.	The position mainly contributes to activities; outcomes and goals within the faculty/directorate/organisational unit
Supervise and facilitate the analysis of raw information from various sources, including raw data and calibration data from Maastricht Instruments, utilising specialised software or statistical tools to process and interpret the data effectively.	The position mainly contributes to activities; outcomes and goals within the faculty/directorate/organisational unit
Facilitate effective communication among researchers, staff, and technical teams to gather requirements and provide comprehensive explanations of the intricate functionalities and characteristics of the metabolic chamber system.	The position mainly contributes to activities; outcomes and goals within the faculty/directorate/organisational unit
Implement stringent quality control measures to uphold data integrity throughout the analysis process. This includes meticulous verification and validation of data to ensure its accuracy, consistency, and reliability.	The position mainly contributes to activities; outcomes and goals within the faculty/directorate/organisational unit
Contribute to the timely preparation of research reports and presentations by presenting analysed data in a clear and concise manner, accompanied by relevant visualisations, to effectively communicate findings.	The position contributes to activities; outcomes and goals; that are implemented and have impact across the University
Support the Institute in maintaining a safe, healthy, and welfare (SHW) compliant workplace by proactively identifying and responding to SHW risks within the designated area of responsibility.	The position contributes to activities; outcomes and goals; that are implemented and have impact across the University
Perform additional responsibilities as directed by the supervisor.	The position mainly contributes to activities; outcomes and goals within the faculty/directorate/organisational unit

HOW THE ROLE OPERATES

The position will require expert knowledge across a range of different areas and has the capacity to make decisions on behalf of the organisation.
The position is expected to demonstrate critical thinking to make recommendations; to meet changing demands; and provide business aligned solutions.
The position mainly communicates with people within their work area.
This position does not have managerial responsibilities.

SELECTION CRITERIA

Qualifications, skills, knowledge and experience:	• Qualification - Bachelor of Science and/or Master's Degree in either Biomedical Engineering, Human Biomedical Science/Electrical Engineering with understanding of biomedical/human research and experience working in the discipline of Physiology/Metabolism. A PhD in physiology and/or previous experience in managing a metabolic chamber facility or similar scientific facility is desirable. • Knowledge - In-depth knowledge of the design, functioning, and technical aspects of metabolic chambers, including their

	components, calibration procedures, and data acquisition systems. • Knowledge - Proficiency in data analysis tools and statistical methods used to process and interpret metabolic data. • Knowledge - Sound knowledge of safety protocols and ethical considerations related to human subjects involved in metabolic experiments. • Knowledge - Ability to identify and troubleshoot technical issues related to the metabolic chamber and associated equipment, enabling timely resolution to maintain the integrity of research data. • Knowledge - Understanding calibration procedures and maintenance requirements of metabolic measurement instruments to ensure accurate and reliable measurements. • Experience - Understanding of (metabolic) research and its operations, general research methodology, human experimentation, and physiology/biochemistry.
Core Competencies:	• Demonstrate confidence and courage in achieving ACU's Mission, Vision and Values by connecting the purpose of one's work to ACU's Mission, Vision and Values. • Work collaboratively internally and externally to ACU to capitalise on all available expertise in pursuit of excellence. • Communicate with purpose. Gain the support of others for actions that benefit ACU. Negotiate for mutually beneficial outcomes that are aligned with the Mission, Vision and Values of the University. • Coach and develop self and others through setting clear expectations, managing performance and developing required capabilities to establish a culture of learning and improvement. • Take personal accountability for achieving the highest quality outcomes through understanding the ACU context, self-reflection, and aspiring to and striving for excellence.
Essential Attributes:	Demonstrated commitment to cultural diversity and ethical practice principles and demonstrated knowledge of equal employment opportunity and workplace health and safety, appropriate to the level of the appointment.
Working with Children and vulnerable adults check	This role does not require a Working with Children Check.

REPORTING RELATIONSHIPS

For further information about the structure of the University, refer to the Organisation Chart https://www.acu.edu.au/about-acu/leadership-and-governance/leadership/organisational-structure