Ph.D Scholarship in the Centre for Muscle Research

This research project will focus on understanding the relationship between skeletal muscle weakness and amino acid signalling.

Location

This strategic scholarship is an exciting collaboration between researchers at the Centre for Muscle Research, Intensivists (Melbourne Health) and specialists in metabolomics and autophagic flux measurements (Karolinska Institute, Sweden). Based at the Parkville precinct our team bring combined expertise in the study of muscle in its many forms. We use innovative molecular and functional methods to study and understand muscle in both cell, animal and human based models. We have access to state-of-the-art facilities, mass spectrometry, metabolomics, gene expression technologies, histology, mouse phenotyping, muscle function platforms. The scholarship includes a two month placement within the research laboratories at the Karolinska institute.

KAROLINSKA INSTITUTE, STOCKHOLM

The project- "Mechanisms of amino acid signalling in skeletal muscle in critical illness

Critical illness is associated with a very rapid decline in skeletal muscle mass and weakness. Impaired anabolic signalling has been proposed as a key contributor, yet despite its biological significance, the metabolic pathways responsible for nutrient sensing and regulation of protein synthesis remain unresolved. The project is designed to increase our basic understanding of the skeletal muscle amino acid metabolism in critical illness and the amino acid sensing capacity of mTORC1. The fundamental discoveries will underpin development of muscle-specific modulators of muscle homeostasis with broad relevance to patients in intensive care. The outcomes of this Ph.D. project will provide an advance in knowledge and understanding of muscle and will provide advancements in novel therapies at a translational level.

The Applicant

Applicants will have a have completed tertiary studies that are equivalent to a 4-year honours degree at an Australian university with a minimum result equivalent to a first-class Honours (80%); The position must commence in 2021 and we are seeking someone with expertise and experience in biomedicine or other relevant biological sciences. Applicants must fulfil the Ph.D. admission criteria for the University of Melbourne, including meeting English language requirements, and demonstrating excellent capacity and potential for research. Demonstration of research ability through publication output in peer reviewed international journals is desirable.

- You must have the right to live and work in Australia to apply for this scholarship.
- Applications will not be accepted if you have previously completed a Ph.D.

Department of Anatomy & Physiology
School of Biomedical Sciences
Victoria 3010 Australia

+61 3 8344 0065
muscle-research@unimelb.edu.au
www.unimelb.edu.au

Institution

Melbourne University's global aspirations seek to make significant contributions to major social, economic and environmental challenges through our research programs. Learn more;

https://research.unimelb.edu.au/graduate-research

Centre for Muscle Research, Department of Physiology,

https://biomedicalsciences.unimelb.edu.au/departments/physiology/engage/centre-for-muscle-research

Remuneration

Annual stipend $31,200 (indexed, 2020 rate) for 3 years with the possibility of a 6-month extension and includes fee remission and inter-state relocation expenses (up to $2000 AUD).

Enquiries

For all enquiries, please contact:

- Prof Gordon Lynch (gsl@unimelb.edu.au)

How to apply

Applications are preferred online. Please go to:

http://jobs.unimelb.edu.au/caw/en/listing/ and in search by position or job number 903939. Applications should include the following documents:

- A cover letter stating your skills and experiences, areas of interest and expertise, and compelling reasons why you think you are suitable for the PhD in the Centre for Muscle Research.
- Your complete Academic Records (including grades/GPA scores, and grading scale details)
- Resume

Short-listed candidates will be contacted for a meeting with Prof Gordon Lynch to discuss your application and the project in more detail. If successful you will be instructed to apply to the Graduate School for admission.