



THE UNIVERSITY OF
MELBOURNE

Western Health Honours and Masters Program 2023

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Western Health Honours Program

A growing program

Collaborative research environment

- Supportive and accessible staff to help you navigate your honours year
- Academic staff, research support officers (Valentina), and academic programs officers and support staff (Aloka)





Western Health Honours Program

Projects of offer encompass

Laboratory based fundamental research

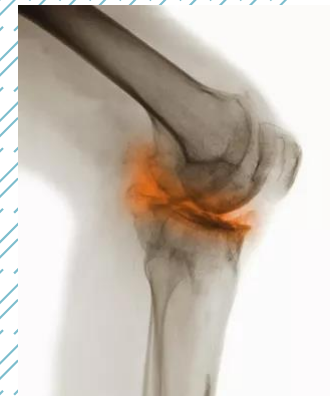
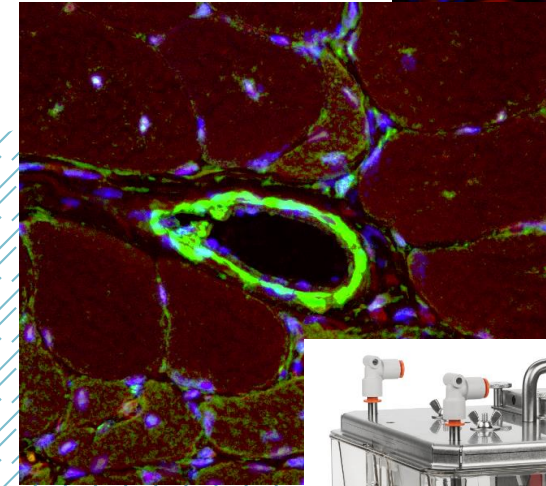
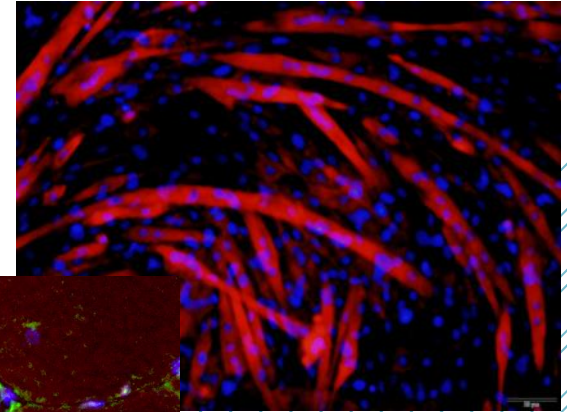
- Focused on understanding disease pathology
- Strengths in physiology
- How is tissue function altered?

Pre-clinical translational research

- Partnerships with international pharmaceutical companies and philanthropic organisations

Clinical research with physician scientists

- Understanding disease pathology from patient samples



Research Projects on Offer

- Skeletal Muscle
- Joints and bones
- Gastrointestinal tract
- Liver
- Lung
- Brain
- Adipose tissue



- Sarcopenia
- Muscular dystrophy
- Ulcerative colitis
- Cancer
- Arthritis
- Obesity

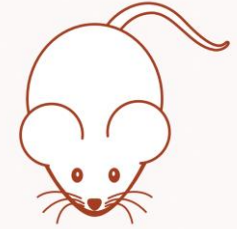
- Fibrosis
- Inflammation
- Mitochondria
- Microbiome
- Stem cells



Research Techniques

Structure – Function

- Physiology
- Pathology



- Behaviour testing
- Metabolic cages
- Skeletal muscle physiology suite
 - Whole body to isolated muscles

- Cell culture facilities
- Routine biochemistry
- Histology suite
- Microscopy suite
 - Confocal microscopes
 - Life cell imaging
- Flow cytometry; FACS
- Seahorse FX Analyser (mitochondria)

Learning support and scaffolded feedback

Mid-year poster presentation - Why?

- Feedback
 - Writing methods
 - Writing results
 - Preparing scientific figures
- Practice
 - Oral presentations
 - Answering questions

Outcome

- Increased confidence
 - Thesis writing
 - Final oral presentation

