



HDR Scholarship Opportunities

Open to New Zealand Students

The Heart Research Institute (HRI) is a leading independent medical research institute committed to tackling the world's number one killer - cardiovascular disease. HRI's vision is to save and improve the lives of people with cardiovascular disorders through world-class research and innovation. At our cutting-edge Institute, we nurture the brightest minds to discover the causes and complexities of cardiovascular disorders.

To continue producing innovative and world-leading cardiovascular research, HRI recognises the need to attract and support upcoming researchers.

HRI is inviting high-achieving, passionate New Zealand undergraduates to apply to undertake a Masters or PhD at HRI.

Key Benefits:

- Generous financial support of \$40,000, per annum (tax-free)
- Return flights from New Zealand to Sydney (initial and return trip covered)
- Accommodation support of up to \$600 p/week for the first two weeks in Sydney
- Mentorship from senior scientists leading innovative research.
- Opportunities for casual employment at HRI during your studies
- Access to state-of-the-art facilities and collaborative networks at an excellent location in the heart of Newtown, close to the University of Sydney and the Royal Prince Alfred Hospital. Take a virtual tour of our facilities [here](#).

- Top-up stipend of \$5,000 per annum (tax-free) for students awarded external HDR scholarships
- Up to \$1,000 to attend domestic conferences in the 2nd or 3rd year
- Up to \$5,000 to attend an international conference in the 3rd year.
- Flexible, inclusive, and supportive culture
- Further benefits of working/studying at HRI can be found on our [benefits page](#).

Potential candidates should identify their area of research interest. Please see below lab outlines, and detailed information about project descriptions can be found on the [HRI website](#).

Using cutting-edge technologies, the **Vascular Complications Lab** investigates the pathogenesis of blood vessel diseases, including atherosclerosis—the underlying cause of coronary, carotid, and peripheral artery disease (PAD). As part of the Centre for PAD, the lab combines advanced cellular, molecular, and translational approaches to develop targeted therapies that protect vascular health to improve patient outcomes.

Contact: A/Prof Mary Kavurma
mary.kavurma@hri.org.au

The **Atherosclerosis and Vascular Remodelling Lab** is exploring the pathogenesis of atherosclerosis through advanced cardiovascular genetics and transcriptomics, in collaboration with leading international researchers.

Contact: Dr Ashish Misra
ashish.misra@hri.org.au

The **Cardiovascular Regeneration Lab** is studying the complex pathophysiology of the cardiac microenvironment using state-of-the-art technologies, including personalised stem cells and 3D bioprinters.

Contact: A/Prof Carmine Gentile
carmine.gentile@hri.org.au

The **Microvascular Research Lab** is focused on understanding the role of reactive species in small artery signalling and disease, following their recent landmark publications (Nature 2019; 566: p548, Nat Commun 2021; 12: p6626)

Contact: Dr Christopher Stanley
christopher.stanley@hri.org.au

The **Cardiovascular Protective Signalling and Drug Discovery Lab's** research combines bioinformatics, natural product synthesis, and protein engineering to develop novel therapies targeting patient-derived blood cells (See *ACS Central Science* 2024, 10, 344; 10k+ views).

Contact: Dr Xuyu Liu
xuyu.liu@hri.org.au

The **Heart Muscle Lab** is focussed on understanding mechanisms underlying adaptive versus maladaptive heart enlargement (cardiac hypertrophy), heart failure, atrial fibrillation, cardio-oncology, organ cross-talk and sex differences. By using lab models and human samples we aim to identify new biomarkers and develop new therapeutic approaches.

Contact: Prof Julie McMullen
julie.mcmullen@hri.org.au

The **Cardiovascular Immunotherapy Unit** investigates how immune dysregulation drives the development and progression of cardiovascular diseases - particularly atherosclerosis and vascular inflammation - with the goal of developing novel immunotherapeutic strategies to treat coronary and peripheral artery disease.

Contact: Dr Sian Cartland
sian.cartland@hri.org.au

The **Cardiometabolic Lipidology and Lipidomics Lab** is dedicated to decoding how lipids (fats) contribute to vascular diseases, using state-of-the-art technologies, including machine learning-powered quantitative and spatial lipidomics. Related experience is required.

Contact: A/Prof Jacob Qi
jacob.qi@hri.org.au

Applications:

Scholarships are subject to project and supervisor availability.

Applications will be assessed by senior HRI Scientists based on academic merit and suitability. Applications must include:

- A one-page cover letter outlining your reasons for applying and your interests in research.
- Your academic record (including certified academic transcript)
- Your CV including referees (a summary of your work experience and other relevant activities)

Please submit your application altogether as **one PDF document** to careers@hri.org.au

Eligibility:

To be eligible, students must:

- Meet the criteria to apply for HDR admission at the University of Sydney
- Be a New Zealand citizen or permanent resident currently located in New Zealand
- Be a New Zealand undergraduate in their final year of study or have completed within the last 12 months.
- Commit to the HRI values and responsibilities
- Attend an interview via Microsoft Teams

The Heart Research Institute supports Equal Employment Opportunity.

We value diversity and encourage applications from women, Aboriginal and Torres Strait Islanders, Māori and Pasifika peoples, people with disability, LGBTQI individuals and applicants of diverse cultures and ages.

We are committed to the safety and wellbeing of our employees and affiliates, and our community. Whoever you are, you are welcome at HRI.

www.hri.org.au