

Post-doctoral Scientist – Cardiovascular Regeneration Group

(open to NZ citizens only)

- Exciting research in cutting-edge technologies using stem cells and organoids towards the development and use of advanced *in-vitro* biofabrication techniques.
- Full-time appointment for 2 years

THE HEART RESEARCH INSTITUTE (HRI) is an internationally recognised Medical Research Institute that performs ground-breaking cardiovascular research from our state-of-the-art facilities located in Newtown. For over 30 years, The HRI has been one of Australia's leading research organisations working to detect, prevent and treat heart disease. Through our research, The HRI has made significant findings that have changed the way we live with and treat cardiovascular disease.

The successful Postdoctoral Researcher will play a key role in advancing our cutting-edge research initiatives aimed at developing innovative solutions for cardiovascular diseases. This appointment is a collaborative venture between the Cardiovascular Regeneration Group at both HRI and the University of Technology Sydney ([Cardiovascular Regeneration • Heart Research Institute](#), [Carmine Gentile Profile | University of Technology Sydney](#)).

The project aims to advance our understanding of how cardiac cells in *in vitro* 3D models can predict outcomes in patients, as well as to develop potential translational solution to treat heart failure. This position offers an excellent opportunity to contribute to cutting-edge research while developing your scientific career.

Key Responsibilities:

- Develop and conduct research in cardiovascular tissue engineering and regenerative medicine, with a focus on design and applications of *in vitro* 3D models of cardiovascular pathophysiology.
- Design and execute experiments involving *in vitro* cardiac cultures that have analytical, biochemical and biological readouts.
- Analyse and interpret experimental data, and present findings through publications, presentations, and reports.
- Contribute to the preparation of grant proposals, progress reports, and other scientific documentation.
- Collaborate with a multidisciplinary team and mentor and supervise students and research assistants within the lab.

ELIGIBILITY

- Applicants must be able to provide evidence of NZ citizenship
- This is a Category A position according to the NSW Health Policy - Occupational Assessment, Screening Vaccination Against Specified Infectious Diseases. The successful applicant will be required to provide evidence of protection against the infectious diseases specified, at their own cost, prior to appointment

Essential criteria – you will have:

- Ph.D. in Biology, Biomedical Engineering, Biomaterials, Physiology, or a related field, with a strong focus on cardiovascular research.
- Strong technical skills and expertise in cardiac cells (myocytes and/or endothelial cells) for *in vitro* 3D models, as well as stem cells (iPSCs), tissue cultures at large, cardiac cell pathophysiology.
- Excellent track record of scientific publications in peer-reviewed journals.
- Strong communication skills, both written and verbal, with the ability to effectively present research findings.
- Ability to work independently as well as collaboratively within a cross-disciplinary team.

Preferred Qualifications:

- Hands-on experience with 3D bioprinting, 3D modelling/segmentation, and cardiovascular tissue engineering techniques, including hydrogel formulations.
- If suitable, experience in animal handling and *in vivo* techniques, including the ability to conduct procedures in compliance with Institutional and governmental regulations.
- Familiarity with bioinformatics tools and data analysis software.
- Experience in supervising or mentoring junior researchers.

Closing Date:

Applications close: 15 December 2024

WE OFFER:

- A friendly, flexible and productive multidisciplinary team environment
- Real work-life balance
- A convenient location in the heart of Newtown and at UTS (Central Station)
- A competitive salary depending on experience, plus not-for-profit salary packaging benefits
- For further benefits of working at HRI, please view our Benefits page: <https://www.hri.org.au/join-us/benefits>

ENQUIRIES: carmine.gentile@uts.edu.au

HOW TO APPLY:

Your application should include (a) a cover letter addressing the essential criteria and (b) detailed curriculum vitae (CV). *Please apply as soon as possible, as this job ad will close once we have received a sufficient response of relevant applications. Only shortlisted candidates will be contacted.*

ELIGIBILITY:

To apply for this position, you must have an appropriate Australian or New Zealand work visa.

This is a Category A position according to the NSW Health Policy - [Occupational Assessment, Screening Vaccination Against Specified Infectious Diseases](#). The successful applicant will be required to provide evidence of protection against the infectious diseases specified, at their own cost, prior to appointment.

The Heart Research Institute supports Equal Employment Opportunity. We value diversity and encourage applications from women, Aboriginal and Torres Strait Islanders, people with disability, LGBTIQI individuals and applicants of diverse cultures and ages.

www.hri.org.au