

2026 Perkins Vacation Scholarships and Projects

Last updated: 19 August 2026

Targeted Drug Delivery, Imaging & Therapy

Associate Professor Juliana Hamzah, Susan Wu

Commencing between 9th and 20th depending on Research Group.

This project investigates dyslipidemia, a metabolic disorder characterised by abnormal lipid metabolism and elevated circulating cholesterol and lipid levels. Dyslipidemia is associated with age-related disorders that affect not only the cardiovascular system but also other organs, including the brain. The project aims to investigate the mechanisms underlying dyslipidemia, atherosclerosis, vascular dysfunction and the effects of altered lipid metabolism on organ function and disease progression, as well as to evaluate potential therapeutic interventions.

Artificial intelligence, Preclinical & Engineering eXcellence in Heart Health (APEXHeart Lab)

Professor Girish Dwivedi

Commencing between 9th and 20th depending on Research Group.

PS OCT versus CT Calcium for score for CAD screening.

Rare Disease Genetics & Functional Genomics Research Group

Professor Gina Ravenscroft and Ravenscroft's Lab

Commencing between 9th and 20th depending on Research Group.

Functional genomics for rare diseases. The Ravenscroft laboratory works on identifying and understanding the genetics underlying rare diseases, with a focus on neuromuscular diseases. The group has a number of ongoing projects which may be amenable to a vacation and/or Honours project. The particular project will be designed in consultation with the student to best fit their interests and expertise, as well as the needs of the research group. Skills gained may include: variant curation, cell culture including of iPSCs, over-expression assays, microscopy and high content imaging, western blotting.

Liver Disease & Carcinogenesis

Emeritus Professor George Yeoh

Commencing between 9th and 20th depending on Research Group.

Discovering biomarker for cystic fibrosis patients with liver disease.

Melanoma Discovery

Professor Elin Gray

Commencing between 9th and 20th depending on Research Group.

Characterisation of melanoma and immune-cell interactions in patient-derived specimens.

Cancer Epigenetic Pilar Blancafort

Professor Pilar Blancafort

Commencing between 9th and 20th depending on Research Group.

The project is suitable for a Bachelor-level student with an interest in cancer biology, genomics and computational biology. As this is a computational project, some prior experience in bioinformatics, R programming or analysis of biological dataset is required. Previous experience with single-cell RNA-seq is advantageous but not required.

Positron Emission Tomography

Doctor Jamie Bellinge

Commencing between 9th and 20th depending on Research Group.

Positron Emission Tomography is an advanced image analysis technique that is used to detect molecular processes within the body. We are using this technique to better understand the drivers of vascular diseases, including cardiovascular disease, vasculitis and infective endocarditis. This project involves working with team members to review scans and data from scans, to help us better understand the molecular drivers of these diseases.

For further information about the projects Research Groups

Refer to the online handbook:

[Student Projects Booklet 2025](#).

Questions regarding the Perkins Vacation Scholarship 2026 contact Catherine at study@perkins.org.au