Macquarie is setting new benchmarks in medical research. With the Australian School of Advanced Medicine (ASAM) and the Macquarie University Hospital co-located on the Macquarie campus, medical sciences and surgery HDR candidates have access to a research environment that is unmatched in Australia.

ASAM brings together world-class clinicians, researchers and medical educators to create an innovative training program for medical practitioners and higher degree research candidates. Research activity is focused on future trends in medicine, particularly in neuroscience, vascular science, molecular biology and genetics, infectious diseases, cardiology, and surgery.

Research efforts are supported by Macquarie University Hospital. Australia’s only private hospital on a university campus, it provides a training ground for clinical and basic research programs in medicine, surgery, imaging, audiology, clinical psychology, and clinical neuropsychology amongst many others. A world leader in neurosurgery, the hospital houses the country’s only gamma knife, as well as other high-tech equipment found nowhere else in Australia.

As an HDR candidate you will have the unique opportunity to work alongside experts in industry and academia, providing you with an unrivalled research experience, and the opportunity to drive innovation and improve the lives of people around the world.
Support

HDR candidates are provided with strong academic and administrative support. This includes:

• Discipline-specific research training units, including workshops in research communication, presentation skills, academic writing skills, thesis planning, and poster preparation
• Experienced supervisors and department-based higher degree research directors
• Financial support for eligible candidates for a range of research-related activity

Highlights

• Macquarie hosts the Concentration of Research Excellence in Neuroscience, Vascular Sciences and Surgery which investigates the interaction between the brain and the cardiovascular and respiratory systems. Research into the use of the gamma knife in the treatment of aterio-venous malformations is leading to a non-surgical treatment for these dangerous lesions.

• Macquarie is also concentrating its activity on advancing on a cure for motor neurone disease and has recently recruited a group of 30 researchers ranging from basic scientists to clinicians using techniques that include genetics, cell biology, neuro-physiology and biochemistry.

• The new Macquarie University Cancer Institute is raising the bar in cancer care through research, advanced detection technologies, and integrated care of patients. A current research focus is on the pathogenesis of lymphoedema post breast surgery.

• Research into infectious agents is focusing on the control of infection in the operating theatre as well as the development of new drugs for malaria through an innovative genetics approach.