

UQ Summer Research Project Description

Please use this template to create a description of each research project, eligibility requirements and expected deliverables. Project details can then be uploaded to each faculty, school, institute, and centre webpage prior to the launch of the program.

Project title:	Probing the neuropharmacology of pain
Hours of engagement & delivery mode	<p>For the Summer program, students will be engaged for 6 weeks only.</p> <p>Hours of engagement must be between 20 – 36 hrs per week and must fall within the official program dates (13 Jan – 21 Feb 2025).</p> <p>Please outline if the project will be offered on-site, remotely or through a hybrid arrangement.</p>
Description:	<p>Peripheral sensory neurons express a range of ion channels and receptors that transform external stimuli into electrical signals. These signals are profoundly influenced by the neuronal microenvironment, including neighbouring cells such as immune cells, which fine-tune neuronal responses. This project will use venom peptides as pharmacological probes to examine the neuropharmacological mechanisms leading to enhanced neuronal excitability in painful conditions.</p>
Expected learning outcomes and deliverables:	<p>Students will gain experience in a range of in vitro pharmacological techniques including assessment of ion channel function, data collection and analysis. Students may also have an opportunity to generate publications from their research and may be asked to produce a report at the end of their project.</p>
Suitable for:	<p>This project is open to applications from students with previous experience in basic laboratory techniques.</p>
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