

## PHD SCHOLARSHIPS IN

# Neuroscience and Nanomaterials

The **Queensland Brain Institute (QBI)** is proud to announce two new scholarships – the **Deborah Kelly PhD Scholarship in Neuroscience** and the **Gregg Thompson PhD Scholarship in Neuroscience and Nanomaterials** (both \$25,000 p.a. tax-free and indexed annually for up to 3.5 years).

QBI are also offering several institutional scholarships (Australian Postgraduate Award equivalents), including top-up scholarships of \$5,000 per annum to selected applicants.

### Specialised fields

The human brain is one of the most complex “machines” known and studying its function is one of the last great frontiers in modern research. Research at QBI, under the Director Professor Perry Bartlett, is dedicated to discovering the fundamental mechanisms that underpin human brain function.

QBI already offers strong leadership in many neuroscience-related disciplines, including neurogenesis, synaptic plasticity, neural stem cells, neural cell migration, neural cell survival, computational neuroscience, cortical development, visual neuroscience, cognitive and behavioural studies, memory and learning, and ageing and brain disorders. A new initiative in Thinking Systems also provides projects that, in collaboration with computer scientists and mathematicians, aims to develop robots that utilise biologically inspired algorithms to learn and navigate the environment.

A further multidisciplinary project will be conducted in close collaboration with the research team of Professor Max Lu from the **Australian Institute for Bioengineering and Nanotechnology (AIBN)**. AIBN is a multidisciplinary Institute working at the

intersection of the biological, chemical and physical sciences.

A major impediment to the application of novel therapeutic strategies to combat neurodegenerative disease and other nervous system insults is the inability to effectively deliver biomolecules across the blood brain barrier into neural tissue within the living animal. The aim of this project is to develop a novel class of nanoparticles that can efficiently deliver biomolecular modulators targeting specific genes into selected cell populations within the brain.

Both QBI and AIBN are housed in purpose-built research facilities, which have been specifically designed for research excellence, incorporating a unique range of equipment and cutting-edge technologies.

### Applications are now invited

The Institute is seeking postgraduate students to undertake research in one of several specialised fields outlined above. Applicants should possess a first-class honours degree in the biological sciences (preferably neuroscience), or engineering.

Shortlisted applicants will be flown to Brisbane for interviews, and to meet with the researchers – a world-class interdisciplinary team of neuroscientists, engineers, molecular biologists, stem cell biologists, electro-physiologists, neuro-psychologists, computational neuroscientists and mathematicians.

To find out more, please contact Dr Sylvie Pichelin, email [s.pichelin@uq.edu.au](mailto:s.pichelin@uq.edu.au) or telephone (07) 3346 6399.

Applications close on the 30 June 2008.

[www.qbi.uq.edu.au](http://www.qbi.uq.edu.au) and [www.aibn.uq.edu.au](http://www.aibn.uq.edu.au)



**AIBN** Australian Institute for  
Bioengineering and Nanotechnology

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