



Purpose

The purpose of Brain Sciences UNSW is to facilitate & support high quality brain sciences research & education.

Vision

Our researchers are driven by a desire to make scientific discoveries targeted at improving the health & well-being of individuals suffering from brain-related & spinal cord disorders & injury, and lessening the burden on the broader community.

Structure & focus:-

Brain Sciences UNSW functions as a network to facilitate collaborative research and access to relevant technologies, expertise & educational or training opportunities. It encompasses an inter-disciplinary approach drawing together researchers & clinicians with diverse backgrounds from various Faculties, Schools & affiliated Institutes with a collective interest in aspects of the function & structure of the nervous system in both a "normal" healthy state & a state of dysfunction manifesting as mental illness or neurological disorder. Collaborative research is broadly organised in several non-binding themes which draw on relevant expertise within Brain Sciences.

Operating principles:- *success of the whole & the parts*

Brain Sciences UNSW promotes:

- The ongoing success of each member entity & participating scientific disciplines; and
- Encourages & enables strong science-driven collaborations across disciplines & between School, Centre & Institute members.

Brain Sciences UNSW seeks to work as a facilitative, collegiate organisation. It does not exist to compete with, or impose upon, members & their chosen scientific foci.

Strengths & opportunities:-

The future breakthroughs in the neurosciences will almost certainly come at the overlap between scientific disciplines & at the intersection of the disciplines with current & emerging technologies such as imaging & genetics. The strengths of Brain Sciences include the genuine multidisciplinary nature of the institute, the high quality of the research outputs of members, the low cost organisational infrastructure, the established collegial management processes, well-regarded colloquia & symposia, some success in obtaining PhD & post doc financial support & the funding of multidisciplinary research programs.

Key initiatives:-

- **Encourage & support applications for large multidisciplinary grants**

Over the coming five years, growth will come from success in a number of areas but in particular from success in attracting large multi-disciplinary grants & increasing other forms of financial support. Researchers are encouraged to extend their research funding beyond their current areas of support &, in particular, to collaborate in pursuing large, long term projects & infrastructure grants. This will involve thinking strategically & beyond one-off grants & may include competing for international & other competitive funds. It will also involve preparedness to engage with organisations & researchers beyond UNSW & its related independent research institutes.

Outcome: *Increased numbers of large national & international multidisciplinary research grants*

- **Plan for co-location of research teams where possible**

Outcome: *Enhanced productivity & collaboration through geographic co-location of researchers & research teams in brain-related disciplines*

- **Increase the possibilities of enhanced translational research between basic science & clinical researchers**

Outcome: *Successful multidisciplinary approaches in clinical research; better translational processes*

- **Strengthen undergraduate education & higher degree training in the neurosciences**

Further develop the education & training initiatives already in place between Schools & Faculties to attract & motivate the best students.

Outcome: *High quality undergraduate & postgraduate students in neurosciences*

- **Facilitate joint supervision of Brain Sciences PhD & honours students, including cross Faculty arrangements where scientifically valid**

There are relatively few students who are currently jointly supervised & an increase in this area will boost multi-disciplinary connections.

Outcome: *Greater numbers of research students with multi-disciplinary training; enhanced academic collaboration*

- **Engage in a collaborative approach to purchasing and/or obtaining access to new research equipment**

The equipment to conduct neurosciences research can be very expensive & funders look for collaborative approaches to equipment funding & use.

Outcome: *Access to cutting edge equipment; lower costs*

- **Encourage & support joint appointment of Chairs & other researchers between Faculties & Schools**

Joint appointments are not always easy to implement but there are now a number of highly successful examples. Members will actively canvas each other & seek support for new joint appointments & for cross-appointments of existing researchers.

Outcome: *Increased numbers of joint appointments & enhanced capacity to fund high-profile researchers between members*