

UNIVERSITY OF OTAGO
Te Whare Wananga Otago

INFORMATION FOR CANDIDATE

for appointment as

Postdoctoral Fellow or Research Fellow - Electrophysiology
(Fixed-term)

DEPARTMENT OF ANATOMY
SCHOOL OF BIOMEDICAL SCIENCES

SUMMARY OF THE RESEARCH PROJECT

This role will focus on research projects directed towards understanding changes in brain excitability and inhibition that underpins functional recovery following a stroke and head injury. In collaboration with industry partners and medicinal chemists we will test several compounds to assess their role in modulating brain excitability levels functional recovery. In addition to brain injury, we will assess GABA inhibitory changes in drug addiction models.

PRIME FUNCTION

As a Research Fellow you will lead the project; as a Postdoctoral Fellow you will contribute to the leadership of the project, and provide quality research assistance to Dr. Andrew Clarkson.

MAIN OBJECTIVE

- To work independently, planning and conducting experiments for research projects investigating electrophysiological changes following brain injury, stroke and in response to drug addiction.

KEY TASKS

- To perform experiments using patch-clamp electrophysiology from adult brain slices on projects related to brain injury, stroke and drug addiction.
- To provide academic input into research projects and to undertake other experiments within the wider research program of the group as appropriate.
- To provide high quality training within areas of expertise and assist in supervision of undergraduate and postgraduate students who may become associated with the research.
- To keep up-to-date with relevant recent literature.
- To write scientific papers that arise from the research project.
- To assist in writing grant applications.
- To begin to develop independent research program, including seeking independent funding for research
- To attend and present experimental results and discuss relevant journal articles at laboratory meetings, meetings within the department and institution, and other scientific meetings as appropriate.
- To ensure all laboratory facilities run as smoothly and efficiently as possible in support of the research project.

RELATIONSHIPS

Directly Responsible to: Dr. Andrew Clarkson.

Supervision of:

Students associated with the project.

Functional relationships with:

Postgraduate and undergraduate students working with Dr. Clarkson.

Other Research and Technical Staff of Department of Anatomy.
Animal Facility Staff.

BUDGETARY RESPONSIBILITY

- Supervise ordering of materials associated with the research.

PERSON SPECIFICATION

- PhD in a relevant neuroscience field.
- For Research Fellow - at least 3 years postdoctoral experience.
- To be self-motivated and committed to a research career in Neuroscience.
- Extensive experience with performing patch clamp electrophysiological recordings from brain slices.
- Evidence of peer-reviewed publications within the field of neuroscience.
- For Research Fellow – evidence of successful grant writing.
- Ability to work without supervision, set priorities and allocate own timetable.
- Ability to relate to a wide variety of people within a research environment.