# Post-doctoral Researcher in Cognitive Neuroscience

# We are seeking a motivated post-doctoral researcher to join a growing cognitive neuroscience team with strong translational patient links, focused on understanding the mechanisms underlying normal and abnormal motivated behaviour.

**Project:** We have received funding to employ a post-doctoral researcher full-time for one year, to investigate patient trajectories and antecedent causes of apathy in people with Parkinson's disease (PD). The project is based at the New Zealand Brain Research Institute (NZBRI), where a longitudinal cohort of PD patients has been followed since 2007, including extensive imaging, neuropsychology and clinical measures. Data is already collected, and the role will predominantly involve leading the analysis and interpretation of results.

## Start Date:

Early 2020

# **Objectives:**

- 1) Perform a robust epidemiological assessment of apathy within the longitudinal PD cohort.
- 2) Determine neuropsychological and imaging (ASL-MRI, functional, diffusion) predictors of apathy development.
- 3) Interpret and collate results (under guidance of the research team), and submit these for publications.

We are looking for a motivated researcher who is passionate about understanding brain function and translating this knowledge to meaningful clinical (patient) outcome. They must have completed (or be close to completion) a PhD in cognitive neuroscience, experimental psychology, neuroimaging or a closely related area. The role is a one year position, however there is strong potential for this to develop into a longer-term position for a suitable person, as well as scope to pursue further career development (publications, conference attendance, grant applications). It will most likely suit candidates with a neuroscience or psychology background, but all applicants with relevant skills will be considered.

# **Desirable attributes**

- Statistical analysis skills (ideally using MATLAB, R and/or Python)
- Experience in designing, conducting and analyzing neuroimaging experiments
- Experience in cognitive or computational neuroscience, with knowledge of motivation, decision-making and/or effort and reward processing
- Experience of writing and publishing peer-reviewed scientific papers
- Ability to work independently whilst also engaging in a team environment
- Strong presentation skills including ability to present research proposals and results, and represent the research group at meetings

• Resourcefulness and organisational skills

### New Zealand Brain Research Institute and Christchurch

The NZBRI provides a dynamic, friendly, supportive environment for neuroscience research. It brings together researchers with diverse skill sets, and integrates basic neuroscience work into the clinical realm through close links to the department of Neurology at Christchurch Hospital. This post-doc position will be affiliated with the University of Otago (Christchurch Campus). Christchurch is New Zealand's second largest city, and offers a multitude of cultural and outdoors activities <u>https://www.christchurchnz.com/new-zealand/</u>.

#### **University of Otago**

The University of Otago is New Zealand's oldest university, and has a rich heritage in neuroscience and experimental psychology research.

#### Renumeration

Will be in-line with current New Zealand Post-doctoral rates, approx. NZD\$79,300/year, plus superannuation (retirement benefits). We may be able to provide some additional help with relocation costs.

#### **Principal Investigator/Supervisor**

The successful candidate will be responsible primarily to Dr Campbell Le Heron, a clinicianscientist at the NZBRI. As a Neurologist he has subspecialty expertise in cognitive disorders, whilst his main research focus is on understanding the mechanisms that underlie apathy, a disorder of motivation affecting patients with a variety of underlying conditions. This incorporates work investigating the cognitive mechanisms that underlie effort-based decision making and normal motivated behaviour in humans. His research combines behavioural, physiological and imaging techniques, in healthy people and those with neurological disorders. He has recently moved to Christchurch, New Zealand (from Oxford, UK where he maintains strong collaborative links) and is establishing a cognitive neuroscience research group within the broader NZBRI.

#### How to apply

For informal inquiries, or to find out more about the formal application process, please contact Campbell Le Heron: <a href="mailto:campbell.leheron@nzbri.org">campbell.leheron@nzbri.org</a>