

PhD position in Cognitive Neuroscience

School of Psychology and Trinity College Institute of Neuroscience, Ireland

Applications are invited for a PhD at Trinity College Institute of Neuroscience (TCIN) to work with Dr Paul Dockree and Dr Lorina Naci from March 2020, funded by the Irish Research Council.

The research will study stroke patients with brain lesions to cortical regions vs. isolated brainstem regions, and examine changes to higher-cognitive processes including attention, awareness and spontaneous thought (including mind-wandering). This project will provide an exciting opportunity to combine lesion-based and electrophysiological (EEG) approaches together with MRI-based functional connectivity analysis to investigate cortical or subcortical interactions underlying goal-directed and spontaneous cognition.

The research team has experience investigating changes in functioning caused by brain injury and also a strong clinical interest in developing rehabilitation techniques and interventions to improve patient recovery from cognitive disabilities. Candidates with an interest in investigating cognitive mechanisms using neuropsychological, electrophysiological and MRI lesion mapping and functional connectivity approaches are encouraged to apply.

This work will be carried out at the Trinity College Institute of Neuroscience (TCIN), part of the School of Psychology. The School, is number 1 in Ireland and in top 40 in Europe, and spans disciplines from social and clinical psychology, to cognitive neuroscience.

TCIN is Ireland's only dedicated neuroscience research institute, one of Europe's leading and among the world's top 0.01% neuroscience institutes, based on the citations of its scientific publications (ISI Thomson Reuters, 2009). It possesses extensive research infrastructure, including Tissue laboratories, Optogenetic facilities, a 7T & 3T Magnetic Resonance Imaging (MRI) systems, MRI compatible eye-tracking devices, 2 TMS systems, and 128 channel EEG systems. TCIN will receive a top of the range Prisma Siemens 3T scanner in Spring 2020.

Applicants should have a BA/BSc in Psychology, Neuroscience, Computer Science or a related field. The PhD student will carry out an original body of research as part of the requirements for the PhD in Psychology at Trinity College. The student is expected to have self-initiative, high motivation for research and to actively collaborate with other members of the Dockree and Naci Labs.

Knowledge & Experience

- Experience in quantitative data analysis (essential)
- Experience conducting research with human subjects (highly desired)
- Excellent English writing (highly desired)



MA/MSc in Psychology, Neuroscience, Computer Science or a related field (desired)

Skills & Competencies

- Computer programming (e.g. Matlab, python) (highly desired)
- EEG/MRI analysis (desired)
- · Clinical research skills (desired)
- Experimental Design (essential)

Further Information for Candidates

Applicants should email <u>dockreep@tcd.ie</u> and <u>nacil@tcd.ie</u> with a cover letter stating why they are interested in the post along with their CV, academic transcripts (grades to date) and the contact details of 2 references. Applications will be accepted until the position is filled

Funding Information

This post is supported by IRC Laureate Consolidator grant awarded to Dr Paul Dockree. Annual stipend of €16,000 and full fees coverage (EU or non-EU).