College of Health and Life Sciences
Centre for Cognitive Neuroscience

Brunel University London | Celebrating 50 years

Network of three linked funded PhD studentships:

Interdisciplinary approaches to the amelioration of cognitive, visual and motor deficits in specified subpopulations of older adults

The Centre for Cognitive Neuroscience at Brunel University London is offering three linked PhD funded studentships to work on three interconnected and interdisciplinary projects, which are linked by foci on the assessment and amelioration of conditions that impair millions of UK older adults' ability to safely live independent lives.

Based in the College of Health and Life Sciences, all three studentships will be funded by Brunel University London. Each studentship offers an annual London rate stipend of £16,296 plus Home/EU tuition fees, for a maximum of 36 months. Start date is 1st October 2016.

Overview

Funded PhD Studentship 1: Attentional Processes in Parkinson's Disease: Identification and Rehabilitation.

Parkinson's disease (PD) is a neurodegenerative condition that affects approximately 127,000 people in the UK – most of whom are over the age of 60 – and it manifests itself in both motor and cognitive dysfunction. The aims of this studentship are to identify attentional deficits in PD sufferers and to derive appropriate interventions accordingly. The precise nature of the research projects will be discussed with the supervisory team and beyond, but a combination of gaze tracking, motion capture, psychophysical, self-report and fMRI methodologies will be used.

The successful candidate will be supervised by Dr Dan Bishop (Dept. of Life Sciences), Dr Alex Nowicky (Dept. of Clinical Sciences), Dr Andre Szameitat (Dept. of Life Sciences) and Dr Mellissa Prunty (Dept. of Clinical Sciences). For informal discussions about this studentship, please contact Dr Dan Bishop **daniel.bishop@brunel.ac.uk**.

Funded PhD Studentship 2: Effects of Cognitive Impairment and Anxiety (Fear of Falling) on Visual Guidance of Adaptive Gait and Navigation in Older Adults.

The student will conduct research using techniques such as virtual reality, optical motion capture and electroencephalography (EEG). Research projects will be developed in discussion with the research team. However, the overall aim of the studentship is to build towards developing low-cost interventions to improve visual perception and balance control in older adults with cognitive deficits and/or a fear of falling.

The successful candidate will be supervised by Dr Andrew Parton (Dept. of Life Sciences), Dr William Young (Dept. of Clinical Sciences) and Dr Adrian Williams (Dept. Of Life Sciences). For informal discussions about this studentship, please contact Dr William Young **will.young@brunel.ac.uk**.

Funded PhD Studentship 3: Older Adults' Perception of Facial Expression of Emotion and Deceptive Intent: Assessment and Intervention.

Elderly people who live alone are highly vulnerable to 'doorstep fraud'. But deception is often accompanied by the simulation of unfelt emotions, or the concealment of genuine emotions, largely through changes to facial expression. The aim of this studentship is to conduct a series of linked studies using fMRI, EEG and behavioural techniques to identify differences in the perception of dynamic faces in adults aged 75 years or older – and to develop suitable interventions as a result.

The successful candidate will be supervised by Dr Justin O'Brien, Dr Noam Sagiv, Dr David Broadbent and Emeritus Professor Michael Wright (all Dept. of Life Sciences). For informal discussions about this studentship, please contact Dr Justin O'Brien **justin.obrien@brunel.ac.uk**.

Each student may be required to contribute towards the teaching and learning related activities of the Department in each academic year of registration.

Eligibility

Applicants must have a good undergraduate degree (upper second or first) in psychology, neuroscience, motor control/learning or related subject. A postgraduate masters degree is not essential, but is desirable. If you are a non-native speaker and have not been awarded a degree by a University in the UK, you must demonstrate English language skills to IELTS 7.0 (minimum 6.0 in any section).

How to Apply

If you wish to apply, please e-mail the following to **chls-pgr-office@brunel.ac.uk** by **Noon 8th July 2016**:

- An up-to-date CV;
- A single-page A4 single-spaced personal statement stating the name of one of the three projects above and setting out why you are a suitable candidate (i.e. outlining your qualifications and skills);
- One piece of academic writing (e.g. an essay, a published paper or dissertation chapter);
- A summary of your teaching experience or the teaching activities you feel you could support;
- Names and contact details for two academic referees;
- A copy of your highest degree certificate and transcript;
- A copy of your English language qualification, where applicable.

Short-listed applicants will be required to attend an interview. Applicants chosen for interview will be instructed to submit a formal online application via Admissions.

For further information about how to apply, please contact the College of Health and Life Sciences Postgraduate Research Student Office on **chls-pgr-office@brunel.ac.uk**.