

NEUROSCIENCE AND THE AGEING BRAIN PhD STUDENTSHIP 2014 (Ref: 2014_2)

Experimental or human neuroscience and the ageing brain

Are you interested in the mechanisms of cognitive ageing in humans or in model systems? Are you interested in how stress affects brain ageing? Do you want to study delirium as a risk factor for cognitive ageing? Are you interested in how cerebral small vessel disease affects cognitive ageing? Do you want to use neuroimaging to investigate age-related changes in the brain, study the genetics of cognitive ageing, or translate between experimental mechanisms and human ageing diseases? These are a few examples of topics available for PhD study in CCACE. Applications are invited from well-qualified candidates for two 1+3 PhD studentships within the **Centre for Cognitive Ageing and Cognitive Epidemiology** (CCACE; www.ccace.ed.ac.uk), **focussed on experimental or human neuroscience and the ageing brain**. The studentship will begin in September 2014 and will be based in the College of Medicine and Veterinary Medicine (CMVM). Applicants should have a good undergraduate and/or masters degree, as appropriate to the chosen research topic; for example, in neuroscience, biomedical sciences, genetics, molecular biology/medicine, neuroimaging, statistics, or another cognate discipline.

The successful candidate will generally first complete a relevant taught MSc and then complete a PhD project of their choice based on the research aims of the Centre, with supervisors spanning at least two of the Centre's research groupings as noted below. Applicants may go straight to the PhD if they already have an MSc. The successful applicant will join a vibrant, successful, highly-collaborative community of researchers across the University in the areas of cognitive ageing and cognitive epidemiology, and will participate in the Centre's events.

The Centre for Cognitive Ageing and Cognitive Epidemiology (CCACE)

CCACE (www.ccace.ed.ac.uk) is a United Kingdom Research Councils-funded research and training Centre. It is an international leader in the field of cognitive ageing and the closely-related field of cognitive epidemiology. The Centre adopts a life-course approach to its research studying how cognition affects health, and health affects cognition. Its researchers use healthy and clinical human population samples and model systems. It works in an integrated fashion from population to neuron. Understanding individual differences in cognitive ageing and cognitive epidemiology is done by establishing associations between risk factors and cognitive ageing, and then exploring the mechanisms of these associations. By utilising a range of techniques including psychological methods, epidemiological designs, statistical genetics studies, human and animal multimodal brain imaging in vivo, human neuro-endocrine studies, longitudinal experimental studies on animals, and in vitro experiments on neuronal/glial preparations the Centre aims to make a seamless integration of bedside-to-bench and bench-to-bedside science.

The Centre is led by Professor Ian Deary (Director), Professors Jonathan Seckl and John Starr (Co-Directors), and eight group leaders across six main research topic groups (the CMVM groups are highlighted in bold):

- Professor David Batty and Dr Catharine Gale - Cognitive Epidemiology
- Professor Ian Deary – Cognitive Ageing: Individual Differences
- Professor Robert Logie – Cognitive Ageing: Human Cognitive Neuroscience
- **Professor Alasdair MacLulich and Professor Megan Holmes – Mechanisms of Cognitive Ageing**
- **Professor David Porteous – Genetics, Genomics and Epigenetics: Experimental, Pathway and Statistical Analysis in Brain Ageing**
- **Professor Joanna Wardlaw – Human and Animal Brain Imaging**

Within these six groups the Centre has a strong multidisciplinary team of around 50 scientific members. There are also 10 core staff who provide research services to the members and students. There is a current PhD cohort of 13 directly-funded Centre students and 17 Centre-affiliated students. Within the PhD cohort the Centre has a PhD student representative (Stephen Rhodes) who provides help and assistance to new CCACE students. Visit the people section of the CCACE website (www.ccace.ed.ac.uk) to see PhDs currently underway.

The University of Edinburgh

The University of Edinburgh (www.ed.ac.uk) is a world-class university situated in the heart of Scotland's capital city. It is one of the largest universities in the UK, with an international reputation for excellence in a large array of subjects. The College of Medicine and Veterinary Medicine (Head, Prof Sir John Savill), was 1st (of 28) submissions in hospital-based clinical subjects in RAE2008. Research is organised in 12 major interdisciplinary research centres, each with extensive facilities

Eligibility and Funding

This is a University of Edinburgh-, ESRC- and MRC-funded Lifelong Health and Wellbeing initiative award. It will provide an annual stipend for four years (1st year MSc, years 2-4 PhD) of around £13,726 per year (subject to confirmation) plus University fees for home (UK) students, or fees only for EU students. Applicants who are not citizens of the EU are not eligible to apply for the funded studentship. However, non-EU applicants are welcome to apply to undertake a PhD within CCACE if they can secure their own funding from other sources.

Application Procedure

Complete the **Centre studentship application form available online at www.ccace.ed.ac.uk**. Please note the successful applicant will also have to complete a standard University of Edinburgh postgraduate application form. Candidates will be expected to contact a member of the Centre currently working in their area of interest in advance of submitting the application and should describe why they chose this topic on their application form.

Deadline

All application forms plus supporting documentation should be sent in electronic format to Katie Keltie in the PPLS* Postgraduate Office (catherine.keltie@ed.ac.uk) by Friday 31st January 2014. Interviews will be held in late February. The studentship will begin in September 2014.

Informal enquiries regarding the Centre or any scientific queries may be directed to

Dr Beverly Roberts, CCACE Scientific Administrator
Email: beverly.roberts@ed.ac.uk Tel +44 (0) 131 650 3368

General queries regarding postgraduate issues should be directed to

Miss Katie Keltie, PPLS* Postgraduate Administrator
Email catherine.keltie@ed.ac.uk Tel +44 (0) 131 650 3594

* PPLS = Philosophy, Psychology and Language Sciences.