UNIVERSITY COLLEGE LONDON

INSTITUTE OF COGNITIVE NEUROSCIENCE

PhD Studentship

(stipend: approx. £17,000 per annum)

A 3-year PhD studentship is available in the Social Neuroscience group (led by Prof Antonia Hamilton) at the Institute of Cognitive Neuroscience, University College London, in collaboration with Dr Ilias Tachtsidis at UCL Medical Physics and Dr Ann-Christin Niehoff at Shimadzu Europe.

Title: What is special about being watched? Finding the neural and physiological signatures of nonverbal interaction

Research focus: This project uses functional near-infrared spectroscopy to study the fundamental mechanisms of human non-verbal communication in a real-world context. In a series of studies, you will examine how the behaviour, brain activity and physiology (heart rate / breathing) of adults changes when they perform challenging tasks with or without being watched by another person. You will analyse these data and develop methods to integrate the data recorded from different systems (fNIRS / physiology / behaviour) in an appropriate fashion. The results of these studies will reveal the neural mechanisms of the 'audience effect' and help us understand some of the fundamental processes of human social interaction.

Location: The PhD is based at the Institute of Cognitive Neuroscience, which is one of the world's leading institutions for the study of human cognitive function and has a vibrant and international research community. The project is part of a collaboration with Shimadzu Europe. The student will be expected to spend 9 months over the next 3 years working at the Shimadzu Innovation Centre in Duisburg, Germany.

This work is funded by the UBEL doctoral training partnership.

Background reading:

- Pinti, Tachtsidis, Hamilton, Hirsch, Aichelburg, Gilbert & Burgess (2018) *The present and future use of functional Near Infrared Spectroscopy (fNIRS) for cognitive neuroscience* Annuals of the New York Academy of Sciences.

- Hamilton & Lind (2016) Audience effects: what can they tell us about social neuroscience, theory of mind and autism Culture and Brain

Person specification:

Applicants should have a recent MSc degree in psychology, cognitive neuroscience or biomedical engineering (with experience of human research). Essential skills include: hands-on experience of running experiments with human participants; experience of communicating scientific research (in project reports and talks); experience of advanced data analysis; experience with computer programming (ideally Matlab). Desirable skills include: high grades on relevant courses at BSc and MSc level, experience of research with neuroimaging data, experience of working in a team.

The successful applicant is expected to enrol in the PhD program at UCL.

Eligibility (as required by funders)

- Candidates must be UK or EU nationals.

Start date / Length of contract

The starting date is 23rd September 2019. The contract is for 36 months

Fellowship

This is a fully funded PhD studentship with a stipend at standard ESRC rates (approx. £17,000 per annum). Travel and accommodation for research visits to Shimadzu will also be funded.

Applications

To apply, please prepare the following information:

- a cover letter stating your research interests and your motivation for applying for the studentship.
- a detailed curriculum vitae, with information on courses, grades and specific skills relevant to this position.
- contact details for 2 referees.

Please put all this information in a single .pdf file named with your surname (e.g. Smith.pdf) and email it to Antonia Hamilton (<u>a.hamilton@ucl.ac.uk</u>) by the deadline.

The application deadline is **1**st **March 2019**.

Informal inquiries regarding the position should be addressed to Prof Antonia Hamilton (<u>a.hamilton@ucl.ac.uk</u>) and further details of our work are available on <u>www.antoniahamilton.com</u>