Fully funded 3-year PhD studentship (School Funded) -School of Human and Behavioural Sciences, Bangor University, UK Closing date: 4 July 2022

The Organisation and Brain Basis of Semantic Knowledge (Behavioural/Ratings Studies and Neuroimaging) Dr Richard J. Binney

Applications are invited for a three-year PhD studentship within the School of Human and Behavioural Sciences, Bangor University. The studentship is funded by the School and covers the full cost of tuition fees for PhD students, plus a maintenance stipend (approx. £16,062 per annum for 3 years) as well as a generous research allowance of up to £750. The studentship can commence any time between October 2022 and January 2023, but with a preferred start date of October 1st.

Project

The project will be broadly aimed at elucidating human semantic cognition, which is a set of processes that bring meaning to our verbal and non-verbal experiences and allow us to use this knowledge to drive context-appropriate behaviour. It will involve the acquisition and the analysis of behavioural (e.g., task performance), self-report (e.g., stimulus ratings), and/or neuroimaging (e.g., fMRI, EEG) data. The precise research topic is yet to be determined and will reflect the interests and specific qualifications of the candidate. However, the supervisor is particularly interested to read proposals that concern (i) the organisation and neural correlates of social knowledge, (ii) abstract conceptual knowledge, and/or (iii) the relationship between semantic and social cognition. Applicants are invited to read Dr Binney's most recent publications on these topics, in order to establish common interests.

Supervision

<u>Dr Richard Binney</u> is a Senior Lecturer in the School of Human and Behavioural Sciences, and a member of the Institute of Cognitive Neuroscience, Bangor University. His research examines the way the human brain stores and uses our knowledge of people, objects, and words. Further, he tries to understand how these abilities break down following brain injury or disease. To do so, he uses behavioural measures, usually in parallel with brain imaging and brain stimulation techniques.

Person specification

Essential requirements:

A strong undergraduate degree (at least 2:1 or equivalent) in cognitive (neuro-) science, psychology, computer science, or cognate disciplines.

Desirable qualities:

A masters-level degree in a relevant subject area. Studying for this degree can be inprogress at the time of application.

Research experience in the area of experimental psychology, psycholinguistics and/or cognate subject.

Experience with neuroimaging methods and analysis.

Coding skills (in languages such as Python, MATLAB, or R).

Research environment

The School of Human and Behavioural Sciences is an exciting new School that is the product of a recent merger between two exceptional Schools: the School of Psychology and the School of Sport, Health & Exercise Sciences. Both Schools are consistently ranked among the top 10 in the UK's annual National Student Survey and are currently ranked top in Wales, and within the leading schools in the UK for research activity in the most recent Research Excellence Framework assessment (REF 2021). Our research is carried out within four research institutes, which the PhD student will be welcome to join: Institute for Psychology of Elite Performance (IPEP: https://ipep.bangor.ac.uk/) Institute for Applied Human Physiology (IAHP: https://www.bangor.ac.uk/iahp) Institute for Cognitive Neuroscience (ICN) Institute for Human Development & Wellbeing (IHDW)

More widely, our School offers postgraduate researchers an excellent research environment, with a large community of PhD students and research-active faculty, seminars, student conferences, visiting speakers, and events targeted at broader professional development. There are extensive facilities and dedicated technical staff for conducting behavioural and psychophysiological research. Facilities include a cutting-edge research-dedicated 3T MRI system, high-density EEG systems, eye-trackers and an openaccess TMS/tDCS suite.

Bangor University is situated among the breath-taking landscape of North Wales. Bangor is a friendly and affordable university city, perched on the Irish Sea and with its back against Snowdonia National Park. There is easy access to beautiful mountains, lakes, rivers, and beaches while maintaining good transport links to some of the U.K.'s larger cities, including Manchester, Birmingham, and London. Bangor University is an equal opportunity employer and welcomes applications from populations who are underrepresented.

Residency requirements

This studentship covers in full the tuition fees for British citizens and other nationals who do not require a visa (e.g., Europeans with settled status, Irish). International candidates are very welcome to apply; however, they need to contact Dr Binney to discuss the issue of fees.

General information

PhD students are expected to contribute to teaching. The School provides excellent training in teaching, and many students achieve HEA (Higher Education Academy) qualifications while completing their PhDs. The initial appointment for the position will be for one year, with an extension of two years after a positive evaluation of capabilities and compatibility. The appointment must lead to the completion of a PhD thesis.

Further information

Informal enquiries about the studentship and more guidance should you want to prepare a more detailed proposal should be directed to Dr Binney, email: <u>r.binney@bangor.ac.uk</u>.

How to apply

All applications must be received by 4 July 2022 through our online application system: https://apps.bangor.ac.uk/applicant/

Applications must contain the following documents:

- Curriculum Vitae. This should be no longer than two pages.
- Cover letter. Include your motivation for applying for this studentship, aspirations beyond conducting a PhD, how you fit the essential and desirable criteria, and any reasons that you feel you are particularly suited to undertaking this project.
- Reference letters. Include two letters from academic staff to be submitted in support for this specific application. Candidates for this position must approach referees themselves and include the letters with their application.
- Research Proposal: 2 pages (the reference list is excluded from the page count) briefly describing one or two experiments to be conducted during the PhD, including a clear description of the research questions, hypotheses, and the approach to collecting and analysing data. The proposal is not binding: the candidate will be able to make adjustments during the PhD.

If English is not your first language or if you have not completed university education in an English-speaking institution, provide proof of English language proficiency such as IELTS (minimum 7.0 overall) or equivalent certification.

General enquiries

For general advice about how to apply and eligibility visit the Bangor Doctoral School Website (<u>https://www.bangor.ac.uk/doctoral-school/</u>)