

Research Fellow

SCHOOL OF PSYCHOLOGY

Closing date: 12 October 2021

Interview date: TBC

Reference number: PSY042R











Version: Jul21



INTRODUCTION

Applications are invited for a full time Research Fellow position at the University of Aberdeen, UK, to work with Professor Patric Bach on the Leverhulme Trust-funded project "Social perception as process of a Bayesian hypothesis testing and revision".

We wish to recruit a skilled and highly motivated post-doctoral researcher to join a team funded by the Leverhulme Trust (PI Professor Patric Bach). The project investigates the neuro-cognitive basis of how people predict and understand other people's behaviour, using state-of-the-art fMRI/EEG multivariate methods, computational modelling and experimental psychology methods.

The project will provide an excellent opportunity to work within an interdisciplinary environment (experimental psychology, neuroscience, computational science) and conduct cutting edge neuroimaging (EEG/fMRI) work in a team of expert collaborators (Dr Elsa Fouragnan, Plymouth; Dr Giorgio Ganis, Plymouth, Prof Paul Downing, Bangor).

Please find further details on the project website here - https://www.actionprediction.org/bayesian-social-perception

JOB DESCRIPTION

MAIN PURPOSE OF THE ROLE:

The successful candidate will be responsible for designing experiments, preparing programmes and experimental materials, recruiting and testing participants. The post holder will analyse fMRI and EEG/ERP data with cutting-edge computational modelling and multivariate techniques. They will prepare manuscripts and communicate the research findings to both academic and non-academic audiences.

Key requirements

Experience in EEG/ERP and/or fMRI design, data collection and data analyses

Experience in behavioural and psychophysical methods

Excellent writing and communication skills

Experience in programming (Python/Matlab and/or R).

Desirable skills

Experience with research on social perception

Experience with computational modelling

Experience with multivariate classification methods



KEY RESPONSIBILITIES:

- Design and development of EEG/ERP and fMRI experiments
- Stimulus generation and experimental programming using NeuroBS Presentation, Python or Matlab
- Operation of EEG and/or fMRI recording equipment
- Data collection: assessing large number of participants
- Data management and analysis of large and complex dataset using R, Matlab, or other relevant analysis packages
- Generating novel methods of analysing EEG/ERP and/or fMRI data, using multivariate pattern classification and computational modelling techniques
- Co-authoring academic journal articles
- Dissemination of results to scientific meetings and lay audiences
- Developing independent research interests and collaborations
- Awareness and development of research skills to meet the needs of the project and future career
- Team working to organise the complex demands of a larger research programme

CANDIDATE BACKGROUND

The successful candidate must have a PhD in Psychology or Cognitive Neuroscience or an affiliated discipline at the time the post starts

The ideal candidate will have experience in neuroimaging studies, including designing and running EEG/ERP and/or fMRI experiments and analysing and managing the resulting data. Excellent numerical proficiency and statistical skills are essential.

The research will use Python, Matlab and/or R. Experience with these programmes is highly desirable. Knowledge in social perception would be desirable, as well as experience in multivariate techniques or computational modelling.





TERMS OF APPOINTMENT

Salary will be at the appropriate point on the Grade 6, £34,304-£35,326 per annum and negotiable with placement according to qualifications and experience.

As this post is externally funded by Leverhulme it will be available for 42 months.

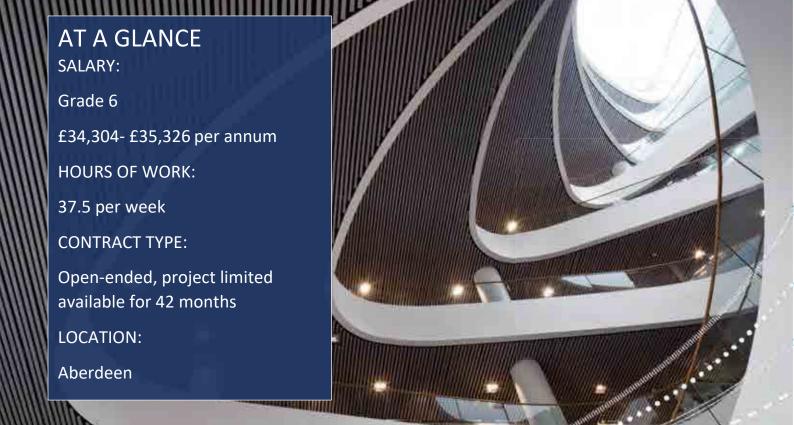
Any appointment will be made subject to satisfactory references and probation period

For further information on various staff benefits and policies please visit www.abdn.ac.uk/staffnet/working-here

This role is based in the UK and as such the successful candidate will be required to live and work in the UK.

The candidate appointed to this post may be eligible for homeworking on an occasional or regular basis. For more information please refer to our Homeworking Policy.

Should you require a visa to undertake employment in the UK you will be required to fulfil the minimum points criteria to be granted a Certificate of Sponsorship under the requirements of the Skilled Worker visa. At the time an offer of appointment is made, you will be asked to demonstrate that you fulfil the criteria in respect of qualification and competency in English. For research and academic posts, we will consider eligibility under the Global Talent visa. Please do not hesitate to contact Natalie Reid, HR Adviser (e-mail: n.reid@abdn.ac.uk) for further information.





Person specification

	ESSENTIAL	DESIRABLE
Education/Qualifications Academic, technical and professional education and training	PhD or equivalent degree in Psychology or Cognitive Neuroscience, or a related field	
Work and Other relevant experience (including training) e.g. Specialist knowledge, levels of experience, supervisory experience, research	 Experience in EEG/ERP and/or fMRI design, data collection and data analyses Experience in behavioural/psychophysical studies Track record in authorship of research publications Strong statistical skills Experience with Python/Matlab or R 	 Experience with multivariate techniques, or computational modelling Experience with computational modelling techniques, especially when applied to neuroimaging data Experience of supervising student research projects Experience with and passion for open/reproducible science
Personal qualities and abilities e.g. initiative, leadership, ability to work on own or with others, communication skills	 Excellent interpersonal skills Ability to work independently and as part of a team Excellent written and oral formal and informal communication skills A collaborative outlook, including a willingness to help other lab members, and help foster an inclusive lab environment 	Experience in presenting research to academic, professional and lay audiences
Other e.g. special circumstances (if any) appropriate to the role such as unsocial hours, travelling, Gaelic language requirements etc.	Willingness to travel to and spend time at the partner universities in Plymouth, UK and Bangor, UK.	



UNIVERSITY OF ABERDEEN

open to all and dedicated to the pursuit of truth in the service of others

The University of Aberdeen is a broad based, research intensive University, and we put students at the centre of everything we do. Outstanding in a wide range of discipline areas, Aberdeen is credited for its international reach and commercialisation of research ideas into spin out companies. The University has over 16,000 matriculated students and 3,600 staff representing 130 nationalities. We encourage bold thinking, creativity and innovation, and we nurture ambition with many opportunities for professional and personal development in an inclusive learning environment which challenges and inspires.



CURRENT CONTEXT

The University continues to build on its achievements. Underpinning our high performance and significant growth is a £100m investment in Aberdeen's estate which will include the completion of a new Science Teaching Hub, the regeneration of the historic King's Quarter and a new Business School building. The University has also invested in 50 new academic posts and in 2020 launched five interdisciplinary, cross-institution Research Centres that will catalyse world-leading research in our areas of strength. Our five Interdisciplinary Challenges are: Energy Transition; Social Inclusion and Cultural Diversity; Environment and Biodiversity; Data and Artificial Intelligence; and Health, Nutrition and Wellbeing.

ABERDEEN 2040

On our 525th anniversary as a University we launched <u>Aberdeen 2040</u>, our strategic vision for the next 20 years. Four strategic themes will shape our learning and discovery, underlined by 20 commitments we have made against each theme:

Inclusive

We welcome students, staff and partners from all backgrounds, organisations and communities. We value diversity.

Interdisciplinary

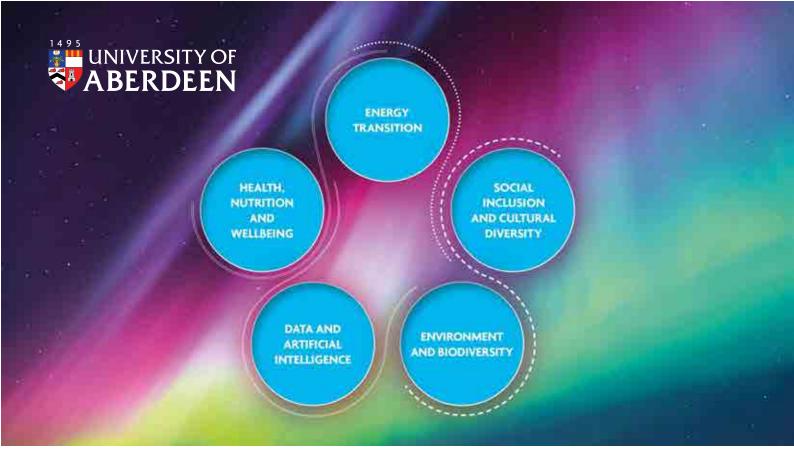
We innovate in education and research by generating, sharing and applying new kinds of knowledge. We learn together.

International

We connect with others and extend our networks and partnerships around the world. We think across borders.

Sustainable

We understand and nurture our environment, and take care of our resources, including our people and finances. We work responsibly.



OUR EDUCATION

Recognised as the Scottish University of the Year in the Times and Sunday Times Good University Guide 2019, we remain true to our roots as an ancient Scottish university, combining breadth and depth in our degree programmes and drawing strength from the quality of our research. Our flexible curriculum encourages students to grow as independent learners and therefore to thrive as graduates in the diverse workplaces of the future. Our education is open to all and we are setting ambitious targets to further widen access.

OUR RESEARCH

Researchers at the University of Aberdeen have been at the forefront of innovation and excellence throughout the centuries, generating insights in medicine, science, engineering, law, social sciences, arts and humanities. This research has contributed to five Nobel prizes as well as other awards such as the Queen's Anniversary prize. Our research is intellectually rigorous working within our established areas of excellence as well as new methods of enquiry. We will continue to generate new knowledge addressing economic and societal issues with ambition and imagination, ensuring that it is globally excellent and locally relevant.

INTERNATIONAL

Aberdeen is increasing its international presence, positioning the University as a global organisation and building on established global partnerships in e.g. Qatar, China, North America, Europe. We feature in the top 50 institutions worldwide for international students¹ and have been named 32nd in the world for International Outlook². The University of Aberdeen is proud to be the first UK University to operate on a dedicated campus in Qatar. Phase 1 of this partnership with AFG College has successfully recruited over 600 students. Phase 2 will see the creation of a substantially larger campus, with capacity for at least 5,000 students and research activity. For further information on our Qatar campus visit www.abdn.ac.uk/qatar.

IMPACT

Our dedication to building a sustainable future is reflected in the Times Higher Education Impact Rankings 2021 where we were ranked in the top 60 Universities worldwide for positive impact on society.

In 2020 the University signed the United Nations Sustainable Development Goals accord, solidifying our commitment to developing the world in a sustainable way. In 2021 we were listed in the global Top 50 for 6 of these goals and in the UK Top 20 for all 17³.

¹ Times Higher Education World University Rankings 2021

² QS World University Rankings 2021

³ Times Higher Education Impact Rankings 2021



THE SCHOOL OF PSYCHOLOGY

The School of Psychology provides an exciting and collaborative research-led learning environment for both undergraduate and postgraduate studies. The School has approximately 1000 students and currently offers BSc, MA and MSc programmes in Psychology, all of which are accredited by the British Psychological Society (BPS), as well as research degrees (MRes, MSc by Research, and PhD).

Research within the School is structured around three themes: Cognition, Perception & Attention, and Social Cognition. In the last UK-wide assessment of research quality, REF 2014, our School was ranked 19th in the UK in overall league tables, which reflect a combination of working environment, research outputs and research impacts. We were ranked 3rd in the UK for the number of both 3* and 4* outputs, and 4th in the UK for 4* outputs alone, reflecting the high quality of research conducted by our staff.

We have a strong track record in research led teaching and in 2020 National Student Survey, the School was ranked 8th out of 126 HEIs for overall student satisfaction.

The School is committed to a supportive and inclusive work environment and in 2020 we were proud to become the first School in the University to be awarded the Athena SWAN Silver Award for equality and diversity: https://www.abdn.ac.uk/psychology/about/working-environment-291.php.

More information about the School is available on our website: https://www.abdn.ac.uk/psychology/.



ABERDEEN AND ABERDEENSHIRE

Scotland's third largest city, Aberdeen sits on the coast between the mountains of Aberdeenshire and the stunning North Sea coastline. The Aberdeen City region is a can-do place that is actively investing, at scale, in its future.

Renowned as a Global Energy Hub, Aberdeen is a vibrant, entrepreneurial region, home to a unique mix of business opportunities and specialist skills across various sectors including energy, technology, life sciences and food & drink. More than 20% of Scotland's top businesses are located in this region which is taking great strides to ensure that it continues to compete on a world stage. Investments of more than £10 billion of public and private infrastructure is due to be delivered before 2030, marking an exciting time to be part of a genuine world-class location.

Built from sparkling local granite Aberdeen has earned the name of the Silver City. As the energy capital of Europe, Aberdeen nevertheless retains its old-fashioned charm and character making it an attractive place in which to live, work and study. Due to its global business and international energy industry credentials, Aberdeen is well served by local and national transport infrastructure with excellent rail networks that run both North and South of Scotland and the rest of the UK. It also acts as an international travel hub. Flying time to London is just over one hour with regular daily flights and serves international travel to European centres such as Amsterdam (Schiphol) and Paris (Charles de-Gaulle) as well as flights to other European destinations.

The City and the surrounding countryside provide a variety of urban, seaside and country attractions. Aberdeen has first class amenities including His Majesty's Theatre, Music Hall, Art Gallery, the P&J Arena, Museums, and Beach Leisure Centre. The City is framed by its accessible beach front which is within a short walk of the city centre and there are an array of activities available across the region such as hill walking; mountaineering; sailing; surfing; salmon, trout and sea fishing; golf; sailing; surfing and windsurfing. The surrounding countryside, known as Aberdeenshire, is also one of Scotland's most appealing regions. Royal Deeside and the Cairngorms National Park are within easy access of the city, and there are a variety of towns and villages scattered along the coastline.

The city and the surrounding area have ranked consistently highly in nationally recognised quality of life surveys, coming out top 10 as one of the best places to live in Scotland in 2020 in the annual Bank of Scotland survey.

To find our more visit www.visitabdn.com





EQUALITY AND DIVERSITY

The University values a diverse working environment and recognises the benefits this can bring. The University is keen to receive applications from individuals from across all of the equality protected characteristics (age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, sexual orientation).

The University supports opportunities for flexible working for a range of reasons and has policies in place to facilitate this. The policies can be found at https://www.abdn.ac.uk/staffnet/working-here/flexible-working--5607.php.

The University's commitment to gender equality has been recognised through the achievement of an Athena SWAN Bronze award at an institutional level and across all its subject areas. The University is also a Stonewall Diversity Champion to further LGBT+ equality.

The University is signed up to Advance HE's Race Equality Charter, affirming the University's commitment to the charter's aim of improving the representation, progression and success of minority ethnic staff and students within higher education.

Candidates who are British Sign Language (BSL) users can contact us directly by using contact SCOTLAND-BSL.

The University is delighted to be accredited as a <u>Disability Confident</u> employer and strives to ensure that disabled staff and students have the opportunity to work and study in an inclusive, accessible and supportive environment.

www.abdn.ac.uk/staffnet/governance/equality-and-diversity-277

How to Apply

Online application forms are available at www.abdn.ac.uk/jobs

The closing date for receipt of applications is 12 October 2021

Should you wish to make an informal enquiry please contact:

Professor Patric Bach, e-mail: Patric.bach@abdn.ac.uk

Please do not send application forms or CVs to **Professor Bach.**

Please quote reference number PSY042R on all correspondence

