Cardiff University
School of Psychology

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<tr>
<th>Studentship Title:</th>
<th>PhD studentship in the School of Psychology</th>
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<tr>
<td>Research Area/ Project Title:</td>
<td>Visual processing in the human brain</td>
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<td>Location:</td>
<td>Cardiff University Brain Research Imaging Centre (CUBRIC) &amp; School of Psychology</td>
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<td>Expected Start Date:</td>
<td>1st October 2017</td>
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<tr>
<td>Duration:</td>
<td>3 years</td>
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<td>Deadline for Application:</td>
<td>28th February 2017</td>
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**Description of Research Opportunity:**

Neuronal representations underlying our visual experience are generated by a combination of bottom-up sensory inputs and top-down influences such as expectation and prior knowledge. In the human visual system, bottom-up and top-down processing is associated with different cortical layers and different frequency channels. Using a combination of psychophysics, modelling, and neuroimaging, this PhD project will focus on how the brain combines bottom-up and top-down signals to organise ambiguous sensory input into coherent visual percepts. The project will primarily use psychophysics and MEG, potentially in combination with functional and structural MRI. The focus will be on visual function in the healthy brain but results might ultimately have implications for our understanding of visual deficits in psychiatric and neurological disorders.

The successful candidate will be jointly supervised by Dr Christoph Teufel and Prof. Krish Singh. They will be part of a world-class research community in cognitive neuroscience and MR applications and will have access to state-of-the-art neuroimaging research facilities, including 3T and 7T MRI scanners, a purpose-built microstructural scanner, and EEG/MEG testing labs (see http://sites.cardiff.ac.uk/cubric/cubric-building/).

For further information, please contact teufelc@cardiff.ac.uk or singhk@cardiff.ac.uk

**Award:**

The studentships will commence in October 2017, and will cover your tuition fees (at UK/EU level) as well as a maintenance grant. In 2016-17 the maintenance grant for full-time students was £14,296 per annum. As well as tuition fees and a maintenance grant, all School of Psychology students receive conference and participant money (approx. £2250 for the duration of the studentship). They also receive a computer and office space, additional funding for their research, and access to courses offered by the University’s Doctoral Academy and become members of the University Doctoral Academy.

**Eligibility:**
Full awards (fees plus maintenance stipend) are open to UK Nationals, and EU students. International students will typically be eligible for a UK/EU equivalent award only. School studentship funding is highly competitive. In view of the limited number of awards and the very high standard of applications received, successful applicants are likely to have a very good first degree (a First or Upper Second class BSc Honours or equivalent).

Requirements:

We are looking for an enthusiastic, motivated, and innovative individual with an excellent degree in psychology, biology, neuroscience, or physics/engineering/computer science. Some research experience in methods from cognitive neuroscience/experimental psychology/psychophysics and programming skills (e.g., C/Java/Matlab/Python) are desirable but not essential as long as you have the enthusiasm and aptitude to learn.

You will:
- receive a full scholarship covering your tuition fees and maintenance, as well as research costs and conference funding
- receive training in neuroimaging techniques (MEG and potentially fMRI), psychophysics, and modelling
- have access to one of the world’s best neuroimaging, psychophysics, and perception research facilities
- be part of a world-class research community in cognitive neuroscience/vision science

How to apply:

You can apply online - consideration is automatic on applying for a PhD in Psychology, with an October 2017 start date (programme code RFPDPSYA).

Please use our online application service at www.cf.ac.uk/regis/general/applyonline/index.html and specify in the funding section that you wish to be considered for School funding.

Please specify that you are applying for this particular project.

Application deadline: February 28th with interviews (either in person or by Skype) being held in April/May.

General Information:

We are based at the Cardiff University Brain Research Imaging Centre (http://sites.cardiff.ac.uk/cubric/) and the School of Psychology (http://psych.cf.ac.uk/). The School of Psychology at Cardiff is one of the largest and strongest in the UK. In the 2014 research excellence framework, Cardiff was one of the UK's top three universities for its world-leading research in psychology, psychiatry and neuroscience. The newly opened imaging centre is one of the largest and technologically most advanced in the Europe. The School has state-of-the art testing facilities, a world-class community of cognitive neuroscience/vision researchers and a thriving postgraduate research group.
Cardiff is the youngest capital city in Europe and the fastest growing in the UK. It plays host to many national and international sporting events at the Millennium Stadium (http://www.millenniumstadium.com/). Culturally, the city is thriving, with the Wales Millennium Centre (http://www.wmc.org.uk/) in Cardiff Bay. Cardiff is in very close proximity to the beautiful Welsh countryside (http://www.breconbeacons.org/), has a two hour rail link to London and a (cheap) one hour air link to Paris and Amsterdam (http://www.cardiffairportonline.com/)

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<th>Please address any informal enquiries to:</th>
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For further information please contact:
Postgraduate Research Enquires

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