2 PhD positions in cognitive neuroscience of proactive working memory

Application deadline: 10 may 2020

Job description

Two PhD positions are available within an exciting ERC-funded project on "Preparing memories for action: how visual working memories are sculpted by their anticipated use", headed by Principal Investigator Freek van Ede. Successful candidates will be at the forefront of a promising new research group at the Institute for Brain and Behavior Amsterdam (Vrije Universiteit Amsterdam, the Netherlands). Positions will be for 4 years, and are fully funded. Intended starting date is 1 Sept 2020 (with some flexibility).

Projects are at the intersection of cognition, brain, and behavior – targeting the proactive, dynamic, and action-oriented nature of human working memory. Advertised positions will specifically address the anticipatory cognitive and neural mechanisms that prepare past vision for guiding future action – starting from the perspective that the primary purpose of visual working memory is not to "hold onto the past" but to "prepare for the future". More detailed project descriptions will be made available to shortlisted candidates.

The PhD positions provide the opportunity to develop and conduct creative and rigorous research on underexplored aspects of the human mind, within a stimulating and committed research group. You will (learn to) innovate laboratory tasks to study and integrate central topics in human cognition, and you will (learn to) employ and develop state-of-the-art human electrophysiology (M/EEG, brain oscillations) and eye-tracking (micro-saccadic attentional biases) methods. Potential extensions to virtual-reality experiments are also envisioned. Resources for attending overseas conferences, and other training opportunities, will be available.

Successful candidates will become integrated in the Institute for Brain and Behavior Amsterdam, Department of Experimental and Applied Psychology, at the Faculty of Behavioural and Movement Sciences at the Vrije Universiteit Amsterdam (the Netherlands). The host institute – and Amsterdam at large – provides a vibrant international atmosphere with a strong cognitive neuroscience community conducting world-class research, and with access to state-of-the-art facilities and ample opportunities for research support and collaboration. The lingua franca is English.

For publications by the Principal Investigator that are directly relevant to the ERC project see also: <u>https://www.nature.com/articles/s41593-018-0335-6</u> <u>https://www.nature.com/articles/s41562-019-0549-y</u> <u>https://www.ineurosci.org/content/37/2/437</u>

Requirements

* A completed MSc degree in the field of Cognitive Neuroscience, or a related area

* Prior research experience in one or more of the following topics provide an advantage: visual cognition, working memory, attention, anticipation, action, timing, micro-saccades, and/or alike

- * Adequate programming skills (in Matlab, Presentation, Python, Vizard, Unity, and/or alike)
- * Experience with M/EEG and EMG acquisition and analysis (preferred)
- * Experience with eye-tracking acquisition and analysis (preferred)
- * Creativity and a passion for research
- * Good scientific writing skills
- * Good command of the English language
- * Good communication skills and ability to work in an interdisciplinary team

Salary and benefits

The salary will be in accordance with university regulations for academic personnel and amounts €2,325 (PhD) per month during the first year and increases to €2,972 (PhD) per month during the fourth year, based on a full-time employment.

Additionally, Vrije Universiteit Amsterdam offers excellent fringe benefits and various schemes and regulations to promote a good work/life balance, such as: a maximum of 41 days of annual leave based on full-time employment, 8% holiday allowance and 8.3% end-of-year bonus, solid pension scheme (ABP), contribution to commuting expenses, and a wide range of sports facilities which staff may use at a modest charge.

Application

Please apply at the following link and upload your CV and cover letter until 10 May 2020, 23:59.

https://workingat.vu.nl/apply/two-4-year-phd-positions-in-the-cognitive-neuroscience-of-proactive-visual-worki/m4emcf

For questions, contact: Freek van Ede - f.l.vanede@gmail.com / frederik.vanede@ohba.ox.ac.uk

Please circulate to those who may be interested.