



University of Iowa Health Care



## <u>Post-Doc Position</u>: Intracranial human recordings of fronto-temporal pathways for cognition

## Supervisors: Professors Christopher Petkov, Matthew Howard III and Tim Griffiths Duration: The position is guaranteed funding for 3 years Closing date: Applications will be accepted until the position is filled

A post-doctoral position is available for a jointly funded Wellcome Trust and European Research Council project on "**Direct intracranial recordings of fronto-temporal pathways in the human brain**". This project is a collaboration between the University of Iowa, USA (Department of Neurosurgery, led by Professor Matthew Howard III) and Newcastle University Medical School, UK (Professors Christopher Petkov and Tim Griffiths). The work will involve professionally conducted studies with neurosurgical patients at the University of Iowa.

The work will focus on understanding the neurobiology of fronto-temporal brain regions supporting comprehension and cognition, such as how we identify individuals by hearing their voice or seeing their face and how we learn language. The studies will also inform on the connectivity between frontal and temporal lobe regions using innovative approaches being used by the clinical group in Iowa and in parallel in Newcastle with primate models. Our goal is to assist medical science by providing insights on neural mechanisms that support auditory or multisensory communication of relevance for understanding human disorders such as forms of aphasia and agnosia following stroke or brain degeneration.

The applicant will live and work near the University of Iowa, Iowa City, USA and support the collaboration with periodic visits (~2 trips per year about 1-2 weeks duration) to the laboratory of Prof. Christopher Petkov at Newcastle University Medical School in Newcastle upon Tyne, England. The ideal candidate will possess a PhD in neurobiology, or a related field, have a strong publication track record and experience with electrophysiological methods (e.g., EEG, extracellular recordings), methods of stimulating the brain (TMS, DCS) and/or functional MRI. We require a strong team player with a proven track record being able to successfully advance their own research and to contribute to collaborative projects.

Financial support is available for 3 years and the successful applicant has the opportunity to receive training in state-of-the-art neurobiological technologies.

Applications will be reviewed from: July 1st, 2017 until the position has been filled.

**Value of the Award:** The salary is commensurate with post-doctoral experience. UK/US applicants are encouraged to apply. Applications from other international applicants will also be considered but the applicant may need to secure or have already obtained a permit to work in the US and necessary visas to travel to the UK several times a year.

**How to Apply:** Please submit a covering letter, full CV and the contact information of at least three individuals who can provide professional references. The covering letter should state how your interests and experience relate to the project. Send your application documents by email to <u>chris.petkov@ncl.ac.uk</u>, and please include 'Wellcome Trust Post-Doctoral Position Iowa' in the subject field.

**Further Information:** To find out more about the position please contact <u>chris.petkov@ncl.ac.uk</u> or browse the laboratory website: <u>http://www.ncl.ac.uk/ion/staff/profile/chris.petkov</u>.

University of Iowa Human Brain Research Laboratory: <u>http://www.healthcare.uiowa.edu/Labs/hbrl-neurosurgery/index.html</u>. Website of Prof. Matthew Howard III, MD:

http://www.medicine.uiowa.edu/dept\_primary\_apr.aspx?appointment=Neurosurgery&id=howardma.