

Neuroscience and Philosophy of Free Will Project Post-doc Opportunities

The post-doctoral positions announced below will be part of a large international project on the neuroscience and philosophy of free will, where some 20 neuroscientists and philosophers will collaborate to explore the neural basis of volition, using experimental, theoretical and computational approaches.

How to apply:

If you are interested in applying for a position, please email freewill@brain.chapman.edu and include your CV, letter of motivation (max one page), and contact information for three references. Be sure to indicate which position(s) you are interested in. Please note that it may be possible in some cases for a post-doc to be shared between two labs and/or to contribute to more than one project. Review of applicants will begin on 15 May 2019 and will be completed by 14 June.

List of opportunities:

*Mark Hallett, MD
Chief, Human Motor Control Section
NINDS, NIH
Bethesda, Maryland, United States*

The position is for a Research Physiologist in the Human Motor Control Section (HMCS), Medical Neurology Branch (MNB), of the Clinical Neurosciences Program (CNP), Division of Intramural Research (DIR) of the National Institute of Neurological Disorders and Stroke (NINDS). This position is located at the NIH campus in Bethesda, MD; the initial appointment will be for two years and is potentially renewable. The mission of the section is to understand the physiology of normal human voluntary movement and the pathophysiology of different movement disorders. The Research Physiologist reports directly to the Section Chief, and the Section focuses on the physiology of normal motor control and the pathophysiology of movement disorders utilizing methods of EEG, TMS and neuroimaging. The Research Physiologist will work primarily with a project concerning the physiology of volition. This will be part of a multicenter international collaboration including neuroscientists and philosophers. Applicants should hold a PhD degree or equivalent and have expertise in human behavioral experiments and recording and analyzing EEG data. Expertise in TMS would be a plus but not be an initial requirement.

*Gabriel Kreiman, PhD
Associate Professor
Harvard Medical School
Boston, Massachusetts, United States*

The Kreiman lab is seeking a postdoc candidate to work in this project in collaboration with the other neuroscientists and philosophers in this team. The candidate will work on building biologically inspired computational models of volitional decision making that are inspired and constrained by the experimental findings. There is also the possibility of performing invasive neurophysiological recordings in human epilepsy patients to investigate the neural mechanisms underlying volitional decisions. The ideal candidate will have expertise in computational neuroscience. Experience in invasive human neurophysiological recordings is a plus. For more information about the Kreiman lab, please visit <http://klab.tch.harvard.edu/>

*Liad Mudrik, PhD
The High-Level Cognition Lab
Sagol School of Neuroscience & School of Psychological Sciences
Tel Aviv University, Israel*

The position is for a post-doctoral fellowship in the lab, at Tel Aviv University, Israel. The initial appointment will be for two years and is potentially renewable. Our goal is to understand the involvement of consciousness in voluntary action, both for arbitrary and meaningful decisions. This research is a part of a multicenter international collaboration including neuroscientists and philosophers. The post-doctoral fellow will work closely with the PI on this research, as well as interact with the other PIs on the project. Applicants should hold a PhD degree or equivalent and have expertise in human behavioral experiments, recording and analyzing EEG or fMRI data. Background in consciousness studies is an advantage, though not a mandatory requirement.

*Prof. Hans Liljenström
Agora for Biosystems
Sigtuna, Sweden*

The Agora for Biosystems (Agora) invites applications for a post-doctoral position in computational neuroscience, as part of the research team of Director, Prof. Hans Liljenström. Agora is an interdisciplinary research center at the Sigtuna Foundation in Sigtuna, Sweden, with close connections to universities and institutes in nearby cities Stockholm and Uppsala, notably the Karolinska Institute (KI) and the Royal Institute of Technology (KTH). The aim of the Agora is to serve as a center for interaction between experimentalists and theoreticians in the life sciences, in particular neuroscience, and to promote a dialogue between science and the humanities, where the Sigtuna Foundation has played a central role in the Swedish society for over a century.

Applicants, with a PhD or equivalent, are expected to have a solid background in one or more of the following domains: computational models of neural dynamics underlying perceptual or cognitive processes, machine learning, signal processing. You should be interested in reading and working with experimental (neural) data and good at communicating and/or collaborating with experimental colleagues. Experience of research in experimental/clinical neuroscience, cognitive science or psychology is a merit. An interest in volition, decision making, and brain-mind relation is essential. The working language is English or Swedish.

For more information please visit

<https://www.slu.se/cv/hans-liljenstrom2/>
www.agoraforbiosystems.se, www.sigstunastiftelsen.se

Uri Maoz, PhD and Aaron Schurger, PhD
Institute for Interdisciplinary Brain and Behavioral Sciences
Chapman University
Irvine, CA USA

The Chapman Brain Institute invites applicants for two post-doctoral positions in the cognitive neuroscience of volition. Each position is for two years and is potentially renewable. We are interested in the nature of intentions and the role of consciousness in voluntary action. Candidates must have a proven track record in the neuroscience of volition or a strong interest in the field. Candidates must further possess strong programming skills in Matlab and/or Python. In addition, candidates should have a solid background in at least two of the following areas:

- EEG
- TMS
- Machine learning
- Real-time data processing / neurofeedback / closed-loop analysis / BCIs
- Consciousness research
- Models of causation

Background in MEG and/or fMRI is a plus.
