

INVITATION FOR EXPRESSION OF INTEREST

*The Laboratory of Visual Cognition at the Medical School of the University of Crete (PI: Georgia Gregoriou) is recruiting highly motivated **postdoctoral researchers and PhD candidates** in Systems and Cognitive Neuroscience.*

Our lab studies the neural mechanisms of **perceptual and cognitive functions** such as visual attention and working memory (<http://physiology.med.uoc.gr/?n=LaboratoryOfVisualCognition.Home>). We use **simultaneous, multi-site electrophysiological recordings** in behaving animals to study how cognitive functions modulate activity of single neurons and neuronal ensembles across a distributed network of brain areas. We are particularly interested in the way the temporal structure of neuronal activity contributes to the formation of functional networks according to behavioral demands and how rhythmic neuronal synchronization shapes local and long-range communication among selected neuronal populations. A list of relevant publications can be found at <http://physiology.med.uoc.gr/?n=LaboratoryOfVisualCognition.Publications>. Our lab is also affiliated with the Institute of Applied and Computational Mathematics, Foundation for Research and Technology Hellas (FORTH).

The selected applicants will join an active and particularly experienced team in behavioral, electrophysiological and computational approaches and will be involved in **novel experimental projects** aiming to **dissect the role of distinct cortical layers in local and long-range neuronal communication during different behavioral states**. In parallel to the experimental work, motivated applicants can also be involved in the **analysis of existing datasets** using computational approaches including signal processing and machine learning methods.

Positions will be for **three years** with the possibility of extension and will **start in 2020**. Positions will be funded by an ELIDEK (Hellenic Foundation for Research and Innovation) grant and a Human Brain Project (HBP) grant. At this time, we are inviting interested researchers with undergraduate degrees in Medicine, Psychology, Biology, Physics, Mathematics, Electrical Engineering, Computer Science or related fields to submit an expression of interest. PhD candidates should have (or expect to obtain soon) a M.Sc. in Neuroscience or related discipline. Postdoc candidates are expected to have a PhD in Neuroscience or related discipline. Experience with *in vivo* electrophysiology and programming in Matlab will be considered a plus. Please, send a **motivation letter, a curriculum vitae**, and the **names and contact info of two scientists**, who can provide reference letters. A single pdf file including the above information should be sent to: gregoriou@uoc.gr

*Georgia Gregoriou, PhD, Associate Professor of Physiology
Medical School, University of Crete and
Collaborating Researcher, Institute of Applied and Computational Mathematics
Foundation for Research and Technology Hellas
71003 Heraklion, Crete, GREECE
tel +30-2810-394505*