



P.N. 10004 / 12-12-2016

Three (3) Postdoctoral Researcher Positions

[Ref # FP7-0027]

The research group of Computational Biology Lab of IMBB under the European Program 7th **Framework programme- ERC-2012-StG-311435** entitled: "Dissecting the role of dendrites in memory -- **dEMORY**" (Program Coordinator Dr. Panayiota Poirazi) invites applications for three (3) Postdoctoral Research positions.

Description

Position 1: The successful candidate will develop new or refine existing computational approaches (abstract theoretical or detailed biophysical models) to investigate how dendrites of pyramidal neurons in brain areas such as the V1 and the prefrontal cortex contribute to memory formation, storage or retrieval.

Qualifications: PhD in related fields (Theoretical Neuroscience, Neuroscience, Physics, Mathematics, Biology) and relevant publications in computational models of dendrites.

Position 2: The successful candidate will work on translating concepts and principles of signal processing in computer networks to infer respective computational principles of biological neurons as modeled in realistic brain networks.

Qualifications: PhD in related fields (Theoretical Neuroscience, Physics, Mathematics, Engineering, Computer Science) and relevant publications in signal processing and communication networks. The successful candidate should ideally have experience on signal processing and learning techniques for dense and large-scale network models (e.g. wireless sensor/actuator networks, body area networks).

Position 3: The successful candidate will work on the refinement and extension of existing associative memory models in order to improve their biological realism via the incorporation of molecular mechanisms. The successful candidate is also expected to design appropriate experimentation to validate current hypotheses of associative memory formation and deficits in animals.

Qualifications: PhD in related fields (Neuroscience, Biology) and relevant publications in experimental Neuroscience. The ideal candidate must have extensive experimental expertise, preferably with respect to associative memory formation in healthy and/or diseased animals.

More information about research activities at CBL can be found at: <u>www.dendrites.gr</u>.



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Nikolaou Plastira 100 Vassilika Vouton GR 700 13 Heraklion Crete, Greece Tel. +30 2810391100 Fax +30 2810391101 Email: imbb@imbb.forth.gr Contract Duration: 6 months (renewable depending on the project needs)

Total budget: 2.100,00 - 2.700,00 € monthly cost (net ~1700-2300), depending on experience

Envisaged starting date: 1 February 2017

Application submission: Interested candidates should submit their application electronically by Jan 5th, 2017 @ 12.00

The application should consist of:

1. CV

- 2. Brief statement of interest
- 3. The names and contact information of two referees

Evaluation procedure

Applications will be evaluated by a three-member evaluation committee. In case of interview procedure, candidates will be invited to participate in person or teleconference.

The announcement of the results will be posted on the website of FORTH-IMBB.

The selected candidates will be notified personally regarding the success of their application and will be requested to submit certified copies of their degrees. In the event that the documents submitted do not agree with the original application the candidates will be dismissed.

Information and submission of applications

Panayiota Poirazi

Email: poirazi@imbb.forth.gr

