



One (1) PhD candidate Position

[Ref # ORZ-0454]

The research group of Systems Neuroscience of IMBB under the European Program ERC-2022-STG - **NEURACT** entitled "**Untangling population representations of objects. A closed loop approach to link neural activity to mouse behavior**" (Program Coordinator Prof. Froudarakis) invites applications for one (1) motivated PhD candidate to assist with the understanding of the algorithm that the brain uses to identify objects in our visual environment under the aforementioned EU-funded ERC Research Program.

Position Description:

Object recognition is a fundamental problem in visual perception and our brain is capable of accomplishing it effortlessly and in a fraction of a second, in spite of immense variation in the sensory information that arrives in our retinas. The proposed research effort aims to (i) create a state-of-the-art behavioral virtual navigation system for mice, (ii) combine it with recent advanced functional brain recording techniques and sophisticated neural data analysis to study how objects are represented in the activity of large populations of neurons across the visual hierarchy and beyond and (iii) causally relate these representations to the behavior of the animal.

The selected candidate will analyze high-throughput electrophysiological, calcium imaging and behavioral data to discover how the visual system solves visual inference problems in natural environments and gain better understanding of how the brain creates untangled transformation-invariant object representations in the perceptual/visual domain, that can subsequently be used to guide behavior.

Qualifications:

The ideal candidate should have a MSc in neuroscience or a related field. We welcome applications from candidates with diverse educational backgrounds, including biology, computational biology, physics, applied mathematics and engineering, that have demonstrated research experience in neuroscience. Applicants must be highly motivated and creative individuals who want to work in a dynamic, multidisciplinary research environment. Previous experience should include behavioral training on mice and neuronal activity recordings. Experience with data collection and analysis, as well as solid programming skills are also desirable.

A/A	Evaluation criteria	Maximum score
1.	Educational background on Neuroscience	30
2.	Experience with data analysis techniques	30
3.	Experience with behavioral training on mice/ neuronal activity recordings	20
4.	Communication skills	20
ΣΥΝΟΛΟ		100

Contract Duration: 12 months with the possibility of extension according to the project needs

Total budget: depending on experience and qualifications

Envisaged starting date: 1 October 2023

Application submission: Interested candidates should submit their application electronically by **July 31st, 2023 @ 13:00 (Greece time)**

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The application should consist of:

1. CV
2. Brief statement of purpose
3. The names and contact details of two referees
4. Photocopies of academic titles
5. Documents proving qualifications

Submission of applications: orz454@imbb.forth.gr

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 candidates with academic titles awarded by foreign Higher Education Institutions must have certificates of recognition from DOATAP – Hellenic National Academic Recognition and Information Center (Hellenic NARIC), either the foreign Higher Education Institutions that award them, are included in the National Register of Recognized Institutions of Higher Education compiled by the DOATAP (<https://www.doatap.gr/anagorish/mitroa/>).

DOATAP is the official body of the Hellenic Republic for the academic recognition of titles and qualifications awarded by foreign Higher Education Institutions, as well as for the provision of accurate information on the Higher Education Institutions and qualifications in Greece and abroad.

The announcement of the results will be posted on the website of FORTH-IMBB. This publication confers the right to object to the results within 5 working days of the date of the results announcement.

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

GDPR Disclaimer

FORTH is compliant with all legal procedures for the processing of personal data as defined by the Regulation EU/2016/679 on the protection of natural persons with regard to the processing of personal data. FORTH processes the personal data and relevant supporting documents that you have submitted to us. Processing of that data is carried out exclusively for the needs and purposes of this specific call. Such data shall not be transmitted to or communicated to any third party unless required by law.

FORTH retains the above data up to the announcement of the final results of the call, unless further process and reservation is required by law or for purposes of exercise, enforcement, prosecution of certain one's legitimate legal rights' as defined in the Regulation EU/2016/679 and/or in national law. We inform you that under the Regulation EU/2016/679 you have the rights to be informed about your personal data, access to, rectification and erasure, restrictions of process and objection to as provided by applicable regulation and national laws. We acknowledge also to you, that you have the right to file a complaint to the national Data Protection Authority. For any further information regarding exercise of your personal data protection rights, you may contact the Data Protection Officer at FORTH at dpo@admin.forth.gr.

You have the right to withdraw your application and consent for the processing of your personal data at any time. We inform you that, in this case, FORTH shall destroy such documents and/or supporting documents submitted and shall delete the related personal data.