



P.N. 0576-P/165628
Heraklion, 20/01/2025

One (1) MSc Student Position

[Ref # ELD-0719]

The research group of Dr. Panayiota Poirazi under the HFRI grant, DENDROLEAP 28056 P.N. 95973/24-10-24, entitled “A dendro-centric framework for learning optimization in biological and artificial systems” invites applications for one (1) motivated MSc student.

About the lab

[The Poirazi Lab](#) investigates how dendrites and their integrative properties contribute to learning and memory-related functions, using computational and experimental techniques. Our models explain findings and predict new roles for dendrites in functions such as spatial navigation/learning, working memory, associative memory, visual processing, etc. We also perform behavioral experiments in mice and use 2-photon imaging of prefrontal cortical neurons to investigate the cellular correlates of flexible behavior. The laboratory offers a thriving and lively research environment and is well-funded by several competitive grants.

About the project and position description:

DendroLeap will investigate how dendritic properties contribute to efficient and robust learning in the brain. By combining computational modeling, in vivo experiments in mice, and machine learning, we will identify key dendritic mechanisms and translate them into novel AI algorithms. This interdisciplinary approach will lead to more brain-inspired and sustainable AI. The successful applicant will work on behavioral and/or imaging experiments in rodents aiming to determine dendritic or sub-cellular changes evoked by learning.

Required qualifications:

- BSc in Biology
- Enrolled in a Neuroscience-related Master’s program
- Prior experience in experiments with animals (e.g., behavioral and/or imaging experiments)
- Prior experience in wet lab techniques (e.g., genotyping by polymerase chain reaction etc.)
- Excellent oral and written skills in English language
- Excellent communication skills

Desired qualifications:

- Highly motivated and creative individual who want to work in a dynamic, multidisciplinary research environment
- Willing to interact with both experimental and theoretical neuroscientists
- Ability to collaborate with other team members

	Evaluation criteria	Maximum score
1.	Enrolled in a Neuroscience-related Master's program	YES / NO
2.	BSc degree in Biology or a related field	YES / NO
3.	Prior experience in animal experiments (undergrad thesis: 20 points, rotation: 10 points)	20
4.	Prior experience in imaging and wet lab techniques (undergrad thesis: 20 points, rotation: 10 points)	20
5.	Excellent oral and written skills in English language (B1: 7 points, B2: 8 points, C1: 9 points, C2: 10 points)	10
6.	Interview where the following skills will be assessed: * a) Research interests (10 points) b) Previous research experience (10 points) c) Communication skills (10 point)	30
7.	Reference letters (Excellent: 20 points, Very good: 10 points)	20
Total score		100

* Only candidates with total score of 50 and above will be invited to an interview.

Contract Duration: Part Time, Fixed Term. for 6 months with possibility of renewal

Total budget: According to national legislation (N. 4354/2015) and experience

Envisaged starting date: from 1st April 2025

Deadline for the submission of applications: February 25th, 2024 @ 13:00 (Greece time)

The application should consist of:

1. Application Form (see below)
2. CV
3. Brief statement of purpose
4. The names and contact details of two referees
5. Scanned copies of academic titles
6. Scanned copies proving all the qualifications
7. Proof of enrollment in graduate program

Submission of applications: eld0719@imbb.forth.gr

Evaluation procedure

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

In case of titles and qualifications awarded by foreign Higher Education Institutions, the provisions of the Law 55/2023 (article 36) and 4957/2022 (article 304) are implemented.

The results of the selection will be announced on the website of IMBB-FORTH. Applicants have the right to appeal the selection decision, by addressing their written objection to the IMBB secretariat within five days since the results announcement on the web. Objections are submitted in one of the following ways: in person, by an authorized person, by post, by courier. They also have the right to access (a) the files of the applicants as well as (b) the table of applicants' scores (ranking of applicants results). All the above information related to the selection procedure will be available at the secretariat of IMBB-FORTH in line with the Hellenic Data Protection Authority. Access to personal data of co- applicants shall be limited to personal data (and relevant data) and supporting documents which have been the basis of the evaluation of the applicants for the specific post(s). Prior to the announcement of the personal data and/or documents of the co- applicants to the applicant, FORTH will inform the data subjects in an appropriate way.

The selected applicants will be notified personally regarding the success of his/her application and will be requested to submit certified copies of his/her degrees. If the submitted documents do not agree with the original application, the applicant 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 applicants have submitted. 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. Under the Regulation EU/2016/679, applicants have the rights to be informed about their personal data, access to, rectification and erasure, restrictions of process and objection to as provided by applicable regulation and national laws. Applicants have the right to file a complaint to the national Data Protection Authority. For any further information regarding exercise of personal data protection rights, applicants may contact the Data Protection Officer at FORTH at dpo@admin.forth.gr.

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

APPLICATION FORM

Name: _____
 Surname: _____
 Date of birth (dd/mm/yy): _____
 Address: _____
 Telephone number: _____
 Email address: _____

TO
FOUNDATION OF RESEARCH AND TECHNOLOGY (FORTH)
INSTITUTE OF MOLECULAR BIOLOGY AND BIOTECHNOLOGY

Hereby I submit my application for the position:

In the framework of the project: _____

Position code [Ref #] _____

Submitted with this application:

1. _____
2. _____
3. _____
4. _____
5. _____

I certify that:

- A) I accept the terms and conditions of the job announcement
- B) I possess all the necessary certificates and documents and I can present them in their original form to the committee without any delay if I am asked to do so
- C) I am able to complete the project within the foreseen time -frame
- D) all the information given in the framework of this application are accurate and true.

Date: _____

Applicant name

 (signature)