

One (1) MSc Student Position

[Ref # ORZ-0743]

The research group of «Biomaterials and Biodevices» under the European Program **HORIZON-EIC2022-PATHFINDEROPEN-01**, entitled “Minimally-Invasive Soft-Robot-Assisted Deep-Brain Localized Therapeutics Delivery for Neurological Disorders - SoftReach” (Program Coordinator Prof. Ioannis Charalampopoulos) invites applications for one MSc Student to work on brain implant development and optimization.

About the lab

The “Biomaterials and Biodevices” lab, led by Prof. Dimitrios Tzeranis, integrates multiple fields (biomaterials, engineering, computational science, imaging, robotics, biology) in order to develop novel biomedical devices and systems around biologically-active biomaterials. The lab focused on specific unmet needs related to the Nervous System (organ regeneration, treatments for neurodegeneration).

About the project:

SoftReach is an EIC project that aims to develop an innovative robotic platform for minimally-invasive localised delivery of therapeutics in hard-to-reach brain regions by integrating robotics, neurobiology, biomaterials, imaging and *in silico* modelling.

Position Description:

We are looking for a graduate student researcher with background in neuroscience and interested bioengineering. The position has the following duties and responsibilities:

- Build fluidic devices for cell assays.
- Cell culture and fluorescence imaging.
- Fabricate experimental testbeds for animal quantification and robot evaluation.
- Collaborate with group members, train undergraduate students, write protocols and technical reports.

Required qualifications:

- BSc in life sciences.
- Enrolled in a graduate program related to neuroscience.
- Demonstrated experience in the fabrication of fluidic systems by 3D printing and PDMS casting.
- Demonstrated experience in cell culture and fluorescence imaging.
- Demonstrated experience in molecular biology methods.

Desired qualifications:

- Experience in tissue preparation and immunohistochemistry (fixation, sectioning, staining)
- Excellent oral and written skills in English language.



	Evaluation criteria	Maximum score
1.	BSc in life sciences (degree GPA × 2)	20
2.	Enrolled in Graduate Program related to neurosciences	YES/NO
3.	Background in the fabrication of fluidic systems (5 points per semester of hands-on experience; 5 for PDMS casting; 5 points for 3D printing)	15
4.	Background in cell culture and quantification (10 points per semester of hands-on experience; 10 points for cell culture; 10 points for fluorescence imaging)	30
5.	Background in molecular biology methods (6 points for PCR; 6 points for western blotting; 3 points for fluorescence staining)	15
6.	Background in tissue preparation and immunohistochemistry (3 points for tissue fixation; 4 points for tissue sectioning; 3 points for immunohistochemistry)	10
7.	Excellent oral and written skills in English language (B1 = 2 points, B2 = 5 points, C1 = 7 points, C2 = 10 points)	10
Total score		100

Contract Duration: 4 months with the possibility of extension according to the project needs

Total budget: 600 euros per month gross.

Envisaged starting date: 01 June 2025

Application submission: Interested applicants should submit their application electronically by **April 30th 2025 @ 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: orz0743@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.

Applicants that do not fulfill required qualifications will be excluded from evaluation. Applicants that are evaluated with score less than 60/100 will be excluded from further consideration.

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)