PREDOCTORAL RESEARCHER POSITION GRANT (FPI)

INSTITUTION

The Hospital del Mar Research Institute is the research center of the Barcelona Mar Health Park Consortium and a member of the Barcelona Biomedical Research Park (PRBB). It provides an exceptional framework for translational research and offers state-of-the-art technological platforms (flow cytometry, animal facility, microscopy, etc.) as well as close collaboration with the Hospital del Mar.

POSITION

Predoctoral researcher position as a part of the research group Intercellular *Communication in Cancer and Ageing* with a predoctoral contract supported by the grant reference PID2023-146053OB-I00, funded by MICIU/AEI/10.13039/501100011033 and by FSE+.

OFFER

- Predoctoral researcher position.
- Predoctoral researcher employment contract governed by Article 21 of Law 14/2021, of June 1, on Science, Technology, and Innovation, and Royal Decree 103/2019, of March 1, on the Statute of Research Personnel in Training.
- Full-time contract.
- Salary according to the provisions of Royal Decree 103/2019, of March 1, on the Statute of Research Personnel in Training, paid in 12 instalments.
- Incorporation within 3 months from the definitive resolution.

Hospital del Mar Research Institute
Parc de Recerca Biomèdica de Barcelona
Doctor Aiguader, 88 | 08003 Barcelona
Tel. 93 316 06 08 | Fax 93 316 06 38
http://www.imim.es

CANDIDATE REQUIREMENTS

- ✓ Degree in B.S. and M.S. in life sciences.
- ✓ Training in microbiota-related research, and/or behavioural science, and/or chronobiology, and/or mouse physiology.
- ✓ Positive evaluation of previous experience working with mice, and/or programming skills in R, fluency in English.
- ✓ At the time of hiring, the candidate must provide proof of admission to a doctoral program.

  Once the candidate has enrolled in the doctoral program, they will need to submit a copy of the formalized enrollment to the contracting institution.

SELECTION CRITERIA

1) Academic and/or scientific-technical trajectory of the candidate. (Up to 50 points).

   1.a) Scientific-technical contributions: The academic record and other curricular merits of the candidate will be evaluated, as well as their suitability for the tasks to be carried out based on their training and professional experience. (Up to 45 points).

   1.b) Mobility and internationalization: The relevance and impact of the candidate's stays in national and international research centers and/or the industrial sector will be assessed, considering the prestige of the hosting entity and the activities carried out there. (Up to 5 points).

2) Suitability of the candidate for the research activities to be carried out. The candidate's suitability for the project or research activities will be evaluated based on their previous training and experience. This will include the added value that the completion of the project will bring to their research career, as well as the contribution to the institution and research group. (Up to 50 points).

THE PROJECT

Disturbed host-microbiota crosstalk: linking circadian disruption and Alzheimers Disease (MICROTALK).

Two alterations that occur in Alzheimers Disease are dysbiosis, detrimental changes in the intestinal microbiota, and deterioration of circadian clock function resulting in disturbed diurnal rhythmicity on the molecular and behavioural level. Recent evidence suggests that both dysbiosis and declining daily rhythmicity are not only symptoms of the disease but also contributing to its development. MICROTALK will investigate whether dysbiosis and disturbed diurnal rhythmicity are linked in Alzheimers Disease, and whether such link could be exploited for therapeutic interventions. This multidisciplinary project will combine behavioural neuroscience with chronobiology and research into the microbiota to decipher how altered diurnal signalling between the gut and the brain impacts on Alzheimers disease development.

Regarding the mentioned project, the person who joins will carry out the following tasks:

- microbiota-gut-brain axis: microbiome manipulation, behavioural studies
- omics: transcriptomics, metabolomics, microbiome sequencing
- molecular biology techniques: PCR, western blot, histopathology

APPLICATION OF CANDIDATES

You can submit your application to: pwelz@researchmar.net

For more information:

https://www.imim.cat/programesrecerca/cancer/en_intercellular_communication.html

Hospital del Mar Research Institute
Parc de Recerca Biomèdica de Barcelona
Doctor Aiguader, 88 | 08003 Barcelona
Tel. 93 316 06 08 | Fax 93 316 06 38
http://www.imim.es