
POSITION AVAILABLE FOR DOCTORAL STUDIES

Associated project. Sex dimorphism in migraine: thermoTRPs as hormonal targets (Ref. PID2021-126423OB-C21)

Research group. The sensory neurobiology group at the IDiBE-UMH (<http://www.idibe.es>) is looking for a highly motivated and creative predoctoral fellow to unveil the role of thermoTRP channels-sex hormone signalling pathways in NTG- and inflammatory-induced migraine, focusing on TRPM8 channels that act as testosterone receptors. A milestone of this aim is (i) to uncover the mechanisms involved in the antinociceptive resilience of male persistent migraine; (ii) to validate results obtained in the animal model, in human sensory neurons transdifferentiated from fibroblasts provided by healthy and migraine volunteers. The candidate will test novel bioactive compounds with the aim of identifying therapeutic candidates for analgesic drug development.

The sensory neurobiology lab has developed a chronic model of migraine that reproduces the sexual dimorphism of the disease opening the opportunity to address these questions. In addition, we have progressed in the transdifferentiation of human skin fibroblasts to sensory neurons that allow to validate results in a human model. We combine pharmacology studies with electrophysiology to investigate the role of trigeminal sensory neurons to the disease. In addition, we have transgenic models that allow for the dissection of the signaling pathways implicated.

Educational requirements and experience. Applicants must hold a:

1. Bachelor's degree in Biotechnology, Pharmacology, Medicine, Biomedicine, Biological Sciences and/or related field of study.
2. Master's degree in Biosciences, Biotechnology, Pharmacology and/or Biomedicine.
3. Laboratory experience in molecular and cellular biology basic techniques.
4. English

Salary. The gross salary will be 16.722€ for the first 1 year, 18.458€ for the 2nd year, and 23.065€ for the 3rd and 4th years (+Social Security).

Duration. This predoctoral position is for 4 years and must conclude with the thesis defense.

Conditions. The candidate will enroll in the Doctoral Program on Molecular and Cellular Biology of IDiBE.

Submission of eligible applications.

Applications must be submitted through the on-line application of the Agency of Spanish Research when the official call opens for the final selection: <https://www.aei.gob.es/convocatorias/buscador-convocatorias/ayudas-contratos-predoctorales-formacion-doctores-2022>

Project reference: PID2021-126423OB-C21.

Deadline. January 26, 2023.

Contact. Prof. Antonio Ferrer (aferrer@umh.es) and Prof. Asia Fernández (asia.fernandez@umh.es).

Employer declaration. The University Miguel Hernández (UMH) is an equal opportunity and affirmative action employer. All applicants will receive equal consideration for employment without regard to age, color, gender, race, national origin, religion, sex, or sexual orientation. The University has implemented the HRS4R Human Resource Strategy for Researchers.