

# Postdoctoral Position (ERC-StG “HIGHMEMORY”) (REF. 2028 BUSQUETS)

The group of **Dr. Arnau Busquets Garcia** is seeking for a **Postdoctoral candidate** with strong interest in **Behavioral Neuroscience**. This is an excellent opportunity to join the project **HIGHMEMORY (Beyond classical conditioning: Hippocampal circuits in higher-order memory processes)**, a project aimed towards understanding complex conditioning processes in order to study how the brain encode and store previous experiences to guide future actions.

**Description:** The overall aim of **HIGHMEMORY** is to elucidate the brain mechanisms involved in higher-order conditioning in mice. Specifically, by using in vivo imaging and viral approaches combined with complex behavioral tasks, we will study how cortico-hippocampal neuronal projections participate in the modulation of complex associative learning and which is the impact of these complex cognitive processes in pathological states such as psychotic states. . The applicant will be dedicated to set up fiber photometry recordings in mice and to apply them to several higher-order conditioning paradigms in combination with pharmacological, viral and optogenetic approaches.

**Requirements:** We seek outstanding individuals awarded with a PhD in disciplines such as Biology, Medicine, Pharmacy or similar. We are looking for highly motivated and organized candidates with good communication skills, initiative, creativity, capable of working in a group but also with a high degree of work autonomy and interest to form students. Experience in **in vivo calcium imaging in rodents** and training in **mouse surgical procedures is essential**. In addition, **experience in calcium imaging analysis and/or optogenetic approaches** will be highly appreciated. High quality publications will be highly considered. Good communication skills and proficiency in written and spoken English are also essential.

**Research Center:** The research will be carried out at the IMIM (<https://www.imim.es>), a multi-disciplinary research center which is located in the Barcelona Biomedical Research Park (<http://www.prbb.org>).

**Starting Date and Term:** The position is available **starting from February 2021** and represents a contract for 2 years, with the possibility of extension. Salary will be consistent with the IMIM pay scales. This contract is part of a project that has been proposed for funding from the European Union’s Horizon 2020 research and innovation program, under the **ERC-StG** program.

**Applications:** Applications should be sent directly to Dr. Arnau Busquets Garcia ([abusquets@imim.es](mailto:abusquets@imim.es)) including a CV and a motivation letter indicating in the subject **“HIGHMEMORY\_POSTDOC2”**. In addition, the name and email of a contacting professor/s or researcher/s that know the candidate should be provided. Pre-selected candidates will be invited for an interview and will have to prepare a presentation summarizing their previous research.

**Deadline: December 1, 2020**