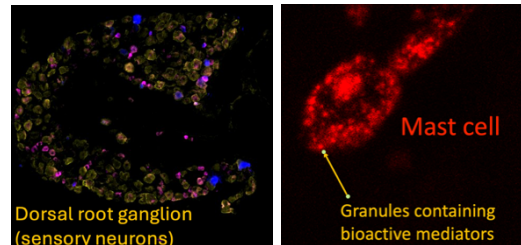


## PhD Position in neuro-immune interactions in pain signalling: Sensory Transduction and Nociception Group

We are seeking to recruit a curious and enthusiastic PhD candidate with a strong interest in neuroimmunology and pain signalling. The successful candidate will join our research group at the Institute for Neurosciences (UMH-CSIC) in Alicante (Spain) while completing their studies towards obtaining a PhD degree in Neuroscience from the University Miguel Hernández.

**Project:** A crucial and significant consequence of immune system activation—such as that occurring during inflammatory states—is the development of pain. This emerges through the activation and/or sensitisation of specialised ‘pain-sensing’ neurons, referred to as nociceptors, by immune-derived mediators (e.g., cytokines, vasoactive amines, eicosanoids, etc.). Mast cells are tissue-resident immune cells known to play an important role in host defence. They are equipped with granules containing a wide array of bioactive molecules, which they can release rapidly upon activation. Mast cell-derived mediators can directly activate and/or sensitise nociceptors, leading to increased nociceptive signalling and pain. However, recent evidence has shown that mast cells can also lead to the resolution of inflammatory pain, hence suggesting that the specific role of mast cells to trigger or alleviate pain depends on the neuro-immune context. The PhD student will help uncover the precise signalling pathways and mediators that mast cells utilise in different neuro-immune scenarios and how this contributes to modulating pain signalling.



### Requirements:

- Master's degree in Neuroscience, Immunology, Biomedicine/Biomedical Sciences, Biotechnology, (molecular) Biology, or related fields.
- Strong interest in neuroscience, the immune system and neuroimmunology.
- A collaborative mindset and enthusiasm to work in an international, interdisciplinary environment.
- Willingness to work with animals (rodents) is crucial. Certification in animal handling is not essential but desired
- Excellent communication skills and fluency in English.

### What we offer:

- A full-time PhD position for 4 years (subject to a positive evaluation at the end of the first year).
- A versatile and challenging job with very diverse contacts in a world-class research environment operating at an international level and various opportunities to broaden your expertise.
- Access to state-of-the-art tools and infrastructure.
- The opportunity to join a friendly, highly collaborative group, in an excellent environment to pursue a PhD degree in neuroscience.
- Opportunity to participate in international collaborations.

**How to apply?** Interested applicants should send their (1) CV, (2) a concise cover letter describing their motivation and career goals, and (3) the name and contact details of 2 referees to Javier Aguilera-Lizarraga ([javier.aguileral@umh.es](mailto:javier.aguileral@umh.es)). A live or remote interview will be carried out with selected potential candidates. Please, do not hesitate to get in touch with any questions or for more information.