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## 1 Postdoctoral research position is available at the Institute of Neurosciences in Alicante to investigate spontaneous activity programs in the developing brain.

The **López-Bendito** Lab is interested in understanding the cellular and molecular mechanisms involved in the development and plasticity of the thalamocortical connection (<http://lopezbenditolab.com>). In particular, our aim is to uncover the principles underlying the development of sensory circuits with emphasis on the role of the thalamus in the development of cortical sensory maps. Furthermore, we are developing strategies for circuit restoration in sensory deprived mice. To tackle these questions, our lab has developed an integrated and innovative experimental programme that includes *in vivo* imaging of brain activity, manipulation of gene expression, cell and molecular biology, genome-wide analysis, cell culture and electrophysiology (Anton-Bolaños et al., Science 2019; Moreno-Juan et al., Nat Comm 2017; Mire et al., Nat Neuro 2012).

The laboratory offers an excellent and multidisciplinary working atmosphere at the Institute of Neuroscience in Alicante, located in the south-east of Spain at the University of Miguel Hernández-CSIC campus. The host institute is composed by several research groups exploring the development, structure and function of the nervous system in normal and pathological conditions (<http://in.umh.es/>).

We are seeking for a highly motivated postdoctoral scientist to determine the spontaneous activity programs involved in the emergence of sensory circuits and cortical territories in the normal and sensory deprived brain. This 3-years project that involves meso-scale calcium imaging *in vivo*, optogenetics, genome-wide analysis, retroviral tracing. Applicants should have a proven track record and an independent working style.

Requirements:

**Position.** PhD in Neuroscience and experience in imaging techniques and circuit function. Knowledge in electrophysiology and/or cell biology will be positively evaluated.

Candidates should send an email to Guillermina López-Bendito ([g.lbendito@umh.es](mailto:g.lbendito@umh.es)) including: i) CV, ii) contact information of two scientists to request references and iii) a brief letter stating past achievements and current motivation. Applications will be considered until **March 15, 2021**.

