



11 July 2022

## PhD CONTRACT AT THE UNIVERSITY OF VALLADOLID (Spain).

<https://investiga.uva.es/convocatoria-2022-de-contratos-predoctorales-de-la-universidad-de-valladolid-cofinanciados-por-el-banco-de-santander/>

**Deadline: 27 July 2022**

## Calcium signaling group (Drs. Javier García-Sancho & M.Teresa Alonso)

<http://www.ibgm.med.uva.es/investigacion/fisiologia-celular-y-molecular/calcio-y-funcion-celular>

Universidad de Valladolid-Instituto de Biología y Genética Molecular (IBGM-CSIC, Spain).

Our group studies a role of subcellular calcium signaling in different organelle like the sarcoplasmic reticulum (SR-ER), the mitochondria or the endo-lysosome, in conditions of health and disease. We have recently developed a new family of Calcium sensors, specifically optimized for measuring Calcium in organelle, especially *in vivo*. The experimental approaches used in our laboratory extends from structural studies to dilucidate the mechanism of the Calcium binding of the sensor, up to the generation of transgenic animal models (both in flies and mice) for human diseases. Lately, we have showed that the SR calcium content is much reduced in aging flies and this correlates with the lost of muscle activity (Delrio-Lorenzo et al., 2020).

We offer a **predoctoral contract** available to study the role of SR-ER calcium signalling in an **animal model of neurodegeneration**. Experimental design will include ***in vivo* Ca<sup>2+</sup> imaging**, biochemistry, molecular biology and the use of transgenic flies and mice for calcium biosensors recently generated by using the Crisp/Cas9 technology. We are looking for a student, master in a Bio-career (Biology, Biotechnology, Biochemistry, etc.) with a good CV, highly motivated for science and with a good spoken english. She/he will join the **Doctorate Programme** offered by our Institute (<http://www.ibgm.med.uva.es/postgrado>). Selected recent publications from our lab:

Delrio-Lorenzo A. et al. *J Cell Sci.* 2020  
Rodríguez-Prados M. et al. *Pflugers Arch.* 2020  
Rojo-Ruiz J. et al. *Biochem J.* 2018  
Arduino DM. et al. *Mol Cell* 2017  
Alonso MT et al. *Methods Mol Biol.* 2017  
Navas-Navarro P et al. *Cell Chem. Biol.* 2016  
Rodríguez-García A et al. *PNAS* 2014

Interested candidates, please send your application to [talonso@ibgm.uva.es](mailto:talonso@ibgm.uva.es)