

David Reigada Prado has a Biology degree (1997) and a Ph.D. in Biology (University of Barcelona, 2002), directed by Dr. Carles Solsona, Department of Cell Biology and Pathology (University of Barcelona, Spain), studying the biophysical and molecular mechanisms of the release of ATP, acetylcholine and other neurotransmitters contained in synaptic vesicles in the nerve terminals of the motor plate. After obtaining his doctorate, he started his first postdoctoral work at the Physiology Department of the University of Pennsylvania, Philadelphia (USA) under the direction of Dr. Claire Mitchell (2002-2006), where he studied the involvement of the purinergic system in the control of intraocular pressure, the physiology of retina pigment epithelium and its relation with the etiology of some ophthalmic diseases such as glaucoma, macular degeneration or retinal detachment. After that, he joined the group of Dr. Maria López de Ceballos in the Cajal Institute in Madrid (Spain, 2007-2008). In her laboratory, Dr. Reigada studied the influence of the purinergic system in the control of microglial activity in Alzheimer's disease development.

Finally, in 2009, he started his present work in the Molecular Neuroprotection Group in the National Hospital of Paraplegics (Toledo, Spain), where he is still working today. In collaboration with Dr. Rodrigo Martínez Maza, they are studying the anti-apoptotic and cytoprotective role of XIAP protein, the purinergic system (specially the diadenosine tetraphosphate (AP4A)) and micro-RNAs as strategy for early treatment against the neurotraumatic damage after spinal cord injury.

Relevant publications:

**Reigada D.**, et al. Control of neurotransmitter release by an internal gel matrix in synaptic vesicles. *Proceedings of the National Academy of Sciences of the U.S.A (PNAS)*. 2003 Mar 18; **100(6)**:3485-3490

**Reigada, D.**, Mitchell CH., Release of ATP from RPE cell involves both CFTR and vesicular transport. *American Journal of Physiology*. 2005 Jan; **200(1)**:C132-C140

Yunta, M., et al. MicroRNA dysregulation in the Spinal Cord following traumatic injury. *PlosOne* **7(4)**:e34534. 2012

**Reigada, D.**, et al. Acute administration of ucf-101 ameliorates the locomotor impairments induced by a traumatic spinal cord injury. *Neuroscience*. 2015 Aug 6; **300**:404-17.

**Reigada, D.**, et al. Diadenosine tetraphosphate (Ap4A) inhibits ATP-induced excitotoxicity: a neuroprotective strategy for traumatic spinal cord injury treatment. *Purinergic Signalling*. Epub October 2016.