Rodrigo Martinez Maza

PRINCIPAL INVESTIGATOR
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My research interest has always been focused on neuroscience, particularly the molecular approach to the study of neurodegenerative diseases. While studying biology at the Complutense University (Madrid, Spain) I worked in the laboratory of Dr. Mora (Faculty of Medicine, human physiology department) where I did a BSc. thesis on the effect of drugs on the patterns of neurotransmitter release. I also collaborated with Dr. M. Vidal (Biological Research Centre), on the characterization of transgenic animals for Polycomb proteins.

I completed my doctoral thesis at the National Center for Molecular Biology (CBM-Severo Ochoa, Universidad Autonoma de Madrid, Spain) focusing on the molecular characterization of glycine transporters subtypes. As a postdoctoral researcher, I joined the laboratory of Prof. Lindholm Dan at the Neuroscience Institute (Center for Biomedicine, Uppsala University, Uppsala, Sweden), where I entered the field of neuronal apoptosis and its involvement in neurodegenerative processes.

My postdoctoral project was centered on determining the mechanism by which the anti-apoptotic protein XIAP protects neurons against different apoptotic stimuli. Furthermore, I participated in a study on the generation of transgenic mice overexpressing XIAP in neurons and analysis of its effects *in vivo*. Finally, I joined the National Hospital for Paraplegics (Toledo, Spain) as a researcher at the Molecular Neuroprotection Laboratory. Our group is particularly interested in understanding cell death regulation during secondary damage caused by spinal cord injury and developing new therapeutic tools to alleviate neurological damage.

Selected articles:

- The role of N-glycosylation in transport to the plasma membrane and sorting of the neuronal glycine transporter GLYT2. R Martínez-Maza et al. JBC 276 (3), 2168-2173.
- Transgenic mice overexpressing XIAP in neurons show better outcome after transient cerebral ischemia T Trapp, et.al. Mol and Cell Neuroscience 23 (2), 302-313.
- MicroRNA dysregulation in the spinal cord following traumatic injury. M Yunta, et al., PLoS One 7 (4), e34534.