

Marco Capogna, Scientific biography

I graduated in Experimental Psychology in Rome, Italy, and in Biology in Pisa, Italy. I received my PhD in Neuroscience at the Medical School of the University of Pisa. From 1991 to 1998 I joined the group of Prof Beat Gähwiler and Dr. Scott M. Thompson at the Brain Research Institute of the University of Zurich, Switzerland. Subsequently, I moved to the UK as a senior scientist of the Neurophysiology Laboratory at Novartis Institute for Medical Sciences, University College, London, UK. My research training also includes a stay at the Department of Clinical Neuropharmacology of the Max Planck Institute for Psychiatry, Munich, Germany. In January 2001, I joined the Medical Research Council-funded Anatomical Neuropharmacology Unit, University of Oxford as a group leader. In 2014 I awarded the title of Professor of Cellular Neuropharmacology at the University of Oxford. In 2016 I joined the University of Aarhus, as Professor in Neuroscience at the Faculty of Health, Department of Biomedicine.

My past experimental work suggested novel mechanisms of the modulation of transmitter release, such as a direct interference with presynaptic exocytotic proteins, induced by the activation of presynaptic receptors or neurotoxins. Currently, I am interested in understanding what circuitry guides emotional-dependent behaviours, and how it is perturbed during animal model of fear and anxiety disorders. To achieve this goal I have elucidated the role of several identified neuronal types of the hippocampus and amygdala with emphasis on GABAergic neurons. I use a wide range of techniques including electrophysiology in vitro and in vivo, voltage sensitive dye imaging, and high resolution anatomy. My research activities benefit by the contribution of a broad range of international collaborators who are Leaders in their field. Techniques used include whole-cell patch clamp recording, extracellular recordings, immunohistochemistry, electron microscopy, membrane voltage imaging. In addition to the contribution as research group leader, I have also trained outstanding scientists. Many of my previous trainees have become researcher world leaders.