



Eduardo Fernández

Eduardo Fernandez is Professor of Cellular Biology, Chairman of the Department of Histology and Anatomy in the University Miguel Hernández (Spain) and Director of the Neuroengineering and Neuroprosthesis Unit in the Bioengineering Institute of the University Miguel Hernandez. He received a M.D. degree from the University of Alicante (1986) and a Ph.D. in Neuroscience with honors in 1990. He has been visiting professor at the University of Utah (USA), University of Oldenburg (Germany), Beth Israel Medical Deaconess Center (USA) and University of Vienna (Austria). His research interests is in developing solutions to the problems raised by interfacing the human nervous system and on this basis develop a two-way direct communication with neurons and ensembles of neurons. He is actively working on the development of multifunctional microprobe arrays for cerebral applications (FP6 NEUROPROBES project) and coordinating an European Project (CORTIVIS) which tries to demonstrate the feasibility of a neuroprostheses, interfaced with the occipital cortex, as a means through which a limited but useful sense of vision could be restored to profoundly blind. In the last 5 years he has been using histological and electrophysiological techniques to asses the response to implantation and general biocompatibility issues regarding intracortical microelectrodes. He is also working on brain plasticity and reorganization in severe vision loss and developing non-invasive methodologies for the selection of appropriate candidates for implantation of visual neuroprosthesis.