



Michele Giugliano is presently tenured associate professor at the Department of Biomedical Sciences of the University of Antwerp (Belgium). Since 2008, he has been directing the Theoretical Neurobiology & Neuroengineering Laboratory, leading an interdisciplinary research group composed today of 4 PhD students, 5 postdocs, and 2 technicians, with diverse backgrounds in biology, medicine, engineering, and physics. He holds also official visiting appointments at the Neuroelectronic Flanders Institute, IMEC, Leuven (Belgium), at the University of Sheffield (UK), and at the Ecole Polytechnique Federale de Lausanne (Switzerland). After receiving a 5-years "laurea" in Electronic Engineering cum laude from the University of Genova (Italy) in 1997, he developed a strong interest for Biophysics and Neurobiology and, in 2001, he received a PhD in

Bioengineering from the Politecnico di Milano (Italy), on the topics of Computational Neuroscience and modeling of short-term synaptic plasticity. He was then awarded with a long-term fellowship by the Human Frontier Science Program to pursue experimental research on the cerebral cortex, with emphasis on novel paradigms for probing single-cell spike response properties. From 2001 to 2005, he was postdoctoral fellow at the Department of Physiology of the University of Bern (Switzerland) in the laboratory of Prof. Luescher, combining experimental and theoretical approaches. From 2005 to 2008, he was junior group leader at the Brain Mind Institute, Ecole Polytechnique Federale de Lausanne (Switzerland) in the laboratory of Prof. Markram, working on cortical cellular electrophysiology and exploring carbon-based nanomaterials as a novel means to interface electrodes and neurons. Today, his scientific research is focused at studying bottom-up the computation performed by the cortex, and at validating novel (technological) paradigms for bridging the single neurons- and network-levels.