

## **VALENTINA CARABELLI CURRICULUM VITAE**

**Name and surname:** Valentina Carabelli

**Date and place of birth:** 28/11/1967, Torino, Italy

**Current position:** Full Professor (Physiology), University of Torino, Italy

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### **PROFESSIONAL DEGREES**

**1992:** Degree in Physics (110/110), Faculty of Physics, University of Torino, Italy

**1997:** PhD in Cellular Physiology and Neuroimmunophysiology, University of Siena, Italy

**1997-1998:** Post-Doctoral fellowship from “Fondazione Cavalieri Ottolenghi”

**1998-1999:** Post-Doctoral fellowship from INFN (National Institute Physics of Matter)

**1999:** Researcher position, University of Torino.

**2005:** Associate professor, Department of Drug Science and Technology, University of Torino

**Since 2018:** Full Professor in Physiology.

### **RESEARCH ACTIVITY**

Research activity has been focused since the early career on the biophysics and modulation of calcium channels, with a specific interest in their role in regulating exocytotic processes as well as cellular excitability, using different experimental models such as hippocampal neurons, neuroendocrine chromaffin cells, clonal and immortalized cell lines. More recently, her main scientific interests have been addressed to investigate the molecular basis of neuronal excitability by combining classical electrophysiological techniques together with the use of multi electrode arrays, and to the development of new diamond-based biosensors for simultaneous detection of neurotransmitter release, cell excitability and Ca<sup>2+</sup> transients. The use of these prototypes has been focused on the investigation of neurodegenerative diseases by monitoring the early stages of neurodegenerative processes.

V.C. is Full Professor at the University of Torino, where she coordinates the group of cellular physiology and molecular neuroscience (PhyNe) at the Department of Drug Science and

Technology. V.C. collaborates since many years in the framework of projects articulated within the inter-departmental centre “Nanostructured Interfaces and Surfaces” (NIS). Her scientific interests include the molecular basis of neuronal excitability and neurotransmitter release, monitored through classical approaches and the development of biosensors arrays. V.C. is co-author of 81 papers on peer reviewed journals (H-index: 33).

V.C. is collaborating as a reviewer with several international journals, such as: *Pflügers Archiv*, *European Journal of Physiology*, *Nanotoxicology*, *Biosensors and Bioelectronics*, *Cell Calcium*, *Journal of Neurochemistry*, *European Journal of Pharmacology*, *Analytical Chemistry*, *Neurotoxicology*, *Toxicological Sciences*, *International Journal of Molecular Science*.

Editor of *Frontiers in Cellular Neuroscience*.

## **GRANTS**

Valentina Carabelli has been grant holder of the following fundings:

Compagnia di San Paolo, Progetto Trapezio, PI (2022-2024)

CRT, PI (2022-2024)

Progetti di Ateneo, Compagnia di San Paolo, PI (2017-2020)

Italian MIUR, Torino Unit Coordinator (2017-2020)

Fondo Europeo di sviluppo regionale F.E.S.R. 2007/2013

Compagnia di San Paolo, “Neuroscience Program” (2008) (National Coordinator)

Italian MIUR (Torino Unit Coordinator) (2006)

Regione Piemonte, BANDO CIPE (2004)

Turin University (2000, 2001, 2005, 2007, 2008, 2009, 2012, 2013, 2014)

Italian CNR (Young Researcher Program, PI) (2001)