## Teresa Soda

## RTDA SSD BIOS/06

Teresa.soda@unicz.it

Stanza 12, 8° liv. Preclinico

#### **EDUCATION:**

# Bachelor of Biological Sciences (2010)

- Master's degree in Neurobiology (2012)
- PhD in Biomedical Sciences (XXVIII cycle) 2012-2015 University of Pavia

#### **Experience:**

- Research experience includes studies on synaptic plasticity in the cerebellum and hippocampus of mouse models of autism and epilepsy,
- Investigation of the neural basis of functional magnetic resonance signals,
- Research on calcium signaling in vascular endothelial cells, with a focus on the cerebral microcirculation.

#### **SKILLS:**

Cellular and molecular techniques, electrophysiology (in vitro, in vivo, ex vivo), membrane receptor and channel function, cardiovascular and cerebral physiology, homeostatic perturbations. Research experience in a laboratory focused on heart-brain interactions.

## **EDUCATION:**

I obtained a Bachelor's degree in Biological Sciences in 2010, followed by a Master's degree in Neurobiology in 2012 at the University of Pavia. At the same university, I earned a PhD in Biomedical Sciences (XXVIII cycle). My doctoral thesis was titled: "Cerebellar hyper-plasticity in the IB2 KO mouse model of Autism Spectrum Disorders." The degree was conferred on 01/02/2016. Supervisor: Prof. Egidio D'Angelo.

## **EXPERIENCE:**

- □ Collaboration with Professor Mitchell Goldfarb's research group, Department of Biological Sciences, Hunter College, University of New York, USA. Active participation in research investigating cerebellar synaptic plasticity in a novel mouse model of autistic cerebellar phenotype, the IB2 KO mouse model.
- □ During a postdoctoral fellowship at the "Centro Fermi", I collaborated on the project "The basis of functional magnetic resonance signals in local neuronal microcircuits". Within this collaboration, I studied the role of neuronal circuits and endothelial cells in regulating cerebral blood flow in response to neuronal activity.
- □ Contributed to research on synaptic plasticity in epilepsy and calcium signaling in cerebral microcirculation, collaborating with Professors Dmitry Lim (UPO, Novara) and Francesco Moccia (UniPV).
- □ Research activities aim to understand the interaction between "heart and brain" in physiopathological conditions, using an approach that extends from cellular/molecular techniques to electrophysiological techniques on in vitro, in vivo, and ex vivo models. Research is conducted at the Laboratory of Physiology and Neuropharmacology, Department of Health Sciences, University of Magna Graecia of Catanzaro.

#### **Teaching Assistant**

Fixed-Term Researcher (240/2010, art. 24, paragraph 3, letter a, SSD BIOS/06 – Physiology, Sectoral Contest 05/D1) at the Department of Health Sciences, Magna Graecia University of Catanzaro, since July 1, 2022.

#### Teaching:

- Physiology II course, Medical and Surgical Sciences degree program,
- .Physiology course, Biotechnology degree program, School of Pharmacy and Nutraceuticals.
- Physiology with a touch of Anatomy course, Cosmetic Sciences and Wellness Products degree program, School of Pharmacy and Nutraceuticals,