## PERSONAL INFORMATION

## Paolo Scalmani

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## **WORK EXPERIENCE**

## (31/12/2019 - to date)

#### Italian NHS researcher

at U.O. VII Clinical and Experimental Epileptology.

I.R.C.C.S. Foundation, Carlo Besta Neurological Institute, Via Amadeo 42, Milan

Study in mouse models of the electrophysiological mechanisms underlying the genesis and propagation of epileptic seizures.

## (04/2009-30/12/2019)

## **Research Contract**

at U.O. VI Laboratory of Cellular Neurophysiology.

I.R.C.C.S. Foundation, Carlo Besta Neurological Institute, Via Amadeo 42, Milan

Analysis of epileptogenic ion channel mutations in animal models.

## (11/2002-04/2009)

# **Fellowship**

at U.O. VI Laboratory of Cellular Neurophysiology.

I.R.C.C.S. Foundation, Carlo Besta Neurological Institute, Via Amadeo 42, Milan

Study of neuronal excitability pathologies resulting from spontaneous human mutations in the sodium channel.

## **EDUCATION AND TRAINING**

## (12/2016)

# State examination for the qualification to the profession of biologist

University of Pavia

## (02/2013)

## Basic course for researchers and personnel engaged in animal testing

Milan

# (01/2008)

## PhD in General Physiology

University of Milan

# (10/2002)

## Bachelor's degree in Biological Sciences

## (07/1992)

## Degree of surveyor

Gorgonzola (Milan)

#### **ACHIEVEMENTS AND AWARD**

#### Grants

**AICE FIRE 2015:** Virus delivered RNA interference as innovative therapeutic strategies for the treatment of genetic drug-resistant epileptic encephalopathy of infancy. 20000 Euro.

**LICE 2019:** A novel homeostatic response implemented by CCK positive GABAergic neurons in Dravet syndrome mice: characterization and use as therapeutic target. 15000 Euro.

## **TECHNICAL SKILLS**

- Techniques for the preparation of cryostat-cut muscle biopsy preparations
- Dissection techniques on human muscle and murine neuronal tissue.
- Cultures of cell lines, primary neuronal cultures and primary cultures of human myotubes.
- Cell transfections with plasmid cDNA.
- Preparation of rat and mouse hippocampal and cortical preparations for electrophysiological recordings.
- Recordings of ionic currents with the "Patch-Clamp" technique in human cell lines, muscle cells, primary neuronal cultures, cortical and hippocampal neurons dissociated and in slices.
- Use of software for the analysis of electrophysiological data and epileptic seizures.
- Basic techniques for RT-Single cell.
- Extraction of plasmid DNA from transformed bacteria.
- Basic molecular biology techniques for mutagenesis.
- Genotyping techniques.
- Histochemical and immunocytochemical techniques for the identification of the various neuronal subtypes.
- Epileptic seizure induction techniques in mouse models using hyperthermia.
- Intraperitoneal and nasal drug administration techniques in mouse models.
- Maintenance of transgenic murine colonies.
- Designs and conducts preclinical and translational research.
- Presents scientific projects, organizes laboratory activities, creates scientific publications, supervises younger colleagues by coordinating their teaching activities.
- Deals with organizational and management aspects relating to the activities it carries out and the connection with ordinary activities relating to animal health and welfare.
- Ability to draft animal testing projects.
- Carries out its activities with operational discretion, assuming direct responsibility for the activities for which it is responsible and for the results achieved