

Marta Gómez-Gonzalo, PhD

Work Address

Istituto di Neuroscienze - Sede di Padova, CNR
c/o Dipartimento di Scienze Biomediche, Università di Padova
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Scientific Expertise

Study of the reciprocal interaction between neurons and astrocytes in physiology (hippocampal, cortical and dopaminergic circuits) and pathology (epilepsy), with different ex vivo and in vivo technical approaches: electrophysiology (single and dual whole-cell patch clamp recordings and field potential recordings in ex vivo rodent brain slices), calcium imaging (single-photon laser scanning confocal microscopy in ex vivo rodent acute brain slices, two-photon microscopy for in vivo imaging and in ex vivo rodent acute brain slices), intracranial injection of adeno-associated viral vectors in rodents, and behavioral test (open field test, conditioned place preference test)

Bibliometric indicators (Google Scholar/Scopus)

Published Articles/Reviews/Chapters in book/Comments: 24/2/2/1
Citations: 2882/2007
H-Index: 21/18

Supervision of PhD students

Supervision PhD Program in Biomedical Science, 37° cycle (2021/2022-2023/2024), c/o Dip. Scienze Biomediche, Università di Padova, “Exploring the role of astrocytes in dopaminergic circuits”
Co-supervision PhD Program in Biomedical Science, 33° cycle (2017/2018-2020/2021), c/o Dip. Scienze Biomediche, Università di Padova, “Reciprocal Signaling between Specific GABAergic interneurons and Astrocytes”
Co-supervision PhD Program in Biomedical Science, 30° cycle (2014/2015-2017/2018), c/o Dip. Scienze Biomediche, Università di Padova, “Astrocyte modulation of synaptic transmission in the reward circuitry of the Ventral Tegmental Area”

Education

PhD in Biological Sciences
2002, Universidad Autónoma de Madrid, Departamento de Bioquímica y Biología Molecular
“Mechanisms of transcriptional regulation mediated by the human hepatitis B and C viruses”
Score: Sobresaliente “*cum laude*”
Master of Science in Biological Sciences
1997, Universidad Autónoma de Madrid
Equivalence (Decreto rettorale Rep. n. 1062/2016, 14/04/2016) to “Laurea Magistrale in Biologia Molecolare (LM6, Classe delle Lauree in Biology-D.M. 270/04)”, Score of equivalence: 110/110

Work Experience

Researcher, 12/2018 to date
Istituto di Neuroscienze, CNR, c/o Dipartimento di Scienze Biomediche, Università degli Studi di Padova
Postdoctoral position, 08/2013 to 12/2018
Dr. Giorgio Carmignoto's laboratory, Istituto di Neuroscienze, CNR,
c/o Dipartimento di Scienze Biomediche, Università degli Studi di Padova
Postdoctoral position, 06/2010 to 06/2013
Dr. Alfonso Araque's laboratory, Departamento de Neurobiología Funcional y de Sistemas,
Instituto Cajal, CSIC, Doctor Arce, 37, 28002, Madrid, Spain
Postdoctoral fellow, 10/2004-06/2010
Dr. Giorgio Carmignoto's laboratory, Istituto di Neuroscienze, CNR
Dipartimento di Scienze Biomediche Sperimentali, Università degli Studi di Padova
Postdoctoral fellow, 12/2002-09/2004
Dr. Manuel López-Cabrera's laboratory, Unidad de Biología Molecular
Hospital Universitario de la Princesa, Diego de León, 62, 28006, Madrid, Spain
Short stay, 13/05/1999-04/08/1999
Dr. Michael M. C. Lai's laboratory, Howard Hughes Medical Institute
Department of Molecular Microbiology and Immunology
University of Southern California, 2011 Zonal Avenue, HMR 401, Los Angeles, California
PhD student, 09/1997-11/2002
Dr. Manuel López-Cabrera's laboratory, Unidad de Biología Molecular
Hospital Universitario de la Princesa, Diego de León, 62, 28006, Madrid, Spain
Study of hepatitis B and C viral transactivators, with cellular and molecular biology techniques: cell cultures, transfection, immunofluorescence, transcription-related assays (luciferase reporter assays, EMSA), Northern blot, RT-PCR and real-time PCR, cloning techniques, protein-protein interaction assays (co-immunoprecipitation, pull-down assays), western blot, in vitro mutagenesis, in vitro acetylation assays