

MARIA GRAZIA BOTTONE *Curriculum vitae et studiorum*

Previous positions

2019-today: Associated Professor of Department of Biology and Biotechnology "L. Spallanzani", University of Pavia

2002-2019: Researcher at the Department of Biology and Biotechnology, University of Pavia

1998: from January he is Technical Collaborator of the technical-scientific area (VII[^] qualification), at the Large Instruments Center (Laboratory of flow cytometry) of the University of Pavia, with a fixed-term employment contract for a period of two years and with 50% part-time working hours.

1998-2002: From November he is technical officer of the technical-scientific area (VIII[^] qualification), at the Laboratory of Cell Biology of the Department of Animal Biology of the University of Pavia, with a permanent contract

Prizes and awards

1999: prize for participation in the Multinational Congress of Electron Microscopy of Veszprem-Ungheria

1992: Young Histochemist Award 1992, Ente assegnante: IFSHC, International Federation Of Societies For Histochemistry And Cytochemistry

Visiting academic positions

2017-present: Proponent of the PhD in Genetics, Molecular and Cellular Biology

2011-2016: Member of the Academic Board of the PhD in Genetics, Molecular and Cellular Biology

2011-2013: Responsible for the execution of experiments on laboratory animals for the realization of the research project "In vivo" evaluation of the neurotoxic effects of platinum compounds"

2010-2011: Member of the Academic Board of the PhD in Cell Biology

2004-2012: Associated with the Institute of Molecular Genetics of the National Research Council (CNR) of Pavia

1994-1996: Post-PhD at the Histology and Embryology laboratory of the University of Pavia

1993-1994, contract as a technician at the Flow Cytometry Laboratory at the Centro Grandi Strumenti at the University of Pavia

1993: PhD in Citochimica e Citomorfologia at the University of Pavia discussing a thesis entitled: "Citochimica e Citomorfologia della cromatina: definizione di compartimenti funzionali attraverso l'impiego della DNasi I". (tutor Prof. Gabriella Manfredi Romanini).

1993-1994: Technician at the Flow Cytometry Laboratory at the Centro Grandi Strumenti at the University of Pavia

1989: Post-graduate internship at the Centro di Studio per l'Istochemica del CNR (section of Histochemistry) of Pavia

1988: Graduated in Biological Sciences at the University of Pavia

Teaching activities and PhD supervision

2005- 2010: Laboratorio di Tecniche Morfologiche e Cellulari (L.M. Scienze della Natura) CFU 4

2007- 2008: Patologia Clinica e Fisiopatologia- mod. 2 (L.M. Biologia Sperimentale Applicata) CFU 1

2009: Neuroanatomia Umana (L.M. Neurobiologia) CFU 5

2008: Metodi in Neuroscienze I- mod. 4 (L.M. Neurobiologia) CFU 1

2010- 2015: Neurogenesi e Neuromorfologia Comparata- mod. 2 (L.M. Neurobiologia) CFU 3

2010- 2014: Neuroanatomia Umana (L.M. Neurobiologia) CFU 6

2015- 2016: Neuroanatomia Umana (L.M. Neurobiologia) CFU 6
2013: Citologia ed Istologia (Laurea Scienze Biologiche) CFU 9
2014: Didattica e Laboratorio della Biologia TFA (Tirocinio Formativo Attivo) CFU 1
2015: Didattica della Biologia PAS (Percorsi Abilitanti Speciali) CFU 1
2015- 2021: Neurocitologia e Neuroistologia (L.M. Neurobiologia) CFU 6
2015- present: Citologia ed Istologia (Laurea Scienze Biologiche) CFU 9
2018-Didattica delle Scienze FIT (Formazione Iniziale Tirocinio) CFU 3
2021-Neurogenesi e Neuromorfologia Comparata (L.M. Neurobiologia) CFU 3
2022- Cellular Neurobiology and Advanced Methods in Neuroscience (L.M. Neurobiology) CFU3

1998- present: supervisor and co-examiner of Biological Sciences, Master's Degree in Neurobiology, Master's Degree in Experimental and Applied Biology and Master's Degree in Molecular Biology and Genetics

2007- 2022: Scientific supervisor of the 13 thesis of the PhD

2021-present supervisor of three PhD students working on three different research projects who will defend their thesis in 2024

2012: Organizer of the course "Cellular bases of development and differentiation" for the Ph.D. in Genetic and Biomolecular Sciences: as a teacher held the seminar "Differentiation of neural cells in culture and cell organelles"

2016: Organizer of the course "Cellular networks in normal, pathological and experimental conditions" for the PhD program in Genetic and Biomolecular Sciences

2022: Organizer with other colleagues of PhD in Genetics, Molecular and Cellular Biology, in the framework of the course in Frontiers in Cellular Biology on Ph.D. RETREAT in "New emerging technologies in cell biology" in Park Hotel Olimpia, Brallo di Pregola (PV), May 23th-26th, 2022

Other work experience (e.g. consultancy if any)

1988-1989 internship for the preparation of the state exam for Biologists at the CNR for Histochemistry, Pavia. She has dealt with determinations of DNA content in flow cytometry in different cell types in normal and pathological conditions

2013-2017: he held the course of "Biologia Cellulare e Tecniche per lo studio delle cellule animali in cultura" (24 hours of theoretical lessons) at the "Fondazione Istituto Tecnico Superiore per le nuove tecnologie della vita in Bergamo.

2017: National Scientific Qualification as Full Professor in the scientific disciplinary sector BIO/06- Comparative Anatomy and Cytology (competition sector 05/B2- Comparative Anatomy and Cytology)

1997-1998: the Faculty of Mathematical, Physical and Natural Sciences assigned her seminars which she carried out as support for the teaching of Cytology and Histology for Biological Sciences

- Administrative role and position responsibility

1998-2000: Scientific organisations/Coordination of academic activities

1998-2000: Member of the research unit of the University of Pavia in the national project: "Exogenous factors and nuclear targets for regulating cell survival", scientific coordinator Nadir Maraldi).

2002-2004: Member of the PRIN 2002 research unit "Apoptogenic photosensitizers, potentially usable in photodynamic therapy" (National Coordinator C.Pellicciari)

2006-2008: Member of the research unit PRIN 2005 "Photodynamic properties and cytotoxicity of hypocrellin B acetate, a new fluorogenic substrate with potential use in therapy photodynamics" (National Coordinator C. Pellicciari)

2007- present: Research collaboration with Prof. Francesco Paolo Fanizzi of the Department of Biological and Environmental Sciences and Technologies, University of Salento, Lecce

2011-2013: Scientific responsibility of the research unit Prin 2009 "In vitro and in vivo evaluation of the neurotoxicity of new platinum compounds" (National Coordinator FP. Fanizzi, University of Salento)

2011-2013: Component of the research project "In vivo and in vitro effects of new cisplatin analogues: evaluation of neurotoxicity, nephrotoxicity and hepatotoxicity", Banca Foundation

Mount Lombardy

2016-present Research collaboration with Prof. Osella Domenico and Prof. Ravera Mauro of the Department of Science and Innovation

Technological University of Eastern Piedmont "Amedeo Avogadro", Alessandria

2016: Research collaboration with Dr. Davide De Pietri Tonelli, PI and head of the "neurobiology of microRNAs" laboratory of the Italian Institute of Technology (IIT) on the project: "Characterization of the role of microRNAs on programmed cell death in cellular models murine and human

2017: Research collaboration with Prof. Bruno Cozzi, Dept. of Comparative Biomedicine and Food Science of the University of Padua

2017: Scientific responsibility of the crowdfunding project on anorexia nervosa, entitled "happiness has no weight" in collaboration with Fondazione Mondino, Pavia.

2022 Component of the PNRR NODES project, Ecosystems of innovation, SPOKE 7 Secondary agro-industry

2022 Component of the Immuno-Hub project (trajectory 4 Ministry of Health tender)

- Scientific organisations/Coordination of academic activities

1997-2000: He collaborated in the preparation and execution of courses in techniques Microscopic, at the Department of Animal Biology of the University of Pavia, within the Leonardo da Vinci project of the European Community.

2001: Actively participated in the organization and development of the Microscopy Course Optics and Microphotography for the University Master's Degree in Microscopic Analysis Techniques in Biology.

2016: Organizer of a series of seminars within the Master's degree in Neurobiology "Seminars in Neurobiology 2016"

2017: Organizer of a cycle of seminars within the Master's degree in Neurobiology "Seminars in Neurobiology 2017"

2017: Organizer of the Neurobiology Symposium, at the Golgi Museum Hall, University of Pavia

2021: Coordinated and supervised the conduct of a practical session "Analysis in flow cytometry of cell proliferation" within the course of Cytometric Methods and Technologies for the Master in Microscopic analysis techniques in biology

2022: Organizer of the Congress "Next Generation Neurobiology Training: a New Era Begins at University of Pavia (22-23 September)

Editorial activity

2003- present: Reviewer for international scientific journals including European Journal of Cancer, Cell Proliferation, Biochemistry Research International, Journal of Histochemistry & Cytochemistry, International Journal of Developmental Neuroscience, Life Sciences, Brain Research, biomedicines, International Journal of Molecular Sciences, Cellular and Molecular Neurobiology, Neurotoxicity Research.

2012: Commissioner for the final exams of the PhD in Neurochemistry and Neurobiology, University of Genoa

2012- 2013: Cineca Referee for FIRB project

2013- 2016: Referee projects of the National Science Center, Poland

2014: referee for SIR funding

2017-present: Associate Editor of the Journal of Embryology & Stem Cell Research (JES-MedWin Publishers)

2018-present. Guest Topic Editor for Frontiers in Neuroscience

2019-2022 Guest Associate Editor for Neuropharmacology, for special issue "Brain Cancers: New Perspectives and Therapies" (<https://www.frontiersin.org/research-topics/13083/brain-cancers-new-perspectives-and-therapies>)

2020-present Topic Editor for International Journal of Molecular Sciences (IJMS)

2022-present Editor for the special issue "Aging: Oxidative Stress and Inflammation New Target for Promote Healthy Longevity" in International Journal of Molecular Sciences (IJMS)