

PERSONAL INFORMATION

Maria Violetta Brundo



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<https://scholar.google.com/citations?user=YdhbjQcAAAAJ&hl=it&oi=a>

o ORCID ID orcid.org/0000-0001-5146-3564

Date of birth 11/05/1973 | **Nationality** Italian

Current Position Full professor, University of Catania

RESEARCH INTERESTS

Summary

Experience in applied research and industrial development contexts, focused on cell biology and analysis of exosomes as delivery systems. Consolidated skills in in vivo and in vitro toxicity tests for the evaluation of safety and efficacy of bioactive compounds. High competence with optical and electronical microscopy techniques. Coordinator of several national and international projects. Since 2014 Scientific Director of the Laboratories of Electronic Microscopy, Developmental Biology, Reproductive Biotechnology, Cytology and Embryology. 2017-2022 Director of the Master in "Biology and Biotechnology of Reproduction" at the University of Catania. Since 2022 Director of the Master in "Clinical Embryology and Seminological Andrology" at the University of Catania. Since 2022 President of the Master's Degree in "Experimental and Applied Biology" at the University of Catania. Since 2023 Delegate of the Rector for Orientation, University of Catania.

Bibliometric Indicators

SCOPUS: h-index 33, citations 2758, documents 96

GOOGLE SCHOLAR: h-index 38, citations 3460, i10-index 81

WORK EXPERIENCE

From 2025/03/01 to today
biology

Full professor in Comparative anatomy, cell biology and developmental
(SSD BIOS/04-A)

University of Catania

Research -Teaching -Third mission

From 2020 to 2025/
developmental

Associate professor in Comparative anatomy, cell biology and
biology (SSD BIOS/04-A)
University of Catania

Research -Teaching -Third mission

From 2007 to 2020
biology

Researcher in Comparative anatomy, cell biology and developmental
(SSD BIOS/04-A)

University of Catania

Research - Teaching - Third mission

From 2004 to 2007

Research Contract

Department "G. F. Ingrassia", University of Catania

Coordinator of Electron Microscopy laboratory. Analysis on different environmental matrices.

From 2001 to 2003

Research Contract

"Research Institute Giorgio Sisini", University of Milan

Cytological, histological and histopathological investigations on animal tissues in clinical trials preparatory to the marketing of anticancer, anti-inflammatory, antibacterial drugs that led to the registration of several national and international patents

2002

Research Contract

Department of Animal Biology "Marcello La Greca", University of

Catania Project PRIN 2000 "Structural and molecular studies on

1999 insects reproduction"
Research Contract
 Fidia Oftal, srl, Catania, Italy
 Study of cytological and histological alterations of the mouse cornea, after pharmacological treatment.

EDUCATION AND TRAINING

2008 **Graduate Studies: Microbiology and Virology**
 University of Catania
 2002 **PhD in Evolutionary Biology**
 University of Catania
 1998 **Degree in Biological Sciences**
 University of Catania

PERSONAL SKILLS

Mother
 tongue(s)

Italian	Other language(s)		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	C1

INSTITUTIONAL RESPONSIBILITIES

2023-2025 Delegate of the Rector for Orientation, University of Catania.
 2022-today President of the Master's Degree in Experimental and Applied Biology, University of Catania
 2022-today Director of Master in Clinical Embryology and Seminological Andrology, University of Catania
 2022-today Deputy President of Degree Course in Biological Sciences, University of Catania
 2020-today Delegate of Director for Safety and Health, Department of Biological, Geological and Environmental Sciences
 2019-today Member of Quality Group, Degree in Biological Sciences, University of Catania
 2019-today Member of Quality Group, Master Degree in Sanitary Biology and Cellular-Molecular, University of Catania
 2017-2022 Director of Master in Biology and Biotechnology Reproduction, University of Catania
 2017-2019 Member of University Discipline Board, D.R. n. 1440, 3 May 2017
 2016-2019 Member of Commission for student applications, Master Degree in Sanitary Biology and Cellular-Molecular, University of Catania
 2014-today Scientific Coordinator of the Laboratories: Electron Microscopy, Developmental Biology, Biotechnology Reproduction, Cytology and Embryology
 2014-2019 Delegate for Communication of the Department of Biological Geological and Environmental Sciences, University of Catania
 2014-2019 Quality Manager for the Degree in Biological Sciences, University of Catania
 2012-today President of Internships Commission in Degree Course in Biological Sciences, University of Catania
 2012-today Delegate for student orientation, Degree Course in Biological Sciences, University of Catania
 2013-2017 Member of Commission for internships, in Master Degree in Sanitary Biology, University of Catania
 2008-2010 Member of Junta of Department of Animal Biology "M. La Greca", University of Catania

MAIN RESEARCH EXPERIENCE

2024-today PNRR FAIR– Future Artificial Intelligence Research of the sub-project (WPI0.1 -Task 10.1.4: Brain-inspired lifelong learning models WPI0.6 - Task: 10.6.6: Bio-inspired algorithms that employ neural structures for the locomotion and perception of robots).

	Component. Financing UNICT € 5,703,895.26 Financing National Project € 122,043,643.00
2023-today	Research Project PRIN 2022 PNRR Mission 4 "Education and Research" - Component C2 Investment 1.1, entitled "Evaluation of the anti-inflammatory and antioxidant activity of collagen hydrolysates obtained from anchovy waste (<i>Engraulis encrasicolus</i>) on a murine model of rheumatoid arthritis". Principal Investigator of Catania University Unit. Financing € 224,947.00
2020-today	Project "In vivo and in vitro assessment of exposure to electromagnetic fields in the millimeter band of 5G" (Voltmeter), funded under the University Research Incentive Plan 2020/2022 (Pia.ce.ri.). Principal Investigator. Financing € 120,000.00
2019-2022	Project "Enhancement of water resources for the optimization of aquaculture in lake environment: realization of an intensive self-purifying model for fat in company reservoirs (sAMPEI)". PO-EMFF 2014/2020, Measure 2.56. Coordinator Unit of Department of Biological, Geological and Environmental Sciences. Financing € 1,056,000.00
2019-2022	FISH PATH NET research project "Strengthening Sicilian ichthyopathology centers" funded under the SICILY OP EMFF 2014/2020, Measure 2.56 "Measures relating to animal health and welfare" - art. 56 of Reg. (EU) no. 508/2014. Scientific manager Activity A.4.1 "Technopathies and congenital pathologies". Financing € 1,058,677.42
2019-today	Project "Use of nanotechnologies applicable to aquaculture, in order to improve sustainability in the fish farming industry", funded under the PON R&I 2014-2020, Action I.2 "Researchers' mobility", Axis I, Line 1 (Mobility of researchers). Financing Euro 150.000
2015-2017	Project PON "Nanotechnologies and nanomaterials for cultural heritage" (TECLA), code PON03PE_00214_1. Component. Total project cost Euro 5,182,100.00 / European contribution Euro 4.229.485
2015-2016	Project FIR "Biological indicators and biomarkers for the assessment of soil quality in the natural and cultivated areas of the R.N.O. Oasi Faunistica di Vendicari (eastern Sicily)". Principal Investigator. Financing Euro 25.147
2014-2016	Project "Winning Applications of nanoTEchnology for Resolutive hydropurification" (WATER), Grant Agreement no. 316082, funded to Seventh framework program REGPOT-2012-2013-1. Scientific Coordinator Unit of Department of Biological, Geological and Environmental Sciences. Overall budget: Euro 4 582 998 / EU contribution Euro 3 934 530
2010-2012	Project PRIN 2002 "Structural and molecular studies on insect reproduction". Component. Financing Euro 110.019
2009-2011	Project PRA 2008: "Ultrastructural and molecular aspects of the reproductive biology of some Arthropods". Principal investigator. Financing Euro 11.000
2007-2008	Project PRIN 2002 "Structural and molecular studies on insect reproduction". Component. Financing Euro 185.000
2004-2006	Project PRIN 2002 "Structural and molecular studies on insect reproduction". Component. Financing Euro 170.000
2002-2004	Project PRIN 2002 "Structural and molecular studies on insect reproduction". Component. Financing 154.000
2000-2002	Project PRIN 2000 "Structural and molecular studies on insect reproduction". Component. Financing Euro 154.937

TEACHING ACTIVITY

2021-today	Biologia della Riproduzione e del Differenziamento Department of Biological, Geological and Environmental Sciences, Master Degree in Experimental and Applied Biology, University of Catania
2021-2023	Metodologie di Embriologia Sperimentale Department of Biological, Geological and Environmental Sciences, Master Degree in Experimental and Applied Biology, University of Catania
2019-today	Citologia e Istologia Department of Biological, Geological and Environmental Sciences, Degree in Biological Sciences, University of Catania
2016-2021	Biologia della Riproduzione e del Differenziamento Department of Biological, Geological and Environmental Sciences, Master Degree in Sanitary Biology and Cellular-Molecular, University of Catania
2007-today	Biologia dello Sviluppo Department of Biological, Geological and Environmental Sciences, Degree in Biological

	Sciences, University of Catania
2014-2016	Biologia della Riproduzione Department of Biological, Geological and Environmental Sciences, Master Degree in Sanitary Biology, University of Catania
2009-2015	Biologia cellulare Department of Biological, Geological and Environmental Sciences, Master Degree in Sanitary Biology, University of Catania
2007-today	Supervisor of over 350 undergraduate and graduate thesis

OTHER RELEVANT EXPERIENCES

2023-today	National Coordinator for the Scientific Degree Plan of Biology and Biotechnology. The project was funded by MUR decree of 04.08.2023. Financing 1,875,866.00
2022-2026	Coordinator for the University of Catania of the Active Orientation project in the school-university transition funded under the PNRR M4C1 by the European Union – NextGenerationEU. Financing 10 million euros over 4 years.
2021-today	Founder of Interdepartmental Center for "Research in Nutraceuticals and Products Healthy", University of Catania (D.R. n. 4782, 23/12/2021)
2019-today	Founder of Interdepartmental Research "Center in Molecular, Preclinical and Translational Imaging – IMPRonTE", University of Catania (D.R. n. 1820, 12.06.2019) 019-today Membership of the Interuniversity Consortium "National Institute of Biostructures and Biosystems" (INBB), Rome.
2018-today	Founder of the Interdepartmental Research Center for the "Implementation of physical, chemical and biological monitoring processes in bioremediation and aquaculture systems", University of Catania (D.R. n. 834, 6 March 2018)
2018-today	Founder of the Interdepartmental Research Center "L'ora del Mare" of the University of Catania (D.R. n. 842, 6 March 2018)
2017-today	Membership of the GEI-Italian Society of Developmental and Cell Biology (GEI-SIBSC)
2017-today	Founder of the Multidisciplinary Research Center for Diagnosis and Therapy of Rare Diseases of the University of Catania (D.R. n. 1048, 03.31.2017) Member of PhD in "Earth and Environmental Sciences", University of Catania
2016-today	Membership of the "National Technological Cluster on the Economy of the Sea", Decree no. 1610 of 3 August 2016, for "Notice for the development of strengthening of 4 new national technological clusters", called "CTN Blue Italian Growth - CTN BIG". Decree of 07/26/2017.
2013-2016	Member of PhD in "Geological, Biological and Environmental Sciences", University of Catania
2013-today	Supervisor of seven PhD thesis
2010-2013	Member of PhD in "Evolutionary and Environmental Biology", University of Catania
2001-today	Membership of the Italian Zoological Union (UZI)

FURTHER INFORMATION

National and international acknowledgments	2017. Winner of the "CHANCE" Call, Action Line 1 of the 2016/2018 Research Plan, Actions to support University of Catania. Awarded Euro 10,000 2017. Funding of basic research activities, MIUR. Financing Euro 3.000,00
Research monographs and chapters in collective volumes	2018. Zebrafish or <i>Danio rerio</i> : A New Model in Nanotoxicology Study. Chapter in Recent Advances in Zebrafish Researches, Edited by Yusuf Bozkurt, Intechopen. DOI: 10.5772/intechopen.74834
Evaluation of research results	2022-today. Associate Editor of Marine Pollution in Frontiers Marine Sciences 2022-today. Editorial Board Member of Journal Marine Sciences and Engineering, MDPI 2021-today. Guest Editor Special Issue "Bioaccumulation and Biomarkers Responses in Aquatic Organisms" in Journal of Marine Sciences and Engineering

2020. Reviewer for FONDECYT Fondo Nacional de Desarrollo Científico y Tecnológico, Santiago de Chile.

2020-today. Guest Editor Special Issue "Nano-TiO₂: Characterization and Application" in Nanomaterials

2017-today. Review Editor of Frontiers in Physiology, section Aquatic

Physiology 2017-today. Editorial board of BA & BE (Bioequivalence and Bioavailability) 2016-today. Reviewer for Basic Research, MIUR (REPRISÉ)

2016-today. Editorial board of Sexual Health

2016-today. Editorial board of Stem Cells Research & Therapy

2015-today. Review Editor of Frontiers in Pharmacology, section Experimental Pharmacology and Drug Discovery

2013-today. Reviewer for: Scientific Reports, PLOS One, Ecotoxicology and Environmental Safety, Chemosphere, Molecules, Environmental Sciences and Pollution Research, The International Journal of Molecular Sciences, Science of the Total Environment, Environmental Research, Journal of Biology and Nature, International Journal of Recent Scientific Research, Journal of Pharmaceutical Research, Nanomaterials, Frontiers in Pharmacology, Frontiers in Physiology, Frontiers in Marine Sciences, Microscopy Research and Technique, ACS Applied Materials & Interfaces, ACS Applied Biomaterials, Chemistry of Materials ACS, Materials, Toxics, Biology, Natural Product Research, Journal of Marine Science and Engineering

Personal data

According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV

Date: October 01, 2026

