



Ernesto Fedele

Full professor

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Education and training

1989

MSc in Pharmacy

Dopaminergic neurotransmission in rat striatal slices following kainic acid lesion - Summa cum laude

University of Genoa - Genoa - IT

1988

MSc in Pharmaceutical Chemistry and Technology

Functional interactions between serotonergic autoreceptors and reuptake mechanisms located onto rat cerebrocortical nerve terminals - Summa cum laude

University of Genoa - Genoa - IT

Academic experience

2024

DIFAR member in the School of Medical and Pharmaceutical Sciences Council

Department of Pharmacy-University of Genoa - Genoa - IT

2021 - ONGOING

Member of the Department Executive Committee

Department of Pharmacy-University of Genoa - Genoa - IT

Director of the PhD Programme in Experimental Medicine

Department of Experimental Medicine-University of Genoa - Genoa - IT

Member of the University Committee for Research

University of Genoa - Genoa - IT

Scientific Committee Member of the Interdepartmental Center of Excellence for Biomedical Research

Department of Pharmacy-University of Genoa - Genoa - IT

Member of the Interdepartmental Center for Longevity and Active Aging

Department of Pharmacy-University of Genoa - Genoa - IT

2020 - ONGOING

Full Professor of Pharmacology

Department of Pharmacy - University of Genoa - Genoa - IT

2019 - ONGOING

Department Research Delegate

Department of Pharmacy - University of Genoa - Genoa - IT

Member of the Department Research Committee

Department of Pharmacy - University of Genoa - Genoa - IT

2017 - 2020

Member of the Academic Committee for Research and Technology Transfer

University of Genoa - Genoa - IT

2015 - 2021

Member of the Academic Senate

University of Genoa - Genoa - IT

2015 - 2020

Coordinator of the Pharmacology and Toxicology Unit

Department of Pharmacy - University of Genoa - Genoa - IT

2012 - 2020

Associate Professor of Pharmacology

Department of Pharmacy - University of Genoa - Genoa - IT

2001 - 2012

Associate Professor of Pharmacology

Department of Experimental Medicine - University of Genoa - Genoa - IT

2001 - 2020

Member of the Center of Excellence for Biomedical Research - Pharmacology and Toxicology Unit

University of Genoa - Genoa - IT

1995 - 2001

Assistant Professor

Department of Experimental Medicine - University of Genoa - Genoa - IT

1992 - 1994

University Technician

Faculty of Pharmacy - University of Genoa - Genoa - IT

1990 - 1992

Visiting Scientist

Merck Sharp Dohme Neuroscience Center - Harlow Town - GB

Language skills

Italian

Mother tongue

English

Proficient user

Teaching activity

2022-ongoing: Course of Pharmacology and Pharmacotherapy, Master's Degree in Pharmacy, University of Genoa.

2012-ongoing: Module of Pharmacotherapeutic aspects for the course of Therapies of CNS Disorders, Graduate School of Hospital Pharmacy, University of Genoa.

2002-ongoing: Module of Toxicology for the course of Pharmacology and Toxicology, Master's Degree in Medical-Pharmaceutical Biotechnology, University of Genoa.

2021-2022: Course of General Pharmacology, Master's Degree in Pharmacy, University of Genoa.

2012-2021: Module of Chemotherapy and New Antineoplastic Therapies for the course of Oncologic Therapies and module of Pharmacotherapeutic aspects for the course of Pain Therapy, Graduate School of Hospital Pharmacy, University of Genoa.

2011-2021: Course of General Pharmacology and Toxicology, Master's Degree in Pharmacy, University of Genoa.

2001-2010: Course of Toxicology, Specialist Degree in Pharmacy, University of Genoa.

Postgraduate research and teaching activity

Supervision of PhD students and post-doctoral fellows

2004-2020: Supervisor for 8 PhD students and 2 post-docs.

PhD committee membership

2021 - ongoing: Director of the PhD Programme in Experimental Medicine

2017 - 2024: Coordinator of the International Curriculum of Pharmacology and Toxicology - PhD Program in Experimental Medicine - Joint Program in Pharmacological Neurosciences, University of Genoa and University of Maastricht

2016 - 2024: Coordinator of the Curriculum of Pharmacology and Toxicology – PhD Program in Experimental Medicine - University of Genoa

2013 - ongoing: Member of the Teaching Board of the PhD Program in Experimental Medicine - University of Genoa

2001 - 2012: Member of the Teaching Board of the PhD School of Experimental, Molecular and Clinical Biology and Medicine - University of Genoa

Research interests

Thirty years of scientific experience in the study of several aspects of central neurotransmission, including:

- Mechanisms of neurotransmitter release and its modulation by presynaptic receptors
- In vivo physiological control and pharmacological modulation of cGMP and cAMP production in different brain regions
- Neurochemical and pharmacokinetic studies in Parkinson's disease patients
- Development of new selective PDE4D inhibitors for cognitive deficits
- Control of A β production by cyclic nucleotides and its physiological role in memory formation

Bibliometric indices (updated July 2024)

Author/co-author of 137 publications (peer reviewed articles, proceedings, review, letters, editorials, book chapters) and numerous congress presentations.

Total impact factor: 490.71 (JCR 2023)

Average impact factor: 4.764

Total citations: 4779 (Google Scholar); 3663 (WOS e SCOPUS)

H index: 39 (Google Scholar); 35 (WOS e SCOPUS)

Top Italian Scientist (http://www.topitalianscientists.org/top_italian_scientists.aspx)

List of publications

<https://www.scopus.com/authid/detail.uri?authorId=7003743702>

<https://iris.unige.it/simple-search?query=ernesto+fedele#.Ws714y-PHGI>

<https://orcid.org/0000-0002-0386-0925>

Membership

Italian Society of Pharmacology (SIF); National Board of University Pharmacologists (CNFU); British Pharmacological Society (BPS); Italian Society for Neurosciences (SINS); Federation of European Neuroscience Societies (FENS).

Editorial activity

- Member of the Editorial Board of Scientific Reports, International Journal of Molecular Sciences, Biomolecular Research and Therapeutics, SciTz Neurology and

Neurosciences.

- Reviewer for Journal of Neurochemistry, Neuroscience, British Journal of Pharmacology, Neurochemistry International, Brain Research, Neurobiology of Disease, Nitric Oxide: Biology and Chemistry, Neuroscience Letters, European Journal of Neuroscience, European Neuropsychopharmacology, Stress, Experimental Neurology, Journal of Neuroscience Methods, NeuroMolecular Medicine, ACS Chemical Neuroscience, Expert Opinion on Therapeutic Patents, Cellular and Molecular Neurobiology, Neurobiology of Learning and Memory, Scientific Reports.
- Registered in the MIUR REPRISE (Register of Expert Peer-Reviewers for Italian Scientific Evaluation).
- Reviewer for Projects of Relevant National Interest (PRIN) and for the Research Quality Evaluation (VQR).
- Reviewer for the Alzheimer's Association Research Grant Programme.

Grants

2014 - 2016

Alterations of excitatory and inhibitory neurotransmission in a murine model of X fragile syndrome

University of Genoa - IT

Principal investigator

2013 - 2015

Role of cAMP and amyloid beta in memory formation and in the pathogenesis of Alzheimer's disease

CARIGE Foundation - IT

Participant

2011 - 2014

PDE4D selective inhibitors for the treatment of memory impairment

Alzheimer's Association - US

Participant

2011 - 2014

BAMMBO Sustainable production of Biologically Active Molecules of Marine Based Origin (7th Framework Programme)

European Union - IT

Participant

2011 - 2013

Cellular and molecular effects of stress and of antidepressant treatment on glutamate release in the central nervous system

PRIN MIUR - IT

Participant

Unit research leader

2009 - 2010

Functional role of RANTES on glutamatergic neurotransmission in human brain and in EAE mice

FISM - IT

Principal investigator

2008 - 2009

Functional role of RANTES on glutamatergic neurotransmission in human brain and in EAE mice

FISM - IT

Participant

2008 - 2009

In vivo microdialysis investigation of BI Pharms PDE inhibitor effects on extracellular cGMP levels in the rat prefrontal cortex

Boeingerher Ingelheim Pharma - DE

Principal investigator

2006 - 2008

In vitro and in vivo studies of aspartate and glutamate exocytotic release in the central nervous system and its modifications in pathophysiological models.

PRIN MIUR - IT

Principal investigator

2006 - 2008

Functional alterations of glutamatergic neurotransmission in the spinal cord of EAE mice

FISM - IT

Participant

2006 - 2007

Pathogenesis immunological and virological studies of HIV/AIDS

Italian Ministry of Health - IT

Participant

2004 - 2006

Exocytotic mechanisms supporting neurotransmitter release induced by presynaptic heterotransporters and heteroporter membrane expression.

PRIN MIUR - IT

Principal investigator

2002 - 2004

Trafficking of neuronal and glial membrane transporters for amino acid neurotransmitters

PRIN MIUR - IT

Participant

2000 - 2002

Effects of dopaminergic agonists on excitatory and inhibitory neurotransmission in the basal ganglia of Parkinson's disease patients an intracerebral microdialysis study

PRIN MIUR - IT

Principal investigator

1999 - 2001

In vitro and in vivo studies of the pre- and postsynaptic inhibitory mechanisms controlling glutamate-mediated excitation in spinal cord motor neurons: role of GABA and glycine

Telethon - IT

Participant

1999 - 2001

Monitoring neurotransmitter release and cell firing changes produced by electrical and pharmacological stimulation of human basal ganglia in Parkinsons disease

Telethon - IT

Participant

1998 - 2000

Release of excitatory amino acids and activation of the postsynaptic NO system in in-

vitro and in-vivo ischemic conditions

PRIN MIUR - IT

Participant

1998 - 1999

Monitoring of neurotransmitter release from human basal ganglia during stereotaxic surgery in Parkinsons disease

Telethon - IT

Participant