

NAME: BALLERINI, PATRIZIA

POSITION TITLE: Full Professor of Pharmacology

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE (if applicable)	Start Date MM/YYYY	Completion Date MM/YYYY	FIELD OF STUDY
"G. d'Annunzio" University of Chieti-Pescara, Italy	Master's degree in Medicine and Surgery	10/1980	10/1986	Medicine
"G. d'Annunzio" University of Chieti-Pescara, Italy	Specialization in Rheumatology	a.a.1987	a.a.1991	Rheumatology
"G. d'Annunzio" University of Chieti-Pescara, Italy	Second-level Master's degree in "Pharmaceutical Regulatory Sciences"	a.a.2007	a.a.2008	Pharmacology

A. Personal Statement

I'm a Full Professor of Pharmacology at the Department of Innovative Technologies in Medicine and Dentistry and "The Center for Advanced Studies and Technology -CAST," G. d'Annunzio University of Chieti-Pescara. I hold a Degree in Medicine, with a Specialization in Rheumatology, and a II level Master's Degree in Pharmaceutical Regulatory Sciences from the University of Chieti-Pescara. My research expertise covers the following fields: i) the role of natural and synthetic purines as well as their derivatives in modulating neuroprotective and/or neurodegenerative mechanisms in vitro and in vivo models; ii) the role of human mesenchymal stem cells as potential innovative therapeutic strategy in neurological diseases and as tools for drugs and/or xenobiotic toxicity; iii) identification of novel molecular targets, biomarkers and therapeutic approaches applicable in the control of tumorigenesis and metastasis. My research interests include the biological effects of pollutants such as ozone and particulate matter on different cell models. I'm the co-author of 113 papers in peer-reviewed journals, as well as several chapters in Pharmacology Books; I am co-inventor of "G-protein coupled receptor 22 transformed cell lines and uses therefor" (WO2015161369(A1)-patent). I'm a reviewer for several international peer-reviewed journals and associate editor of *Frontiers in Inflammation Pharmacology* and *Frontiers in Neuroscience/Neurodegeneration* and a component of the Editorial Board of the *International Journal of Molecular Sciences*. I'm a member of the Italian Society of Pharmacology, and I am involved in several national and international research projects as a Staff Scientist, PI, and co-PI. I'm an Expert evaluator for the Italian National Agency for the Evaluation of Universities and Research Institutes (ANVUR).

B. Positions, Scientific Appointments and Honors

Positions and Scientific Appointments

- **2021 – present** Full Professor of Pharmacology, "G. d'Annunzio" University of Chieti- Pescara, Italy
- **2020 – present** Member of the PhD Research Board in "Science and Technology for Sustainable Development", "G. d'Annunzio" University of Chieti- Pescara, Italy
- **2011– 2021** Associate Professor of Pharmacology, "G. d'Annunzio" University of Chieti-Pescara, Italy

- **2009:** Member of the PhD Research and Teaching Board in Biomedical, Cytomorphological and Motor Sciences
- **2005 –** Member of the PhD Research and Teaching Board in Biomedical and Cytomorphological Sciences
- **1992 – 2011** Research Assistant of Pharmacology, "G. d'Annunzio" University of Chieti-Pescara, Italy
- **1991 – 1992** CNR Research Fellow, "G. d'Annunzio" University of Chieti-Pescara, Italy
- **1989 – 1991** University Technician "G. d'Annunzio" University of Chieti-Pescara, Italy
- **1987 – Present** Member of Italian Society of Pharmacology

Institutional Activities

- **2021-present:** President of the Evaluation Board at the "G. d'Annunzio" University of Chieti-Pescara.
- **2025-present:** Member of the Evaluation Board of Ferrara University.
- **2025-present:** Director of Medical Services of the Clinical Research Center, CAST, University of Chieti-Pescara.
- **2022- present:** President of the Evaluation Board at the "Leonardo da Vinci" Telematic University.
- **2021-present:** QA leader and member of the QA Committee for the "G. d'Annunzio" University of Chieti-Pescara in the INGENIUM European University project co-financed by the EU.
- **2020-2023:** Expert in quality systems management for the TACEESM-Erasmus+KA2-2020 project, Cooperation for innovation and the exchange of good practices in Higher Education.
- **2019-present:** Member of Evaluation Expert Commissions for the initial and periodic accreditation of Universities and Study Programs operating by appointment of ANVUR Governing Board
- **2019-2021:** Member of the Quality Assurance Team at the "Leonardo da Vinci" Telematic University.
- **2014-2016:** Member of the "Teaching staff" in the Tempus Project "Strategic support on development of sustainable structures on QA, international relations and student support services at three newly established public universities in Kosovo" - SD@UHZ P.N. 543801-UKTEMPUS-JPGR.
- **2013-2015:** Member of the "Teaching staff" in the Tempus Project "Modernizing the 3rd cycle at the University of Prishtina and developing a PhD Program at the Faculty of Economics" MOD @ PhD Project No. 544188-TEMPUS-XK-TEMPUSJPCR.
- **2013-2021:** Member of the Quality Assurance Team the "G. d'Annunzio" University of Chieti-Pescara.

Management and Organizational Activities

- **2007-present:** Member of competition committees for various academic roles.
- **2020-present:** Coordinator of the First-Level Master's in "Critical and Emergency Care in Nursing," "G. d'Annunzio" University of Chieti-Pescara.
- **2020-present:** Coordinator of the First-Level Master's in "Management for Coordination Functions in Health Professions," "G. d'Annunzio" University of Chieti-Pescara, delivered online.
- **2019-present:** Project and coordination activities for the creation of the dynamic management dashboard of the "G. d'Annunzio" University of Chieti-Pescara called "Ud'A in Numbers."
- **2018-2020:** Coordinator of the First-Level Master's in "Nursing in Critical and Emergency Care."
- **2016-2019:** Member of the Board of Directors of the Company for the Right to University Studies of Chieti-Pescara.
- **2014:** Rector's Delegate to represent the "G. d'Annunzio" University of Chieti-Pescara in the Assembly of Members of the Interuniversity Consortium for Integrated Access Systems (CISIA).
- **2014:** University Head of the TOLC (CISIA Online Test) project.

Teaching Activities

- **1999-present:** Teaching assignments in Pharmacology within Bachelor's and Master's Degrees of the "Life Science and Health Area" at the University of "G. d'Annunzio" of Chieti-Pescara. Teaching assignments in Pharmacology for Specialization courses, PhD courses, and first and second level Master's programs in the "Life Science and Health Area" of the same University. Supervisor of numerous Bachelor's and Master's degree thesis.

C. Contributions to Science

My scientific production is documented by 122 publications in Peer-Reviewed Journals

Complete List of Published Work in:

[https://ricerca.unich.it/simple-](https://ricerca.unich.it/simple-search?query=Ballerini+Patrizia&location=&rpp=10&sort_by=dc.title_sort&order=asc)

[search?query=Ballerini+Patrizia&location=&rpp=10&sort_by=dc.title_sort&order=asc](https://ricerca.unich.it/simple-search?query=Ballerini+Patrizia&location=&rpp=10&sort_by=dc.title_sort&order=asc)

Bibliometric indicators (from Scopus):

- Total citations: 3531

- H-index: 36

Main Scientific Interests:

- Characterization of the physiological/pathophysiological activity and pharmacological modulation of adenine and guanine-based purines in terms of: i) receptor-mediated modulation of cell viability and proliferation, protein expression and intracellular molecular pathways, with particular reference to cells of the Central Nervous System;
- In vitro and in vivo evaluation of the neuroprotective effect of guanosine and its analogues and its distribution (including in the Central Nervous System) in response to parenteral administration of the nucleoside in rats
- Characterization of new scaffolds and molecules as potential innovative approaches for neurodegenerative diseases, such as Parkinson's Disease and Alzheimer's Disease, with potential pharmacological implications;
- Characterization and potential therapeutic effects of human mesenchymal stem cells in models of neuroinflammation both in vitro and in vivo with possible developments in the field of regenerative and rehabilitative medicine;
- Development of male and female germ cell models in vitro, starting from human amniotic fluid stem cells, for the assessment of mutagenic and epigenetic effects of drugs;
- In vitro and in vivo (in murine models) and clinical studies aiming to elucidate the role of platelets and microvesicles in inflammation, fibrosis and tumorigenesis and metastasis formation; iv) development of cellular and animal models to assess the potential pathophysiological effects of pollutants, such as ozone and atmospheric particulate matter

Participation in national and international research projects as PI and Co-PI:

- **2024-2025:** Co-PI of the project funded by "THE - TUSCANY HEALTH ECOSYSTEM", Piano Nazionale per la Ripresa e Resilienza (PNRR), emanato con D.D. n. 2004/2023 – Prot. 315887 del 22 dicembre 2023. SPOKE 3. Codice progetto ECS00000017. CUP B83C22003920001. "G.d'Annunzio" University of Chieti-Pescara. *Project title:* "Microvescicole Batteriche: Implicazioni nella Fibrillazione Atriale" (MICROFIBRA)
- **2016:** PI of the "Care4Rare networking nurses in LSD diseases" project funded by Sanofi Genzyme;
- **2015:** Co-PI (Stuppia L., Ballerini P., Antonucci I) of the project "Human Amniotic Fluid Stem Cells as a Promising 'In Vitro' Experimental Model to Study Polycystic Ovary Syndrome" funded by Merk-Serono.

Participation in national and international research projects as Staff Scientist:

- **2017-2020:** *Staff Scientist* for the project funded by AIRC, Associazione Italiana per la Ricerca Sul Cancro [Grant IG-20365, PI: Paola Patrignani, “G.d’Annunzio” University of Chieti-Pescara]. **Project title:** “Extracellular vesicles in colorectal cancer: diagnostic and therapeutic implications.”
- **2024-2025:** *Staff Scientist* for the project funded by “THE - TUSCANY HEALTH ECOSYSTEM” - SPOKE 7 “INNOVATING TRANSLATIONAL MEDICINE”, PNRR-MUR, BANDO A CASCATA SU “PRECISION MEDICINE & PERSONALIZED HEALTHCARE”- NEXTGENERATIONEU (CODICE PROGETTO ECS00000017 - CUP B63C22000680007), PI: Giovanni Di Bonaventura, “G.d’Annunzio” University of Chieti-Pescara. **Project title:** Optimized in vivo and ex-vivo Models as Platforms for the Preclinical Evaluation of Antimicrobial lead Compounds) (OMPEAC)
- **2024-2025:** *Staff Scientist* for the project VITALITY, funded by the European Union—Next Generation EU—under the National Recovery and Resilience Plan (NRRP), Mission 4 Component 2 -M4C2, Investment 1.5—Call for Tender No. 3277 of 30 December 2021, Italian Ministry of University, Award No. ECS00000041, Project Title: “Innovation, digitalization, and sustainability for the diffused economy in Central Italy”, Concession Degree No. 1057 of 23 June 2022, adopted by the Italian Ministry of University. CUP: D73C22000840006
- **2020-2023:** *Staff Scientist* for the project funded by ITINERE (CUP B79J23000720005)

Research periods abroad

1997: Visiting scientist at the Department of Biomedical Sciences and Medicine at McMaster University, Health Science Centre, Ontario, Canada, as part of a scientific collaboration with the group led by Prof. M.P. Rathbone.

1996: “Advanced Course on Video Enhanced Microscopy and Fluorescence Techniques in Cell Biology” at the German Cancer Research Center, Heidelberg, Germany, October 1996, coordinated by Prof. M. Trendelenburg.

Editorial Activity

Associate Editor in *Frontiers in Inflammation Pharmacology*,

Associate Editor in *Frontiers in Neuroscience, Neurodegeneration*,

Editor in *International Journal of Medical Science*. Reviewer for numerous international peer-reviewed journals indexed in Scopus/WOS.

Patents

International patent “*G-protein coupled receptor 22 transformed cell lines and uses therefor*” (WO2015161369(A1) - Co-inventors: Rathbone, Michel P. Jiang, Shucui, Caciagli F., Ciccarelli R., Ballerini P., Di Iorio P., Giuliani P., D’Alimonte I.

Chieti, July 2, 2026

