

Curriculum Vitae **AMBRA GROLLA**



PERSONAL INFORMATION

Name: Ambra Grolla
Date of birth: 15/07/1985
Place of birth: Cuggiono (MI)
Spoken Languages: English (C2), Spanish (A1)

WORKING INFORMATION

University: Università del Piemonte Orientale (UPO), Department of Pharmaceutical Sciences (DSF)
Address: via Bovio 6, Novara 28100 ITALY

EDUCATION

2004-2007: 3-years Degree in Biotechnologies at UPO, 104/110.
2007-2009: Master Degree in Medical and Pharmaceutical Biotechnologies at UPO, 106/110.
2009-2013: Ph.D. in Food and Drug Biotechnologies at UPO. Meanwhile 1-year experience at University of Manchester, Faculty of Life Sciences, Manchester (UK).

RESEARCH and PROFESSIONAL EXPERIENCE

2006-2009: Thesis in Pharmacology Lab of Prof. Armando Genazzani, DSF, Novara. Field: NAD metabolism
2009-2013: PhD in Pharmacology Lab of Prof. Armando Genazzani, DSF, Novara. Field: Neuropharmacology, astrocytes in neurodegeneration
2011-2012: 1-year experience in the Lab of Alexeij Verkhratsky at Univ. of Manchester, Faculty of Life Sciences, Manchester (UK).
2013-2021: Post-Doc at Pharmacology Lab of Armando Genazzani, DSF Novara
Field: Intracellular and extracellular NAMPT in tumour progression
2021-2024: Researcher (Type B) at University of Eastern Piedmont, Department of Pharmaceutical Sciences (DSF), Novara Italy. Field: Pharmacology of tumours: angiogenesis and metastasis in mammary carcinoma
April 2024- present: Associated Professor at Università del Piemonte Orientale (UPO), Department of Pharmaceutical Sciences (DSF), Novara Italy.

Teaching Activities:

- 2016 - 2018: Cultore della materia in the BIO/14-Pharmacology sector, as part of the integrated course of General Pharmacology, Single-cycle Master's Degree Course in Medicine and Surgery, UPO
- 2016 - present: Cultore della materia in Pharmacology, Single Cycle Master's Degree Course in Pharmacy, UPO
- 2018: National Scientific Qualification (ASN) for Associate Professor band II in Pharmacology, Clinical Pharmacology and Pharmacognosy 05/G1 (art.16 paragraph 1, Law 240/10).
- 2018 - 2021: 3-year contract as Adjunct Professor of Pharmacology, Master's Degree Course in Biology, University of Eastern Piedmont (UPO), Alessandria branch. BIO/14 (6 CFU 48h/year).
- 2020 - 2021: 1-year contract as Adjunct Professor of Pharmacology, Single Cycle Master's Degree Course in Medicine and Surgery, UPO Alessandria headquarters. BIO/14 (3 CFU 37.5h).
- March 2023 - June 2023: course in Biotechnological Drugs, Pharmacogenetics and toxicology, Degree Course in Biotechnology (Chemical-Pharmaceutical Biotechnology), Novara location. BIO/14 (9 CFU, 72h)
- January 2024: course "Hospital-territory continuity: Pharmacology", Master's Degree in Nursing and Midwifery Sciences (1 CFU, 12h).
- March 2024 - present: course in Biotechnological Drugs, Pharmacogenetics and toxicology, Degree Course in Biotechnology (Chemical-Pharmaceutical Biotechnology), Novara location. BIOS/11A (13 CFU, 104h)

- March 2025- present: Medicinal Therapy course at Medical Biotech Master degree, Novara (BIOS/11A)

Supervisor in experimental theses:

2017- present: Supervisor of 14 experimental theses and Co-supervisor of 5 experimental theses for Pharmacy (Novara), CTF (Novara), Biology LM (Alessandria) and Biotechnology (Novara), UPO.

ACTIVE SCIENTIFIC COLLABORATIONS

Main research area: Oncology pharmacology.

Role of metabolic proteins in tumor progression and characterization as possible pharmacological targets in breast cancer.

- 2009- present: collaboration with Prof. Armando Genazzani, Univeristy of Piemonte Orientale and University of Turin, on the study of NAMPT and NAD metabolism in cancer.
- 2013-present: collaboration with the Pharmaceutical Chemistry group directed by Prof. Gian Cesare Tron and Dr. Ubaldina Galli and Prof. Tracey Pirali of the DSF UPO, for the synthesis and study of small molecule NAMPT inhibitors, HDAC inhibitors and anti-tubulin agents as antineoplastic chemotherapeutics.
- 2015-present: collaboration with the Biochemistry group of Prof. Menico Rizzi and Prof. Silvia Garavaglia, DSF UPO. For the study of protein-protein interactions in cancer metabolism.
- 2016-present: collaboration with Prof. Marina Ziche and Dr. Sandra Donnini, University of Siena. For the study of NAMPT in the angiogenesis of breast cancer, with focus on pericytes.
- 2016-present: collaboration with Prof. Maria Angela Sortino, University of Catania. For the study of the cytokine NAMPT and the permeability of the BBB.
- 2017-present: collaboration with Prof. Daniele Di Marino (ICS, Lugano/ University of Ancona) and Dr. Alessandro Gori (CNR, Milan) for the design and development of NAMPT and GAPDH interfering peptides as pharmacological tools in tumors and with Prof. James Wohlschlegel (UCLA, LA) for LC-MS analyzes and proteomic studies.
- 2019-present: Collaboration with Prof. Dmitry Lim, UPO, in studying the effects of astrogliosis on pericyte activity in Alzheimer's disease.
- 2021-2023: Partner in the project financed by Fondazione Cariplo "Extracellular Nicotinamide Phosphoribosyltransferase (eNAMPT): role in the pathogenesis and progression of inflammatory intestinal diseases", lead partner Dr. Cristina Travelli, University of Pavia.
- 2022- present: collaboration with Dr. Gloria Ravegnini, University of Bologna as co-PI in the PRIN2022 project "Characterization of extracellular nicotinamide phosphoribosyltransferase (eNAMPT) as a novel drugological target in ovarian cancer".
- 2023- present: collaboration with Dr. Francesca Faroni in the study of the effects of miR-22 released by hepatocarcinoma on endothelial cells
- 2023- present: collaboration with Xtal (Uniupo) and Exeris (Lugano, Switzerland) for the validation of new delivery strategies of chemotherapy drugs against pancreatic cancer.
- 2023- present: collaboration with Prof. Mariagrazia Grilli in the study of the role of neuronal and glial progenitors in the progression of peripheral tumors, such as breast cancer.
- 2023- present: collaboration with Dr. Lorenzo Gerratana and Dr. Rossana Roncato of the CRO of Aviano for the monitoring of plasma levels of the cytokine eNAMPT in patients with breast cancer. Drafting of the clinical protocol "Exploring the clinical validity and usefulness of liquid biopsy in women with early-stage triple-negative breast cancer treated with neoadjuvant chemotherapy in combination with pembrolizumab: the GIM-XX/DORALEEN.2 study".

AWARDS

- Assegno di ricerca CRT 2020, UPO (25.000€)
- GRANT2018 Fondazione Umberto Veronesi (27.000€)



- Prize for Best Poster/Travel Award at FASEB Science Research Conference entitled "NAD+ Metabolism and Signaling", Timmendorfen Strand Germany, 2015 (400\$)
- Fellowship awarded by Italian Society of Pharmacology and Merck MSD Italia, 2015 (25.000€)
- Prize SIF-Farindustria for Pharmacological Research, 2013 (10.000€)
- Prize for Best Poster at the Society of Pharmacology Congress Bologna, 2011 (500€)
- Fellowship for abroad for members of the Italian Society of Pharmacology, 2011 (4.500€)

FUNDING OBTAINED

- PI Partner Unit in the "eNAMPT in the pathogenesis of IBD" project funded by the Cariplo Foundation, 2021-2023 (40,000 euros).
- Co-PI in the PRIN2022 project "Characterization of extracellular nicotinamide phosphoribosyltransferase (eNAMPT) as a novel drugological target in ovarian cancer", with Dr. Gloria Ravegnini, University of Bologna (124,000 euro).
- Co-PI in AIRC project IG (Project 2023 ID 29095) "Old dog, new tricks. Inhibiting HDACs using isonitriles. Novel epigenetic drugs against triple negative breast cancer", (166,500 euros), shared with the PI Prof. Gian Cesare Tron of the University of Eastern Piedmont.

EDITORIAL AND SCIENTIFIC DISSEMINATION ACTIVITIES

- 2014-2019: Co-author of "SIF-Ricerca di Base", Newsletter of the Italian Society of Pharmacology (SIF)
- 2019-present: Topic Editor in Frontiers in Pharmacology, topic "Liquid Biopsy as a Tool for Precision Oncology: New Challenges to Assess Clinical Response"
- 2020-present: Editor of SIF Magazine, online magazine for citizens created by the Italian Society of Pharmacology. <https://www.sifweb.org/sif-magazine>
- 2020-present: Member of the Reviewer Board of Cancers, an Open Access Journal from MDPI, IF= 6.126
- 30 April 2021: Invited speech at The Watcher Talk event entitled "Enhancing research to cure the future", with the participation of the Minister of Health Beatrice Lorenzin.
- 2022- present: Review Editor in Neurodegeneration, Frontiers.
- 2023- present: Review Editor in Cellular Biochemistry, Frontiers.
- June 2023: Assignment in the PNRR "UPO-Active orientation in the school-university transition" project in favor of high school students adhering to the UNIUPO Agreement.

SCIENTIFIC SOCIETIES

- 2011- 2014: Young Member of the Italian Society of Pharmacology (SIF)
- 2014-present: Ordinary Member of the Italian Society of Pharmacology (SIF)
- 2015: Member of American Association for Cancer Research, AACR
- 2019-present: Member of the Youth Board of the Italian Society of Pharmacology (SIF)
- 2024-present: Member of the Animal Welfare Organization – OBA of the University Piemonte Orientale

CONGRESSES

Abstract submission at national and international congresses, including:

- FASEB, Federation of American Societies For Experimental Biology Conferences (NAD metabolism)
- FEBS, Federation of European Biochemical Societies
- Neuroscience Congresses (Washington 2011 and New Orleans 2012). Selected for oral presentation.
- Italian Society of Pharmacology (SIF) Congresses
- American Association for Cancer Research (AACR) Congress (Philadelphia 2015)
- International Summer School "Cancer Biology and Therapeutic Strategies Towards Personalized Medicine", Lipari Italy June 2017



PARTICIPATIONS AS AN INVITED SPEAKER

- March 2021: 40th National Congress of the Italian Society of Pharmacology, Digital Edition 9-13 March 2021. Symposium entitled "Strategies for the discovery and development of targeted anticancer drugs".
- 30 April 2021: Invited speech at The Watcher Talk event entitled "Enhancing research to cure the future", with the participation of the Minister of Health Beatrice Lorenzin.
- October 2024: 2nd International Cancer Science Congress 2024, Cagliari, Italy, 12-14 October 2024. Invited conference entitled: "Extracellular Nicotinamide Phosphoribosyltransferase (eNAMPT) Drives Abnormal Pericyte-Rich Vasculature in Triple-Negative Breast Cancer".
- November 2024: 42nd National Congress of the SIF. Sorrento, 13-16 November 2024. Symposium entitled: "Targeted protein degradation as an emerging pharmacological strategy for the development of anticancer drugs."

CONGRESS ORGANIZATION

- 11 September 2020: Webinar "Effective communication: The web, social media and the damn tricks needed to capture attention online", with Davide Gambardella, Imagineificio.
- 8 March 2021: XXIII SIF Seminar on Pharmacology for PhD Students, Fellows, Post Doc and Specialist Trainees, Italian Society of Pharmacology (SIF)
- September 2020 - July 2021: 3 cycles of webinars "MEDICINES: REGULATORY TOOLS, training school on the regulatory world of medicines. In collaboration with the Italian Society of Pharmacology (SIF), the Italian Society of Regulatory Activities, Access, Pharmacovigilance (SIARV) and the Italian Society of Pharmaceutical Medicine (SiMeF).

PATENT

"Biphenyl compounds as SOCE modulators, compositions and uses thereof"

Number: 102020000003692, 21st Feb 2020. Field of the invention: the disclosure concerns new biphenyl 1,4- disubstituted 1,2,3-triazol compounds able to modulate the calcium entry operated by endoplasmic reticulum, also known as Store-Operated Calcium Entry (SOCE), compositions, and uses thereof.

PUBLICATIONS

Scopus Author ID: 24334744800
ORCID ID: 0000-0003-0233-0700
PubMed: Ambra A. Grolla, Grolla AA

Number= 32
h-index=20 (Scopus)
Citations= 1299

Redatto ai sensi degli artt. 46 e 47 del D.P.R. 445/2000 e consapevole che le dichiarazioni mendaci sono punite ai sensi del codice penale e delle leggi speciali in materia, secondo le disposizioni richiamate dall'art. 76 del D.P.R. 445/2000
Autorizzo il trattamento dei dati personali contenuti nel mio curriculum vitae in base all'art. 13 del D. Lgs. 196/2003 e all'art. 13 GDPR 679/16.

 22/10/24