

Curriculum Vitae

(updated to 11/05/2026)

Personal information:

- Name: Alessandra Ottani
- Date of Birth: September, 18 1967
- Place of Birth: Castelfranco Emilia (Modena)

Business address :

Department of Biomedical, Metabolic and Neural Sciences
Section of Pharmacology and Molecular Medicine
University of Modena and Reggio Emilia
Via G. Campi, 287
41125 Modena (Italy)
Phone : 39-59-2055165 (office) ; 39-59-2055210 (lab)
Fax : 39-59-2055376
E-MAIL : alessandra.ottani@unimore.it

Professional training and career

- 1987: Scientific High School Diploma, A. Tassoni Scientific High School, Modena
- 1995: Degree in Biological Sciences with a Biomedical address at the University of Modena and Reggio Emilia
- 1996: Achievement in 1996 of the qualification useful for carrying out the profession of "Biologist" after having taken both the oral test and the qualifying practical test, which were held in the classrooms and laboratories of the Biological Institutes of Via G. Campi 187, 41125 (Modena), University of Modena and Reggio Emilia
- 1996: Participation in the "workshop on animal care", Verona 7 June (Policlinico Borgo Roma), Cividale del Friuli (Ud) 10 June, Harlan-Italy company establishments
- 1/04 / 1996-31 / 03/1997: Scholarship, awarded by Glaxo Wellcome S.p.A. for a research entitled: "Effects of Iacidity on the CNS in an ischemia / reperfusion model"; These researches were carried out at the Department of Biomedical Sciences Section of Pharmacology of the University of Modena and Reggio Emilia and the University of Verona (Dr. W. Vergoni)
- 1997-1998: Scholarship, awarded by Chiron S.p.A., at the Department of Microbiological, Hygienic and Statistical Sciences of the University of Modena and Reggio Emilia, for the epidemiological evaluation of the new FLUAD ® flu vaccine
- 1997-98: Annual Postgraduate Course in Laboratory Research Methodology, at the Department of Biomedical Sciences, Pharmacology Section of the University of Modena and Reggio Emilia, presenting a final report entitled "Influence of sodium gamma-hydroxybutyrate on gastric emptying in rats".
- 01/11 / 1998-31 / 10/2003: PhD scholarship in "Drug addiction" (XIV cycle - legal duration of 5 academic years), with administrative headquarters at the University of Siena (coordinator: Prof. A. Tagliamonte), which led to the achievement of the PhD in "Drug addiction" on February 12, 2004 at the University of Siena, presenting a final dissertation entitled "HU210: a potent toll to investigate the cannabinoid system".
- 01/05 / 2004-30 / 04/2005: Awarding of research fellowship for the "Integrated Department of Diagnostic, Laboratory and Forensic Services" - SSD BIO / 14. Research carried out relating to:
 - study of the influence of melanocortin neuropeptides on the cerebral gratification system, with particular regard to the release of dopamine in the shell of the nucleus accumbens septi, in the awake rat;

- study of the influence of g-hydroxybutyric acid and its analogues on the activity of reinforcing stimuli in the awake rat
 - study of cyclooxygenase activity in patients suffering from chronic daily headache from / with abuse of analgesic drugs
 - study of the mechanism of the pain-relieving action of paracetamol, with particular regard to the possible involvement of the endocannabinoid systems (in the rat) (tutor: Prof. A. Bertolini).
 - 01/05 / 2005-31 / 10/2006: Research grant award for the "Department of Biomedical Sciences, Section of Pharmacology", Faculty of Medicine and Surgery, University of Modena and Reggio Emilia - SSD BIO / 14. Research title: "Neurotoxicity of perinatal and neonatal exposure to polychlorinated biphenyls: behavioral profile, functionality of the serotonergic system in the adult rat and sex differences", coordinator Prof. Valeria Vergoni
 - From 2007 to 27 december 2002: University Researcher (SSD Pharmacology Bio / 14) of the University of Modena and Reggio Emilia, Faculty of Medicine and Surgery, Department of Biomedical, Metabolic and Neuroscience Sciences, Section of Pharmacology and Molecular Medicine
- 28 december 2022 – now: Associate Professor (SSD Pharmacology Bio / 14) of the University of Modena and Reggio Emilia, Faculty of Medicine and Surgery, Department of Biomedical, Metabolic and Neuroscience Sciences, Section of Pharmacology and Molecular Medicine

Funding and patents

- PARTICIPANT: Title: Melanocortin peptides as inducers of neuroprotection and neurogenesis in ischemic brain pathology Funding: PRIN 2007; Responsible prof. Salvatore Guarini; Period: 2007-2009
- PARTICIPANT: Title: Spa-waters with high hydrogen sulfide contents against progression of Alzheimer's disease: studies in triple-transgenic mice at different ages reflecting the progressive severity of the disease Funding: FoRST (Foundation for Thermal Scientific Research); Responsible prof. Giuliani Daniela; Period: 2010-2012
- PARTICIPANT: Title: Spa-waters with high hydrogen sulfide contents against progression of Alzheimer's disease: studies in triple-transgenic mice at different ages reflecting the progressive severity of the disease (project continuation 2010-2012) Funding: FoRST (Fondazione per la Ricerca Thermal science); Responsible prof. Giuliani Daniela; Period: 2014-2016
- PARTICIPANT: Title: Melanocortins as potential neuroprotective and neurogenic agents to slow the progression of Alzheimer's disease, Funded by: Fondazione Cassa di Risparmio di Modena, Head of Prof. Guarini Salvatore; Period: 2015-2018
- RESPONSIBLE: Title: Effect of melanocortins on heart damage related to Alzheimer's disease in a transgenic mouse model Funding: Department of Biomedical, Metabolic and Neuroscience Sciences; Period: 2017-2018
- PARTICIPANT: Title: EXplorIng the pathophysiological role of PCSK9 in Alzheimer's Disease: focus on inflammation and lipid metabolism (EXIT-AD). Funder: Amgen, Head of prof. Giuliani Daniela; Period: 2018-2020
- PARTICIPANT: Title: On-Demand Bioresorbable OptoElectronic System for In-Vivo and In-Situ Monitoring of Chemotherapeutic. Funded by: Horizon -EIC-2021-PATHFINDEROPEN-01 / RESORB, Responsible prof. Giuliani Daniela; Period: 2022-2025;
- PARTICIPANT: FAR Mission Oriented (2021), Title: ASA Project - Ethical alternative to Animal Experimentation: the CAM model - development of new protocols for the validation of biomaterials and drugs Funding: FOMO, Head of Prof. Carla Palumbo; Period: 01/12 / 2021-31 / 05/2023
- RESPONSIBLE: Title: Analysis of the ability of Magnesium Chloride to promote osteoclastogenesis Rankl – employee Funder: University research fund 2024, internal call for funding of research projects, widespread research action: Period: 2024

- RESPONSIBLE: Title: Bioresorbable Optical Sensors For In-Vivo and In-Situ Monitoring Of Chemotherapeutic Drugs (EVANESENSE) Funder: PRIN 2022; Manager; Prof. G. Barillaro Period: 2022-2024
- Holder of Patent No. 102018000006399, "Melanocortin agents for use in the therapeutic treatment of melanoma, tumors of the gastrointestinal tract, and thyroid carcinoma" (University of Pisa, University of Modena and Reggio Emilia).
- PARTICIPANT: European project Horizon -EIC-2025-PATHFINDEROPEN-01 /ALERT (2026-2029)

Teaching activities: Pharmacology courses at the Faculty of Medicine and Surgery of the University of Modena and Reggio Emilia

Past :

- Professor of "Clinical Pharmacology" for the Integrated Course in Specialized Medicine, Degree Course in Nursing (Modena branch)
- Professor of "Pharmacology" for the Integrated Course of Hygiene and Pharmacology, CdS in Psychiatric Rehabilitation Technique
- Professor of "Pharmacology" for the Integrated Course of First Aid Sciences, Degree Course in Obstetrics
- Professor of "toxicology" for the CdS in Biological Sciences (Faculty of Biology and Biotechnology)
- Professor of "General Pharmacology and Pharmacotherapy" for the course of "General Pharmacology and Pharmacotherapy" CdS in Pharmaceutical Chemistry and Technology
- Accredited teacher and member of the Board of Teachers of the School of Specialization in "Toxicology" at the University of Modena and Reggio Emilia (2010-2106)
- Accredited lecturer and member of the Board of Teachers of the School of Specialization in "Medical Pharmacology" at the University of Modena and Reggio Emilia (2010-2106)
- Accredited teacher and member of the Board of Teachers of the Doctoral School in "Clinical and Experimental Medicine", where he also works as a speaker and tutor, at the University of Modena and Reggio Emilia (2012-2020)

Current

- Professor of "General Pharmacology", for the integrated course of "Pathophysiological Bases of Diseases", CdS in Nursing (Modena branch) and teaching coordinator
- Professor of "Clinical Pharmacology I", for the integrated course of "Nursing in the Medical Area", Degree Course in Nursing (Modena branch)
- Professor of "Clinical Pharmacology II", for the integrated course of "Nursing in Chronicity and Disability", CdS in Nursing (Modena branch) and teaching coordinator
- Professor of "Clinical Pharmacology III", for the integrated course of "Nursing in critical area", CdS in Nursing (Modena branch)
- Professor of "Pharmacology" for the integrated course of "Science of Prevention and First Aid" CdS in Dietetics and teaching coordinator
- Professor of "Pharmacology" for the integrated course of "Principles of General Medicine, CdS in Dental Hygiene
- Professor of "Pharmacology for the integrated course of" Pharmacology, forensic medicine and medical genetics ", CdS in Biomedical Laboratory Techniques
- Head of "Choice Activities" for the 2nd and 3rd year of the course, Degree Course in Nursing (Modena office)

- Accredited lecturer and member of the Board of Teachers of the school of specialization in "Psychiatry" (Medical Area / Class of Neuroscience and Clinical Behavioral Sciences, SSD MED / 25, coordinator Prof. Gian Maria Galeazzi, <https://www.unimore.it/teaching/scuolespec-medi.html>) at the University of Modena and Reggio Emilia (2017-present)
- Accredited lecturer and member of the Board of Teachers of the specialization school in "Anesthesia, Intensive Care and Pain and Intensive Care" (Clinical Services Area / Class of Specialized Clinical Services, SSD MED / 41, Coordinator Prof. Alberto Barbieri, <https://www.unimore.it/didattica/scuolespec-medi.html>) at the University of Modena and Reggio Emilia (2017-present)
- Accredited teacher and member of the Teaching Body of the School of Specialization in "Pharmacology and clinical toxicology" (Clinical Services Area / Class of Biomedical Specialized Clinical Services, SSD BIO / 14, coordinator Prof. Fabio Tascetta, <https://www.unimore.it/teaching/scuolespec-medi.html>) at the University of Modena and Reggio Emilia (2016-present)
- Supervisor of at least 8 degree theses a year for the Degree Courses and Specialization Schools in which she teaches

Past research activity

- neurochemical mechanisms involved in sexual activity, aggression, eating behavior, affective disorders, pain and addiction to substances of abuse as a target of innovative drugs;
- serotonin system and endocannabinoid system in pain / inflammation;
- Medicines for headaches

Present research activity

- Role of melanocortins in cardioprotection;
- Melanocortin neuropeptides and hydrogen sulfide: role in acute and chronic neurodegeneration
- Role of the melanocortin system in modulating the expression of various tumor cell lines
- Correlation between magnesium chloride and osteoclastogenesis
- Development of bio-resorbable sensors for monitoring chemotherapeutic drugs
- Early identification of biomarkers of Alzheimer's disease through fluorescence with microneedle sensors and QR code reading

Collaborations

- Prof Helgi B. Schiöth, Department of Neuroscience, Biomedical Center Uppsala University, Uppsala, Sweden (completed)
- Prof Francesco Squadrito, Department of Clinical and Experimental Medicine, Section of Pharmacology, University of Messina, Messina, Italy
- Prof Jerzy Jochem, Department of Basic Medical Sciences, School of Public Health in Bytom, Medical University of Silesia, Katowice, Poland
- Prof. Guido Bocchi, Division of Pharmacology, Department of Clinical and Experimental, Medicine, University of Pisa, Italy (ongoing)
- Prof. G. Barillaro, University of Pisa, Italy (ongoing)

Other assignments

- Representative of Researchers in the Board of the Department of Biomedical, Metabolic and Neuroscience Sciences (2012-2022)
- Member of the QA management group, CdS in Nursing (Modena office),
- Member of the steering committee, Degree Course in Nursing (Modena office),
- Member of the Joint Commission for the Faculty of Medicine and Surgery, at the University of Modena and Reggio Emilia
- Website Manager of the Department of Biomedical, Metabolic and Neurosciences (2023-present)
- Research Quality Assurance Manager of the Department of Biomedical, Metabolic and Neurosciences (2023-present)
- Vice President of the Degree Course in Dietetics (UNIMORE) (2025-present)

Publishing

- Author of 73 scientific papers published mostly in international journals
- Co-author of the following book chapter: Bertolini A., Ottani A., Sandrini M. "Selective COX-2 inhibitors and dual acting anti-inflammatory drugs: critical remarks". In: Frontiers in Medicinal Chemistry, Reitz A.B., Kordki C.P., Choudhary M.I. and, Atta-Ur-Rahman (Eds); Bentham Science Publishers: 1: 85-95 (2004)
- H-index = 34; more than 3691 citations
- Translator of the third Italian edition of the pharmacology treatise "Medical pharmacology and elements of therapy (Elsevier, 2010)
- Reviewer from 2009 to date for various international scientific journals in the pharmacological field, including:
 - European Journal of Pharmacology
 - Brain research
 - Neurological Research
 - Journal of Behavioral and Brain Science
 - Frontiers in Pharmacology
 - Brain Research

Member of the Italian Society of Pharmacology since 1997

ORCID: orcid.org/0000-0002-1676-051X

The undersigned expresses her consent so that the personal data provided can be processed in compliance with Legislative Decree n.196 / 03 and subsequent amendments, and with EU regulation n.679 / 2016. Prof.ssa. Alessandra Ottani

Modena 11/05/2026

Allen Sissendro