
BIOGRAPHICAL SKETCH

NAME	POSITION TITLE
SILVIA FRANCHINI	ASSOCIATE PROFESSOR
	UNIVERSITY OF MODENA & REGGIO EMILIA

EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Department of Pharmaceutical Sciences, University of Modena & Reggio Emilia, Italy	Master Degree in Pharmaceutical Chemistry and Technologies (Final grade: <i>Summa cum laude</i>)	1994	Medicinal Chemistry
Faculté de Chimie, Laboratoire de Chimie des Polyphénols, Université Louis Pasteur, Strasbourg, France	Fellowship granted by University of Modena and Reggio Emilia	1995	Chemistry
Department of Pharmaceutical Sciences, University of Modena & Reggio Emilia, Italy	Ph.D.	1996-1999	Medicinal Chemistry
Department of Pathology & Lab. Medicine, Protein Chemistry Lab., University of Pennsylvania Medical Center, USA	Post-doctoral fellowship granted by NIH	1999-2001	Medicinal Chemistry, Protein Chemistry

Married with Luca Manfredini (Engineer, computer science), one son (Lorenzo, born 2008) and one daughter (Sara, born 2011).

A. Personal Statement

I have more than twenty years of experience in preclinical drug discovery, in particular in the design, synthesis and optimization of novel ligand/tool compounds. During my post-doctoral fellowship, I have developed the ability to work in a multidisciplinary context, in close contact with biologists, immunologists and pathologists and I have built expertise in protein chemistry (purification, proteomic analysis, development of strategies for site-specific chemical functionalization and bio-conjugation) and application of advanced methods (LC-MS/MS, SPR) for pharmacokinetics analysis as well as the study of protein-protein interactions and protein ligand interactions.

My research interests can be summarized within the following projects:

- CNS active compounds targeting GPCR receptors (serotonergic, adrenergic, dopaminergic, muscarinic, TAARs) and sigma 1 / sigma2 receptors for the treatment of neurodegenerative disorders, pain, depression and cancer.
- DAT inhibitors for drug abuse
- Multitarget HDAC6/ HSP90 inhibitors for the treatment of cancer
- Nucleoside reverse transcriptase inhibitors for the treatment of viral infections

B. Positions

Positions and Employment

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| 1995 | Fellow in the student mobility program, Université Louis Pasteur, Strasbourg, France |
| 1996-1999 | Fellow, Ph.D. program in Drug Sciences, University of Modena and Reggio Emilia, Italy |
| 1999-2001 | Post-doctoral Fellow, Department of Pathology & Lab. Medicine, University of Pennsylvania Medical Center, USA |
| 2001-present | Full-employed Researcher in Medicinal Chemistry, University of Modena and Reggio Emilia, Italy |
| 2004-2015 | Member of the Doctorate School ‘Science and Technologies for Health Products’, University of Modena and Reggio Emilia, Italy |
| 2012-2015 | Member of the International Doctorate School (PhD) in Clinical and Experimental Medicine, University of Modena and Reggio Emilia, Italy |
| 2004-2022 | Assistant Professor at the University of Modena and Reggio Emilia, Italy |
| 2022-present | Associate Professor at the University of Modena and Reggio Emilia, Italy |

Other Experience and Professional Memberships

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| 2019 | Abilitazione Scientifica Nazionale to the role of Associated Professor settore concorsuale 03/D1. |
| 2020-present | Elective Member of the Board of the Italian Chemical Society (SCI)-Sezione Emilia-Romagna, |
| 2001-present | Member, Italian Chemical Society, Pharmaceutical Chemistry Division |
| 2009-present | Member, Società dei Naturalisti e Matematici di Modena |
| 2023 | Member of the Scientific Committee ‘XXII Giornata della Chimica dell’Emilia Romagna, SCI. |
| 2023 | Member of the Organizing Committee of the Workshop ‘Drug Discovery in Epigenetics’, University of Modena and Reggio Emilia, 15th Dec 2023. |
| 2008 | Member of the Organizing Committee of the XIX National Meeting on Medicinal Chemistry-Verona |
| 2007 | Member of the Scientific Advisory Committee, CIGS, University of Modena e Reggio Emilia for Mass Spectrometry Labs Project (800.000,00 euro) |

- 2005 Member of the Organizing Committee of Second Joint Italian-Swiss Meeting on Medicinal Chemistry, Modena
- 2015-present Reviewer for peer reviewed international journals: Journal of Medicinal Chemistry, PLOS ONE, CNS & NEUROLOGICAL DISORDERS-DRUG TARGETS, MEDICINAL CHEMISTRY

Teaching activity

- 2023-present Master in Biotherapeutics, UNIMORE
- 2023-present Molecular mechanisms underlying the action of drugs for Specialisation Schools in Hospital Pharmacy (Scuola di Specializzazione in Farmacia ospedaliera) UNIMORE
- 2016-present “*Extractive and synthetic drug preparation Laboratory*” for Master Degree in Pharmaceutical Chemistry and Technologies, UNIMORE
- 2017-present ‘*Drug Discovery and Development of new drugs: the preclinical and clinical trials*’ for Master Degree in Chemistry and Pharmaceutical Sciences
- 2004-2015 ‘*Integrated strategies for Drug Discovery*’ for Master Degree in Pharmaceutical Biotechnology
- 2008-2012 ‘*Purification and characterization of proteins and metabolites*’ for Master Degree in Industrial Biotechnology
- 2004-2012 ‘*Management of scientific information*’ for Ph.D students in Sciences and Technologies of Health Products.
- 2004-2009 ‘*Integrated strategies for Drug Discovery using Mass Spectrometry*’ for Ph.D students in Sciences and Technologies of Health Products
- 2004-2009 ‘*Laboratory of drug purification and analysis* ’ for bachelor's degree in Pharmaceutical Biotechnology
- 2018-2020 Supervisor of 3 post-doctoral fellow in Medicinal Chemistry
- 2004-present Supervisor of 4 doctoral theses and > 60 master degree thesis.

C. Funding

- 20023-2025 As a Partecipant, FAR INTERDISCIPLINARE 2023- UNIMORE, "Lead Optimization strategy for the identification of a drug candidate against metastatic castrate- resistant prostate cancer".
- 20023-2024 As a PI, FAR2023- UNIMORE, SERENA (SERotonErgic ligaNds for pAin relief).
- 2022-2025 As a participant, National project PRIN 2022, "Lead Optimization of HDAC6/Hsp90 Dual Inhibitors: identification of a drug candidate against metastatic castrate-resistant prostate cancer".
- 2019-2024 As a participant, AIRC Call: Investigator Grant - IG 2019, ‘Targeting metastatic castrate-resistant prostatic cancer with HDAC6/Hsp90 dual inhibitors’
- 2018-2020 As a PI, FAR2017- UNIMORE, ITACA (The Sigma receptor: an Innovative protein TArget for the treatment of Cancer)
- 2019-2020 As a partecipant, FAR2019- UNIMORE, DAhLIA (Dat AtypicalL Inhibitor for Addiction)

2017 As a PI, FAABR (Finanziamento annuale individuale delle attività base di ricerca)

2015-2017 As a participant, FAR2015- UNIMORE.

2015-2016 As a PI, one competitive grant by Fondazione Cassa di Risparmio di Modena.

2006-2010 As a researcher, European Community Project (VI Frame Work)'Lights'

2007-2009 As a researcher, National project PRIN 2007.

2006-2008 Research contract with Glaxo-SmithKline, Psychiatry CEDD, Verona, Italy.

2005-2007 As a researcher, National project PRIN 2005.

2003-2005 As a researcher, National project PRIN 2003.

2001 As a researcher, National project PRIN 2001

D. Publications

As on May, 2024, Prof. Franchini (ORCID 0000-0002-6320-9712) has published more than **55** full papers on peer-reviewed international journals (font: Scopus), with an H index of **19**. She is co-inventor of **2** patents and presented **4** oral communications to conferences and meetings. Her papers have received more than **1406** citations (Scopus).