MATTIA MORI – CURRICULUM VITAE

EDUCATION

2009 – International PhD Degree in Structural biology at CERM, the magnetic resonance center of the University of Florence. Tutor: Prof. Ivano BERTINI. Thesis title: Drug design approaches for the identification of new protein-interacting compounds.

2004 – Graduation in medicinal chemistry (Chimica e Tecnologia Farmaceutiche (CTF) at the University of Florence (110/110 cum laude). Tutor: Prof. Cristina NATIVI and Prof. Stefano MENICHETTI. Thesis title: Synthesis and reactivity of alpha-alpha'-dioxothione derivatives supported on solid phase.

EMPLOYMENT and RESEARCH EXPERIENCE

2021 – present: Associate Professor in medicinal chemistry at the Department of Biotechnology, Chemistry and Pharmacy of the University of Siena.

2018 - 2021: senior researcher (tenure-track RTD-B, L.240/2010) in medicinal chemistry at the Department of Biotechnology, Chemistry and Pharmacy of the University of Siena.

2017 – 2018: Researcher at the Italian Institute of Technology (IIT), Center for Life NanoScience@Sapienza.

2012 – 2017: Postdoc at the Italian Institute of Technology (IIT), Center for Life NanoScience@Sapienza.

2009 – 2012: Postdoc at the University of Roma “La Sapienza”.

2005 – 2006: Junior scientist in the Biotech company ProtEra Srl.

AWARDS and QUALIFICATIONS

2022 – National Qualification as Full Professor in Medicinal Chemistry (SSD: CHEM07/A, 03/D1).

2018 – Winner of the 2018 Award by the Medicinal Chemistry Division of the Italian Chemical Society.

2018 – Winner of the young medicinal chemist meeting in Italy and invited talk at the 5th EFMC Young Medicinal Chemistry Symposium (YMCS2018).

2017 – National Qualification as Associate Professor in Medicinal Chemistry (SSD: CHIM08, 03/D1.)

MEMBERSHIPS

2024 – present: American Chemical Society (ACS);

2020 – present: International Natural Product Sciences Taskforce (INPSTF);

2018 – present: Italian Chemical Society (SCI).

PUBLICATIONS and TRAINING

>170 publications in peer-reviewed journals; H-index: 34 (Scopus, January 2026); citations: 3502 (Scopus, January 2026); 4 book chapter; 5 patent applications (1 granted).

h-index (Scopus): 35 (February 2026)

Invited speaker at >20 international conferences on medicinal chemistry and drug design. Supervisor of several undergraduate and PhD students, and Postdocs.

EDITORIAL ACTIVITY

Co-Editor of Current Pharmaceutical Design. Editorial board member of Current Drug Discovery Technologies, Current Enzyme Inhibition. Research Topic Editor in Frontiers in Pharmacology, Topic editor for Molecules, International Journal of Molecular Sciences, Current Pharmaceutical Design, ACS Medicinal Chemistry Letters.

RECENTLY GRANTED PROJECTS (<5 years)

- Partner: Italian Cystic Fibrosis Research Foundation FFC2025. “Evaluating the Effectiveness of a Combined Approach to Enhance CFTR Gating Mutations and Combat Lung Pathogens”.
- PI/Supervisor: HORIZON-MSCA-2022-PF-01 “Druggability of G-quadruplexes, promising modulators for antimicrobial resistance (The G-Q-reat ESKAPE)”.
- Partner: Italian Cystic Fibrosis Research Foundation FFC2022. “Esculentin-derived peptides as novel therapeutic agents with antimicrobial and CFTR potentiator activities to address cystic fibrosis lung disease”.
- PI of Research Unit: MUR-PRIN2022-PNRR. Screening and optimization of nature-inspired ligands to target microbial G-quadruplexes – ACRONIMO G4MICRONAT
- Chair: COST Association. CA21145 - European Network for diagnosis and treatment of antibiotic-resistant bacterial infections (EURESTOP).
- PI of Research Unit: MUR-PRIN2022. Structural and functional insights into hCA/Gli1 multitarget inhibitors for efficient targeting of cancer cells and hypoxic niches.
- Partner: Italian Cystic Fibrosis Research Foundation FFC2021. “Pharmacological inhibition of colistin resistance in Gram-negative cystic fibrosis pathogens”.
- Partner: Italian Cystic Fibrosis Research Foundation FFC2019. Antimicrobial peptides from amphibian skin for treatment of lung pathology in cystic fibrosis: advanced in vitro and in vivo functional characterization.

5 RELEVANT PUBLICATIONS

1. Structure-Based Ligandability Exploration of a G-Quadruplex-Forming Sequence from the Pseudomonas aeruginosa Genome. Fiabane M, Platella C, Diaco F, Biancucci C, Calcaterra A, Musumeci D, Antonelli G, Turriziani O, Botta B, Montesarchio D, Mori M. *ACS Med Chem Lett*. 2025; 16(11):2232-2238. doi: 10.1021/acsmedchemlett.5c00428
2. The Rise of Bacterial G-Quadruplexes in Current Antimicrobial Discovery. Ciaco S, Aronne R, Fiabane M, Mori M. ACS Omega. 2024; 9(23):24163-24180. doi: 10.1021/acsomega.4c01731
3. Solving the antibacterial resistance in Europe: The multipronged approach of the COST Action CA21145 EURESTOP. Seguin-Devaux C, Mestrovic T, Arts JJ, Sen Karaman D, Nativi C, Reichmann D, Sahariah P, Smani Y, Rijo P, Mori M; COST Action CA21145 EURESTOP. *Drug Resist Updat*. 2024; 74:101069. doi: 10.1016/j.drup.2024.101069
4. Selective Targeting of Cancer-Related G-Quadruplex Structures by the Natural Compound Dicentrine. Platella C, Ghirga F, Musumeci D, Quaglio D, Zizza P, Iachettini S, D'Angelo C, Biroccio A, Botta B, Mori M, Montesarchio D. *Int J Mol Sci*. 2023; 24(4):4070. doi: 10.3390/ijms24044070
5. What Makes Thienoguanosine an Outstanding Fluorescent DNA Probe? Kuchlyan J, Martinez-Fernandez L, Mori M, Gavvala K, Ciaco S, Boudier C, Richert L, Didier P, Tor Y, Improta R, Mély Y. *J Am Chem Soc*. 2020; 142(40):16999-17014. doi: 10.1021/jacs.0c06165

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