

PERSONAL INFORMATION **Mattia Mori**

📍 Via Aldo Moro 2, 53100 Siena (DBCF@UNISI)

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<https://orcid.org/0000-0003-2398-1254>

Sex Male | Date of birth 26/12/1979 | Nationality Italian

SCIENTIFIC QUALIFICATION

- 4 October 2022 – 4 October 2032 National Qualification (Abilitazione Scientifica Nazionale) as Full Professor in Medicinal Chemistry, sector 03/D1 (CHIMICA E TECNOLOGIE FARMACEUTICHE, TOSSICOLOGICHE E NUTRACEUTICO-ALIMENTARI)
- 31 March 2017 – 31 March 2023 National Qualification (Abilitazione Scientifica Nazionale) as Associate Professor in Medicinal Chemistry, sector 03/D1 (CHIMICA E TECNOLOGIE FARMACEUTICHE, TOSSICOLOGICHE E NUTRACEUTICO-ALIMENTARI)
- 2005 (1st session) Qualified Pharmacist at the University of Florence

WORK EXPERIENCE

- August 2021 - present *Associate Professor in Medicinal Chemistry (SSD 03/D1, CHIM08)*
University of Siena – Department of Biotechnology, Chemistry and Pharmacy, via Aldo Moro 2, 53100 Siena, Italy
Business or sector Public university
- August 2018 – July 2021 *Senior Researcher (L. 240/2010 Art. 24 – b)*
University of Siena – Department of Biotechnology, Chemistry and Pharmacy, via Aldo Moro 2, 53100 Siena, Italy
▪ Research title: "Design and optimization of small molecule inhibitors of non-canonical targets of HIV-1 and *Mycobacterium tuberculosis*, particularly oriented to overcome drug resistance"
Business or sector Public university
- November 2017 – July 2018 *Researcher*
IIT – Istituto Italiano di Tecnologia – Center for Life Nano Science of Rome (CLNS@Sapienza), viale Regina Elena 291, 00161 Roma – Italy.
▪ Research title: "Identification, optimization and development of small molecules as candidate therapeutics against cancers that depend from signaling pathways involved in proliferation and differentiation of cancer stem cells". Scientific Coordinator: professor Giancarlo RUOCCO
Business or sector Research Institute
- November 2012 – October 2017 *Post-doc*
IIT – Istituto Italiano di Tecnologia – Center for Life Nano Science of Rome (CLNS@Sapienza), viale Regina Elena 291, 00161 Roma – Italy.
▪ Research title: "Identification of novel drug candidates that target specifically the Hedgehog and Notch signalling pathways to be used in the treatment of brain tumors". Scientific Coordinator: professor Giancarlo RUOCCO.

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Business or sector Research Institute

September 2013 – August 2016

Post-doc

University of Siena – Department of Biotechnology, Chemistry & Pharmacy, viale A. Moro 2, 53019 Siena – Italy

- Research Contract to work at the FP7 project THINPAD (Targeting the HIV-1 Nucleocapsid Protein to fight Antiretroviral Drug Resistance) – Grant Agreement 601969. Previous active participation in writing and negotiation of the project proposal. Scientific coordinator: Prof. Maurizio BOTTA
- Role: Task Leader in WP2 (Hits selection and hits/leads optimization).

Business or sector Public university

November 2011 – October 2012

Post-doc

University of Roma – La Sapienza, Dipartimento di Chimica e Tecnologie del Farmaco, Piazzale Aldo Moro 5, 00185 Roma – Italy

- Research assistant (Assegno di Ricerca) in the group of prof. Bruno BOTTA, Dipartimento di Chimica e Tecnologie del Farmaco. Research title: "Identification of a Second Generation of Hedgehog Inhibitors through Virtual Library Design"

Business or sector Public university

October 2009 – October 2011

Post-doc

University of Roma – La Sapienza, Dipartimento di Chimica e Tecnologie del Farmaco, piazzale Aldo Moro 5, 00185 Roma – Italy

- Post-doctoral fellow in the laboratory of prof. Bruno BOTTA. Research title: "Targeting signaling pathways involved in stem cell self-renewal and differentiation: basic and translational aspects"

Business or sector Public university

January 2005 – December 2005

Junior Scientist

ProtEra Srl, viale delle Idee n.22, Scientific Campus of the University of Florence. Biotech Spin-off focused on Drug Discovery

- Discovery and optimization of matrix metalloproteinases (MMPs) inhibitors using in silico/in vitro approaches.

Business or sector SME

EDUCATION AND TRAINING

January 2006 – January 2009

International Ph.D degree in Structural Biology

CERM – Magnetic Resonance Center of the University of Florence, in collaboration with the University of Frankfurt and the University of Utrecht.

TUTOR: Prof. Ivano BERTINI

- Thesis title: Drug Design Approaches for the Identification of New Protein-Interacting Compounds

September 1998 – December 2004

Five-year degree (Laurea Specialistica a ciclo unico – classe 14S) in Chimica e Tecnologia Farmaceutiche (CTF)

University of Florence, Faculty of Pharmacy.

TUTOR: Prof. Cristina NATIVI; CO-TUTOR: Prof. Stefano MENICHETTI

- Thesis title: Synthesis and Reactivity of α,α' -dioxothione derivatives supported on solid phase
- FINAL MARK: 110/110 *cum laude*

TEACHING ACTIVITY

Curriculum Vitae of Mattia Mori

- June 2021 **Trainer** at the COST Action CA17104 Training School Targeting MDR Tumours: from natural product chemistry to nanocarrier-based formulation". Rome (Italy).
- 2019–2020 **Professor** of the laboratory course "Analysis of drugs II" – Department of Biotechnology, Chemistry and Pharmacy, University of Siena. Degree course in Pharmacy (84 hours)
- 2019 **Contract professor** of Pharmaceutical Biotechnology course (50 hours) – Tecnico superiore per il sistema qualità di prodotti e processi a base biotecnologica – BIOQUALTECH – Tecnico superiore per le produzioni biotecnologiche industriali. Siena.
- 2018–2019 **Professor** of the laboratory course "Analysis of drugs II" – Department of Biotechnology, Chemistry and Pharmacy, University of Siena. Degree course in Pharmacy (84 hours)
- 2018 – 2019 **Contract professor** of Pharmaceutical Biotechnology course (50 hours) – Istituto Tecnico Superiore per le Scienze della Vita PROBITS2: PROBITS2 – Tecnico superiore per le produzioni biotecnologiche industriali. Siena.
- 10–12 December 2018 **Trainer** at the Third Training School of the CM1407 COST Action: "Computational modeling tools in drug discovery with natural products". Title: Computer-aided structure-based identification of HIV-1 nucleocapsid protein inhibitors.
Practical hands-on session (4 hours): Virtual screening of chemical libraries
- 2017–2018 **Contract professor** of the course "Chemistry of heterocycles" – Department of Biotechnology, Chemistry and Pharmacy, University of Siena. Degree course in Pharmacy (48 hours).
- 2017–2018 **Contract chair** of the didactic tutoring activity in Organic Chemistry – PLS progetto lauree scientifiche di MIUR. Department of Life Sciences, University of Siena. (18 days).
- January 2018 **Contract professor** in a short course in transferable skills (18 hours) – Istituto Tecnico Superiore per le Scienze della Vita PROBITS: PROBITS – Tecnico superiore per le produzioni biotecnologiche industriali. Siena.
- 18–20 September 2017 **Trainer** at Second Training School of the CM1407 COST Action: "Synthesis, isolation and structural elucidation of bioactive compounds". Title: Diels-Alder-type adducts isolated from *Morus nigra* are potent inhibitors of *Mycobacterium tuberculosis* protein tyrosine phosphatase B.
- 21–26 May 2017 **Trainer** at the XI European Workshop in Drug Design, case study "14-3-3 Protein-Protein Interaction: Molecular modeling tools applied to 14-3-3 proteins". 3-day case study with hands-on sessions. Certosa di Pontignano, Siena
- 2016–2017 **Contract chair** of the didactic tutoring activity in Organic Chemistry – PLS progetto lauree scientifiche di MIUR. Department of Life Sciences, University of Siena. (10 days).
- 18–20 May 2017 **Trainer** at Training School "Antiparasitic drug design and screening *in silico*" – COST Action CM1307. Certosa di Pontignano, Siena. Title: Introduction to structure-based virtual screening.
- 2016 – 2017 **Contract professor** of the "pre-course in Organic Chemistry" – Department of Biotechnology, chemistry and Pharmacy, University of Siena. (20 hours).
- 25 September 2016 **Trainer** at the First Training School of CM1407 COST Action "In vitro evaluation of compounds with anticancer potential". Belgrade, Serbia. Title: Virtual and experimental screening to identify novel naturally occurring inhibitors of the Gli1 transcription factor.
- 2016 **Contract professor** of Pharmaceutical Biotechnology course (50 hours) – Istituto Tecnico Superiore per le Scienze della Vita PROBITS: PROBITS – Tecnico superiore per le produzioni biotecnologiche industriali. Siena.
- 2010–2014 **Assistance** to course of Medicinal Chemistry II (Chimica Farmaceutica II) and Integration of Medicinal Chemistry (Complementi di Chimica Farmaceutica), degree course in Medicinal Chemistry (CTF), University of Siena, chaired by Prof. Maurizio Botta.

TUTORING ACTIVITY

- 2022-2025 **Supervisor** of two PhD students in the Chemical and Pharmaceutical Sciences Course at the University of Siena, Department of Biotechnology, Chemistry and Pharmacy: Rossella Aronne and Luigi Cutarella
- 2022-2023 **Supervisor** of the thesis work of three undergraduate students, Pharmacy Course): Giulia Nicastro, Martina Fiabane, Valeria Tundo
Supervisor of the thesis work of one undergraduate student (medicinal Chemistry Course): Laura Malvestuto)
- 2020-2021 **Supervisor** of the undergraduate student Aldo Lauro during the preparation of his research thesis work. Pharmacy degree at the University of Siena
- 2020-2021 **Co-tutor** of the undergraduate student Maria Assunta Altamura in the preparation of her research thesis work. Medicinal Chemistry degree at the University of Florence.
- 2019-2022 **Co-tutor** of the PhD student Elizabeth Lopes at the University of Lisbon
- 2019 – 2021 **Supervisor** of the PhD student Francesca Picarazzi at the PhD school in Chemical and Pharmaceutical Sciences of the University of Siena.
- 2019 – 2022 **Supervisor** of the PhD student Stefano Ciaco at the PhD school in Chemical and Pharmaceutical Sciences of the University of Siena.
- 2019 **Supervisor** of Alice Ballone, visiting PhD student from the University of Eindhoven (3 months)
- 2018 - 2020 **Co-tutor** of the PhD student Raffaele Passannanti at the PhD school in Chemical and Pharmaceutical Sciences of the University of Siena.
- 2019 **Supervisor** of Dario Valenti, visiting PhD student from Taros Chemicals GmbH & Co (2 months)
- 2014 **Co-tutor** of the degree thesis of Giusy Tassone, Course in Medicinal chemistry, University of Siena, thesis title: "Approccio Structure-Based per l'Identificazione in Silico di Possibili Inibitori della Proteina Hsp90 di *Leishmania braziliensis*".
- 2009 - 2011 **Co-tutor** of the PhD student Arul Christopher Robert Selwyne in the PhD course in Pharmaceutical Sciences, University of Siena. Thesis title: "Structure Based Drug Design against anti-tumor agents & Ligand Based Pharmacophore Modeling against anti-mycobacterial agents".
- 2011 **Co-tutor** of the degree thesis of Alessandro Nucci, Course in Medicinal chemistry, University of Siena, thesis title: "Uso della dinamica molecolare per lo studio dell'interazione tra la proteina NCp7 di HIV-1 e leganti noti".
- 2007 - 2008 **Assistance** to Prof. Claudio Luchinat in the course of Design and synthesis of MMP inhibitors, degree course in Biotechnology, University of Florence.

PERSONAL SKILLS

Mother tongue(s)
 Other language(s)
 English
 Digital competence

Italian		UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production			
B2	B2	B2	B2			B2
SELF-ASSESSMENT						
Information processing	Communication	Content creation	Safety			Problem solving
Proficient user	Independent user	Independent user	Proficient user			Proficient user

Computer skills:

- Advanced handling of Operating Systems based on UNIX (Linux, mostly based on Debian and Red Hat distributions) and WINDOWS.
- Programming and scripting in BASH and PYTHON languages.
- Very good knowledge of web browsers, and Windows Microsoft packages.

ORAL PRESENTATIONS
 (Conferences, seminars,
 workshops)

Date	22 March 2023
Place	Medicinal chemistry for drug design Training School of the PANDORA COST Action IG17104
Title	Virtual screening of a natural compounds library – <i>invited speaker</i>
Date	21 February 2023
Place	Interactionwins 2023 Innovative ThERApEutiC Targets In nOn-canonical Nucleic acids structures Winter InterNational School 2023
Title	Computer-aided discovery of DNA G-quadruplex binders with anticancer potential – <i>invited speaker</i>
Date	24 November 2022
Place	AMRelay 2022
Title	European Network for diagnosis and treatment of antibiotic-resistant bacterial infections (EURESTOP) – COST Action CA21145
Date	20 April 2022
Place	University of Piemonte Orientale, Department of Pharmaceutical Sciences
Title	Nature-inspired discovery of anticancer leads targeting DNA G-quadruplexes – <i>invited speaker</i>
Date	29 November 2021
Place	Polish Medical Research Agency Press Conference
Title	RNA technology as a medical technology of the future – <i>invited speaker</i>
Date	23-26 November 2021
Place	INTERACTION WINS 2021 - Winter School on non-canonical nucleic acid structures
Title	Computational modelling of nucleic acid structures and their interaction with small molecules – <i>invited plenary speaker</i>
Date	18-19 November 2021
Place	Bio.Natural II – Bioactive Natural Products Research Meeting (online)
Title	Selective Natural Product Modulators of DNA G-Quadruplex with Anticancer Potential – <i>invited speaker</i>
Date	1 – 30 November 2021
Place	7th International Electronic Conference on Medicinal Chemistry
Title	Identification of effective anticancer G-quadruplex-targeting chemotypes through the exploration of a high diversity library of natural compounds
Date	7 July 2021
Place	4 th International Summer School on Natural Products (ISSNP) Virtual edition
Title	Tricks and tips for a successful proposal – the MSCA-PF call – <i>invited speaker</i>
Date	30 June 2021
Place	Rome, Italy. COST Action CA17104 Training School “Targeting MDR Tumours: from natural product chemistry to nanocarrier-based formulation”
Title	Identification of bioactive compounds by computer-aided screening of a natural product library – <i>invited speaker</i>
Date	27-28 February 2020
Place	Belgrade, Serbia. Annual conference of the STRATAGEM COST Action CA17104
Title	Switching from 14-3-3 to Carbonic Anhydrases through hit recycling – <i>invited speaker</i>

- Date** 14-17 November 2019
Place 4th Satellite Meeting on Carbonic Anhydrases – University of Parma (Italy).
Title 3-nitrobenzoic acid derivatives as potent and selective carboxylic acid inhibitors of tumor-associated Carbonic Anhydrases IX and XII
- Date** 27-28 September 2019
Place Bioactive Natural Products Research Meeting 2019 (Bio.Natural Meeting 2019) - Universidade Lusófona / CBIOS-Research Center for Biosciences & Health Technologies, Lisbon, Portugal
Title Rational design of isoflavones as multitarget Hedgehog pathway inhibitors with anticancer effects – *invited speaker*
- Date** 15-17 August 2019
Place 11th International Retroviral Nucleocapsid and Assembly Symposium – IRNCAS Boston, MA, USA
Title Discovery and characterization of potent and selective HIV-1 Nucleocapsid protein inhibitors: the dihydroxypyrimidine carboxamides – *invited speaker*
- Date** 1-5 July 2019
Place International Summer School on Natural Products (ISSNP) third edition, Naples and Maratea (Italy).
Title Exploiting chemical diversity of natural products in drug discovery – *invited plenary speaker*
- Date** 17 June 2019
Place PhD course “Natural Products: Synthetic and Medicinal Chemistry”, PhD program in Chemistry and Industrial Chemistry, University of Milan (Italy).
Title Computer-aided discovery and optimization of Hedgehog pathway inhibitors inspired by natural products – *invited speaker*
- Date** 18 – 19 February 2019
Place COST Action CM1407 – Meeting dedicated to ECIs, Brussels. Belgium
Title From natural product PAINS to preclinical candidates through computational studies – *invited speaker*
- Date** 10 – 12 December 2018
Place Third Training School of the CM1407 COST Action: “Computational modeling tools in drug discovery with natural products”. Santa Cruz de Tenerife, Tenerife Island, Spain.
Title Computer-aided structure-based identification of HIV-1 nucleocapsid protein inhibitors – *invited speaker*
- Date** 6-7 September 2018
Place 5th EFMC Young Medicinal Chemist Symposium, Ljubljana, Slovenia
Title Targeting Zinc-Finger Proteins in Cancer and Viral Infections – *invited speaker*
- Date** 19 July 2018
Place Italian-Spanish-Portuguese Joint Meeting in Medicinal Chemistry MedChemSicily2018
Title Targeting Zinc-Finger Proteins in Cancer and Viral Infections – *invited speaker*
- Date** 11 September 2017
Place XXVI Congresso Nazionale della Società Chimica Italiana 10-14 September 2017 Paestum (SA), Italy.
Title Structure-based identification of HIV-1 nucleocapsid protein inhibitors active against wild-type and drug-resistant HIV-1 strains
- Date** 20 July 2017
Place Department of Biology and Biotechnology, Sapienza University of Roma, Italy
Title Computer-aided drug screening: the Hedgehog pathway case study – *invited speaker*
- Date** 15 June 2017
Place Natural Products: Tecniche analitiche e nuove tendenze nel mondo dei prodotti naturali. Novetel, Sesto Fiorentino (FI).
Title Utilizzo di una libreria in house di prodotti naturali nelle fasi iniziali di progetti di ricerca – *invited speaker*
- Date** 26 May 2017
Place New Trends in Carbonic Anhydrases' Research, 3rd Satellite Meeting on Carbonic

Curriculum Vitae of Mattia Mori

- Title** Andhydrases' Research. Montecatini, Italy
Computationally-driven design of CA Inhibitors.
- Date** **14 February 2017**
Place Natural Products. Tecniche analitiche e nuove tendenze nel mondo dei prodotti naturali, Sapienza University of Roma
Title Utilizzo di una libreria *in house* di prodotti naturali nelle fasi iniziali di progetti di ricerca – ***invited speaker***
- Date** **13 February 2017**
Place Symposium "The ubiquitin-proteasome system in yeast, plant and human. Hypotheses for new anti-cancer therapies". Sapienza University of Roma, Sala Multimediale – Palazzo del Rettorato
Title *In silico* identification of inhibitors of the cullin deneddylating enzyme Csn5.
- Date** **7 December 2016**
Place How computer chemistry could be exploited in current life science? Sapienza University of Roma, Plesso Tecce.
Title Efficient antagonists of SMO and GLI1 Hedgehog signaling targets by computational screening – ***invited speaker***
- Date** **27 – 30 October 2016**
Place 6th Multidisciplinary Cancer Research Congress, Konya, Turkey.
Title Discovery and Development of Glabrescione B (GlaB) for the Therapy of Hedgehog-Dependent Tumors – ***invited speaker***
- Date** **18 – 21 September 2016**
Place 10th IRNCAS – International Retroviral Nucleocapsid protein and Assembly Symposium, Montpellier, France.
Title Discovery and development of non-covalent NC inhibitors – ***invited speaker***
- Date** **15 – 19 May 2016**
Place Sixth European Workshop in Drug Synthesis (V EWDSy), Certosa di Pontignano, Siena, Italy.
Title THINPAD: Targeting the HIV-1 Nucleocapsid Protein to fight Antiretroviral Drug Resistance – ***invited speaker***
- Date** **4 – 5 April 2016**
Place Centro de Investigaciones Biológicas (CIB-CSIC). Madrid, Spain. Second conference of the CM1407 COST Action.
Title Exploitation of an in house library of natural products in early-stage drug discovery projects.
- Date** **10 – 11 March 2016**
Place COST Action CM1106 Final Workshop – Chioggia (Italy), Palazzo Grassi.
Title An update on the development of GlaB for the therapy of Hedgehog-dependent tumors.
- Date** **5 October 2015**
Place Sapienza University of Roma, Italy. First Conference of the CM1407 COST Action.
Title The CM1407 COST Action (Opening Talk).
- Date** **13 April 2015**
Place Faculty of Pharmacy, Strasbourg – France.
Title Computational investigation of structural and ligand-binding properties of zinc fingers: two case studies – ***invited speaker***
- Date** **26 – 27 March 2015**
Place COST Action CM1106 Meeting – Athens – Greece
Title Structure-based discovery of a natural compound targeting the Gli1 transcription factor of the Hedgehog pathway.
- Date** **25 February 2015**
Place Computationally Driven Drug Discovery Meeting - CDDD 4th Meeting, Auditorium of Angelini Research Center, Santa Palomba, Pomezia (RM), Italy
Title Structure-based discovery of a natural compound targeting the Gli1 transcription factor of the Hedgehog pathway.
- Date** **10 November 2014**
Place Padova, Dipartimento di Scienze del Farmaco – *Project Workshop on Inhibitors of HIV-1*

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- nucleocapsid protein.*
- Title** Computational design of inhibitors of the HIV-1 Nucleocapsid protein, a desirable target for future anti-HIV-1 therapies – *invited speaker*
- Date** **27 – 29 October 2014**
- Place** COST CM1307 Conference - Targeted chemotherapy towards diseases caused by endoparasites, Calvi, France.
- Title** A structure-based approach to identify small molecule inhibitors of *Leishmania braziliensis* Hsp90.
- Date** **14 – 15 October 2014**
- Place** COST CM1106 Workshop - Chemical Approaches to Targeting Drug Resistance in Cancer Stem Cells, Puerto de la Cruz, Tenerife, Spain.
- Title** Recent advances and opportunities in targeting cancer stem cells.
- Date** **21 May 2014**
- Place** Fifth European Workshop in Drug Synthesis (V EWDSy), Certosa di Pontignano, Siena, Italy.
- Title** Inhibition of the HIV-1 Nucleocapsid Protein: a New Strategy Against Antiretroviral Drug Resistance.
- Date** **19 – 20 May 2014**
- Place** Quo Vadis Synthesis, Università degli Studi di Roma – La Sapienza, Roma, Italy.
- Title** Kuwanol E, a Diels-Alder Type Adduct from *Morus nigra* Inhibitor of *Mycobacterium tuberculosis* Protein Tyrosine Phosphatase B – *invited speaker*
- Date** **25 February 2014**
- Place** Universidade Federal de Santa Catarina, Florianopolis, Brasil.
- Title** Molecular modeling tools in medicinal chemistry and structural biology: two case studies.
- Date** **21 February 2014**
- Place** Universidad de la Republica Uruguay, Montevideo, Uruguay.
- Title** Computational modeling tools in medicinal chemistry and structural biology: two case studies.
- Date** **18 February 2014**
- Place** Universidad de Quilmes, Bernal, Buenos Aires, Argentina.
- Title** Use of computational tools in drug discovery and structural biology: two case studies on virtual screening and Molecular Dynamics simulations.
- Date** **4 – 6 February 2013**
- Place** Second National Meeting on Computationally Driven Drug Discovery (2 CDDD), Genova, Italy.
- Title** Ligand-Based Discovery of Natural Compounds as Potent Inhibitors of the Hedgehog Pathway.
- Date** **31 May – 1 June 2012**
- Place** COST Meeting CM-0801 “New Drugs for Neglected Diseases”, Siena, Italy.
- Title** Discovery of natural products as potent inhibitors of *Mycobacterium tuberculosis* protein tyrosine phosphatase B.
- Date** **15 – 17 March 2012**
- Place** 6° Meeting on New Perspectives in Pharmaceutical Chemistry (6NPCF), Riccione, Italy.
- Title** Ligand-Based Discovery of Natural Compounds Potent Antagonists of the Hedgehog Pathway.
- Date** **8 November 2011**
- Place** University of Roma – La Sapienza, plesso Tecce, Aula D – IIT Seminars (Italian Institute of Technology)
- Title** A Multidisciplinary Approach for Modulating the Hedgehog Signaling by Natural Products.
- Date** **18 – 21 September 2011**
- Place** 8th International Retroviral NC Symposium – Barcelona, Spain.
- Title** Computational methods for identifying small molecule modulators of the HIV-1 NCp7 activity.

COMMITTEES

Curriculum Vitae of Mattia Mori

- 2020-present** Member of the Organizing Committee of the International Summer School on Natural Products (ISSNP).
- 2019** Member of the Organizing Committee of the "Advanced school on carbohydrate chemistry" <http://www.chimica-dei-carboidrati.it/scuola-avanzata-di-chimica-dei-carboidrati-xvii-cscc-2020.html>
- 2018** Member of the Organizing Committee of the European Workshop in Drug Design (EWDD)

PARTICIPATION to SCHOOLS and WORKSHOPS

- 2019** Third International Summer School on Natural Products (ISSNP), Naples and Maratea (Italy).
- 2019** XII European Workshop in Drug Design, Certosa di Pontignano, Siena, ITALY
- 2017** XI European Workshop in Drug Design, Certosa di Pontignano, Siena, ITALY
- 2015** X European Workshop in Drug Design, Certosa di Pontignano, Siena, ITALY
- 2013** IX European Workshop in Drug Design, Certosa di Pontignano, Siena, ITALY
- 2011** VIII European Workshop in Drug Design, Certosa di Pontignano, Siena, ITALY
- 2010** EMBO course in Biomolecular Simulations, Institute Pasteur, Paris, FRANCE
- 2009** VII European Workshop in Drug Design, Certosa di Pontignano, Siena, ITALY
- 2008** Python programming in molecular modeling and drug design, S-IN. Vicenza, ITALY

EDITORIAL ACTIVITY

- 2021 - present** **Co-Editor** of Current Pharmaceutical Design (Q2 - Bentham Science). IF = 3.116. <https://benthamscience.com/journals/current-pharmaceutical-design/editorial-board/>
- 2020-2021** **Guest Editor** of the Special Issue entitled "Antiviral Drug Targets: Structure, Function, and Drug Design" in the International Journal of Molecular Sciences, together with Ilaria Vicenti.
- 2020-2021** **Guest Editor** of the Special Issue entitled "In Silico Activity Profiling of Natural Products" in Molecules, together with Ilza Pajeva.
- 2020-2021** **Guest Editor** of the special Issue entitled "Coronaviruses" in Expert Opinion Therapeutic Patents, together with Claudiu T. Supuran and Alex Donald.
- 2020** **Guest Editor** of the special Issue entitled "Natural Products as an important source in drug discovery" in Current Pharmaceutical Design (Bentham Science) together with Dr. Patricia Rijo.
- 2020 – present** **Topical Advisory Panel Members** – International Journal of Molecular Sciences (Q1, MDPI). IF = 5.923 https://www.mdpi.com/journal/ijms/topical_advisory_panel
- 2020 – present** **Topical Advisory Panel Members** – Molecules (Q1, MDPI). IF = 4.411 https://www.mdpi.com/journal/molecules/topic_editors
- 2019** **Guest Editor** of the special issue entitled "In memory of Maurizio Botta: His vision of Medicinal Chemistry" – ACS Medicinal Chemistry Letters. <https://pubs.acs.org/doi/10.1021/acsmchemlett.9b00392>
- 2018 - 2021** **Early Career Board (ECB) member** of the Journal of Chemical Information and Modeling – ACS Publications <http://pubs.acs.org/journal/jcisd8>
- 2018 – present** **Editorial Board Member** of Current Drug Discovery Technologies – Bentham Science

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- <https://benthamscience.com/journals/current-drug-discovery-technologies/#top>
- 2015 – present **Editorial Board Member** of Current Enzyme Inhibition – Bentham Science
<https://benthamscience.com/journals/current-enzyme-inhibition/>
- 2015 – present **Editorial Board Member** of Journal of Enzyme Inhibition and Medicinal Chemistry – Taylor & Francis <http://www.tandfonline.com/toc/ienz20/current>
- 2015-2016 **Guest Editor** of two Thematic Issues “*Challenging organic syntheses and pharmacological applications of natural products and their derivatives [Part I and Part II]*” of Current Pharmaceutical Design – Bentham Science

EVALUATION AND REVIEWING

- PROJECTS/FUNDING BODIES** Agenzia Nazionale di Valutazione del Sistema Universitario e della Ricerca - VQR 2015-2019
COST – open call 1 2020
European Commission - H2020-MSCA-IF-2020
European Commission - H2020-MSCA-IF-2019
European Commission - H2020-MSCA-IF-2018
European Commission - H2020-MSCA-IF-2017
European Commission - H2020-MSCA-ITN-2017
IBiSA 2016 call (France)
- JOURNALS (in alphabetical order)** ACS Medicinal Chemistry Letters
ACS OMEGA
Biomedicine & Pharmacotherapy
Bioorganic & Medicinal Chemistry
Bioorganic Chemistry
Bioscience Reports
Cancer Letters
Cellular and Molecular Lifesciences
Chemistry & Biodiversity
ChemBioChem
Computational Biology & Chemistry
Computational Structural Biotechnology Journal
Current Drug Discovery: Technologies
Current Enzyme Inhibition
Current Medicinal Chemistry
Drug Discovery Today
European Journal of Medicinal Chemistry
Expert Opinion Therapeutic Patents
F1000 Research
Future mEdicinal Chemistry
International Journal Molecular Sciences
Journal of Chemical Information and Modeling
Journal of Enzyme Inhibition and Medicinal Chemistry
Journal of Histochemistry & Cytochemistry
Journal of Medicinal Chemistry
JSM Biotechnology & Biomedical Engineering
Letters in Drug Design & Discovery
Letters in Organic Chemistry
Molecular Pharmaceutics
Molecules
PLoS ONE
Phytochemistry Review
RNA Biology
Scientific Reports
- EVALUATION COMMISSIONS** University of Strasbourg, External member in the PhD jury for the evaluation of the candidate Lesia Kovalenko. October 2017
- University of Siena, Expert member in the commission of PhD evaluation – 27°, 28°, 29° cycle. February 2017

PARTICIPATION TO PROJECTS

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Curriculum Vitae of Mattia Mori

- Framework and year** **Italian Cystic Fibrosis Research Foundation FFC2022**
Title "Esculentin-derived peptides as novel therapeutic agents with antimicrobial and CFTR potentiator activities to address cystic fibrosis lung disease"
Role Partner – responsible of research unit
- Framework and year** **COST Association**
Title CA21145 - European Network for diagnosis and treatment of antibiotic-resistant bacterial infections (EURESTOP)
Role Chair
- Framework and year** **Italian Cystic Fibrosis Research Foundation FFC2021**
Title "Pharmacological inhibition of colistin resistance in Gram-negative cystic fibrosis pathogens"
Role Partner – responsible of research unit
- Framework and year** **Italian Cystic Fibrosis Research Foundation FFC2019**
Title Antimicrobial peptides from amphibian skin for treatment of lung pathology in cystic fibrosis: advanced in vitro and in vivo functional characterization
Role External collaborator
- Framework and year** **Italian Cystic Fibrosis Research Foundation FFC2019**
Title Pharmacological inhibition of colistin resistance in gram-negative cystic fibrosis pathogens
Role External collaborator
- Framework and year** **COST 2018–2022**
Title CA18238 – European transdisciplinary networking platform for marine biotechnology.
Role Management Committee substitute for Italy. WG member.
- Framework and year** **COST 2017–2021**
Title CA17104 – Stratagem: New diagnostic and therapeutic tools against multidrug resistant tumours.
Role Working group member (WG2).
- Framework and year** **AIRC (Associazione Italiana per la Ricerca sul Cancro) 2018–2022**
Title IG#20801 New multi-targeting approaches in Hedgehog-dependent cancers.
Role Participation in project writing; member of the research team.
- Framework** **MIUR "Dipartimenti di Eccellenza" 2017**
Title Realizzazione ed applicazione di una innovativa piattaforma tecnologica alimentata da simulazioni QM/MM per lo sviluppo di molecole fotoattivabili.
Role Participation in project writing.
- Framework** **COST 2016–2020**
Title CA15138 – European Network of Multidisciplinary Research and Translation of Autophagy knowledge (TRANSAUTOPHAGY).
Role Management Committee Member.
- Framework** **COST 2015–2019**
Title CM1407 – Challenging organic syntheses inspired by nature - from natural products chemistry to drug discovery.
Role Management Committee Member, participation in project's proposal setup and writing.
- Framework** **Sapienza Project 2015**
Title MIUR Code: C26H15ECP5. Synthesis and evaluation of innovative molecular drugs in brain tumors treatment.
Role Participant.
- Framework** **AIRC (Associazione Italiana per la Ricerca sul Cancro) 2014–2017**
Title IG#14723. "Targeting hedgehog signaling to control brain cancer stem cells".
Role External collaborator.
- Framework** **Sapienza Project 2014**
Title MIUR Code: C26H14YBLC. Identification, sustainable synthesis and research of molecular drugs efficacy in brain tumors treatment.
Role Participant.
- Framework** **FP7 2013–2016**
Title THINPAD – Targeting the HIV-1 Nucleocapsid Protein to fight Antiretroviral Drug Resistance. Grant Agreement #601969.

ORCID: 0000-0003-2398-1254

- Role Coordination of project writing and negotiation. Support to project coordination. Task leader in WP2.
- Framework PRIN 2012**
 Title PRIN-2012C5YJSK – Identificazione, sintesi sostenibile e studio dell'efficacia di nuovi farmaci molecolari nei tumori del sistema nervoso
 Role Participant.
- Framework Sapienza Project 2012**
 Title MIUR Code: C26A123SMB. Blending Bio- and METal- catalysts for sustainable CHEMistry.
 Role Participant.
- Framework PRIN 2007**
 Title PRIN-2007M5MWM9 – Gli ioni metallici nelle interazioni proteina-proteina.
 Role Participant.
- Framework FP6 2003–2007**
 Title LSHB-CT-2005019102. Nano4Drugs – An innovative Protein-Based Drug Delivery Device using Flourescent Diamond Nano-Particles.
 Role Participant.

ORGANIZATION OF MEETINGS, CONFERENCES, WORKSHOPS

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- 4-7 July 2021 Scuola Avanzata di Chimica dei Carboidrati (XVII CSCC 2021, 4-7 Luglio 2021)
 Role Organizing Committee
- 6-8 July 2021 4th Edition of the International Summer School on Natural products (ISSNP)
 Role Scientific Committee
- 15 December 2020 CA1704 COST ACTION – WG2 Meeting and International Online Symposium on “Synthesis and nanodelivery strategies for new therapeutic tools against Multidrug Resistant Tumours”
 Role Co-organizer, member of the scientific committee
- 10, 17, and 24 July 2020 ISSNP Webinar series “Viruses, not only the bad ones”
 Role Editor/Organizer
- 19–24 May 2019 12th European Workshop in Drug Design (EWDD), Certosa di Pontignano, Siena.
 Role Scientific Committee + Local Organizing Committee
- 18–19 February 2019 CM1407 COST Action meeting dedicated to ECIs. Brussels, Belgium.
 Role Scientific Committee
- 13–14 December 2019 Final conference of the CM1407 COST Action “Challenging organic syntheses inspired by nature - from natural products chemistry to drug discovery”. Santa Cruz de Tenerife, Tenerife, Spain.
 Role Scientific Committee
- 10–12 December 2018 Third Training School of the CM1407 COST Action: “Computational modeling tools in drug discovery with natural products”. Santa Cruz de Tenerife, Tenerife Island, Spain.
 Role Scientific Committee
- 1–2 March 2018 Fifth conference of the CM1407 COST Action “Challenging organic syntheses inspired by nature - from natural products chemistry to drug discovery”. Salini Resort, Malta.
 Role Scientific Committee
- 21–22 September 2017 Fourth conference of the CM1407 COST Action (WG/MC meeting) “Challenging organic syntheses inspired by nature - from natural products chemistry to drug discovery”. Lusòfona University, Lisbon, Portugal
 Role Scientific Committee
- 18–20 September 2017 Second Training School of CM1407 COST Action “Synthesis, isolation and structural elucidation of bioactive compounds”. Lusòfona University, Lisbon, Portugal

Curriculum Vitae of Mattia Mori

Role	Scientific Committee
21–26 May 2017	XI European Workshop in Drug Design; Certosa di Pontignano - Siena
Role	Local Organizing Committee
2–3 March 2017	Third conference of the CM1407 COST Action “Challenging organic syntheses inspired by nature - from natural products chemistry to drug discovery”. Krakow, Poland.
Role	Scientific Committee
4–5 April 2016	Second conference of the CM1407 COST Action “Challenging organic syntheses inspired by nature - from natural products chemistry to drug discovery”. Madrid, Spain.
Event	
Role	Scientific Committee
5–6 October 2015	First conference of the CM1407 COST Action “Challenging organic syntheses inspired by nature - from natural products chemistry to drug discovery”
Event	
Role	Scientific Committee; Organizing Committee
17–22 May 2015	X European Workshop in Drug Design; Certosa di Pontignano - Siena
Event	
Role	Local Organizing Committee
19–20 January 2015	Targeting Hedgehog Signaling in Cancer Stem Cells - <i>Focused Joint-meeting for Early Stage Researchers</i> . Barcelona, Spain
Event	
Role	Scientific Committee and Organizing Committee
19–25 May 2013	IX European Workshop in Drug Design; Certosa di Pontignano - Siena
Place	
Role	Local Organizing Committee
22–28 May 2011	VIII European Workshop in Drug Design; Certosa di Pontignano - Siena
Place	
Role	Local Organizing Committee

AWARDS

2018	Nvidia GPU Grant
2018	Winner of the young medicinal chemist meeting in Italy and invited talk at the 5 th EFMC Young Medicinal Chemistry Symposium (YMCS2018)
2018	Winner of the 2018 Award by the Medicinal Chemistry Division of the Italian Chemical Society
2015	ACS Medicinal Chemistry Letter Editor's choice mark for the paper entitled “ <i>Exploring Oxidovanadium(IV) Complexes as YopH Inhibitors: Mechanism of Action and Modeling Studies</i> ”.
2015	ACS Medicinal Chemistry Letters Cover page for the paper entitled “ <i>Exploring Oxidovanadium(IV) Complexes as YopH Inhibitors: Mechanism of Action and Modeling Studies</i> ”.
2010	EMBO fellowship to attend the EMBO practical course in Biomolecular Simulations, Pasteur Institute, Paris, France.

MEMBERSHIP

Member of the Italian Chemical Society (SCI), division of medicinal chemistry (chimica farmaceutica) since 2017

Member of The International Natural Product Sciences Taskforce (INPST) since 2020

PATENTS

- 5) Imperi, F., Ascenzioni, F., **Mori, M.**, Ghirga, F., Quaglio, D., Corradi, S., et al. (2020) Inhibitors Of Antibiotic Resistance Mediated By AmT. WO/2021/014422.
- 4) C. Limatola, G. D'Alessandro, L. Di Marcotullio, P. Infante, B. Botta, **M. Mori**, F. Ghirga, C. Ingallina, S. Berardozzi (2018). "Compounds for use in the treatment of brain diseases". WO2019149962A1
- 3) B. Botta, I. Screpanti, L. Tottone, N. Zhadanoskaya, C. Ingallina, F. Giulimondi, D. Quaglio, R. Palermo, **M. Mori**, F. Ghirga (2016). "Inibitori di Notch per uso nel trattamento della leucemia linfoblastica acuta a cellule T" *Italian Patent application* number 102016000132360
- 2) M. Botta; **M. Mori**; F. Saladini; M. Zazzi; P. Fezzardi; S. Harper; S. Malancona; M. Santoriello; V. Summa; D. Deforni; L. Kovalenko; Y. Mely; M. Pires; E. Real; S. Lyonnais; G. Mirambeau (2016). *European Patent application* number 16186511.8 – 1452.
- 1) B. Botta; A. Gulino; M. Botta; **M. Mori**; L. Di Marcotullio; P. Infante; F. Ghirga; S. Toscano; C. Ingallina; R. Alfonsi (2014). Multitarget hedgehog pathway inhibitors and uses thereof, *PCT Int. Appl.* (2016), WO 2014207069.

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LIST OF PUBLICATIONS

Papers in peer-reviewed journals:

- 129) **Mori M**, Quaglio D, Calcaterra A, Ghirga F, Sorrentino L, Cammarone S, Fracella M, D'Auria A, Frasca F, Criscuolo E, Clementi N, Mancini N, Botta B, Antonelli G, Pierangeli A, Scagnolari C. Natural Flavonoid Derivatives Have Pan-Coronavirus Antiviral Activity. *Microorganisms*. **2023**; 11 (2): 314.
- 128) Platella C, Ghirga F, Musumeci D, Quaglio D, Zizza P, Iachettini S, D'Angelo C, Biroccio A, Botta B, **Mori M**, Montesarchio D. Selective Targeting of Cancer-Related G-Quadruplex Structures by the Natural Compound Dicentrine. *Int J Mol Sci*. **2023**; 24 (4): 4070.
- 127) Li S, **Mori M**, Yang M, Elfazazi S, Hortigüela R, Chan P, Feng X, Risinger AL, Yang ZY, Oliva MA, Diaz JF and Fang WS. Targeting tubulin C-terminal tail by charged small molecules. *Org. Biomol. Chem.*, **2022**; 21 (1): 153-162.
- 126) Zhdanovskaya N., Lazzari S, Caprioglio D, Firrincieli M, Maioli C, Pace E, Imperio D, Talora C, Bellavia D, Checquolo S, **Mori M**, Screpanti i, Minassi A, Palermo R. Identification of a Novel Curcumin Derivative Influencing Notch Pathway and DNA Damage as a Potential Therapeutic Agent in T-ALL. *Cancers* **2022**, 14(23), 5772
- 125) Picarazzi F, Zuanon M, Pasqualetto G, Cammarone S, Romeo I, Young MT, Brancale A, Bassetto M, **Mori M**. * Identification of Small Molecular Chaperones Binding P23H Mutant Opsin through an In Silico Structure-Based Approach. *J Chem Inf Model*. **2022**; 62 (22): 5794-5805
- 124) Espadinha M, Lopes EA, Marques V, Amaral JD, Dos Santos DJVA, **Mori M**, Daniele S, Piccarducci R, Zappelli E, Martini C, Rodrigues CMP, Santos MMM. Discovery of MDM2-p53 and MDM4-p53 protein-protein interactions small molecule dual inhibitors. *Eur J Med Chem*. **2022**; 241: 114637
- 123) Di Maria S, Picarazzi F, **Mori M**, Cianciusi A, Carbone A, Crespan E, Perini C, Sabetta S, Deplano S, Poggialini F, Molinari A, Aronne R, Maccioni E, Maga G, Angelucci A, Schenone S, Musumeci F, Dreassi E. Novel pyrazolo[3,4-d]pyrimidines as dual Src/Bcr-Abl kinase inhibitors: Synthesis and biological evaluation for chronic myeloid leukemia treatment. *Bioorg Chem*. **2022**; 128: 106071
- 122) Pontecorvi V, **Mori M**, Picarazzi F, Zara S, Carradori S, Cataldi A, Angeli A, Berrino E, Chimenti P, Ciogli A, Secci D, Guglielmi P, Supuran CT. Novel Insights on Human Carbonic Anhydrase Inhibitors Based on Coumalic Acid: Design, Synthesis, Molecular Modeling Investigation, and Biological Studies. *Int J Mol Sci*. **2022**; 23 (14): 7950
- 121) Grytsyk N, Richert L, Didier P, Dziuba D, Ciaco S, Mazzoleni V, Lequeu T, **Mori M**, Tor Y, Martinez-Fernandez L, Improtta R, Mély Y. Thienoguanosine, a unique non-perturbing reporter for investigating rotational dynamics of DNA duplexes and their complexes with proteins. *Int J Biol Macromol*. **2022**; 213: 210-225
- 120) Lopes EA, Mestre R, Fontinha D, Legac J, Pei JV, Sanches-Vaz M, **Mori M**, Lehane AM, Rosenthal PJ, Prudêncio M, Santos MMM. Discovery of spirooxadiazoline oxindoles with dual-stage antimalarial activity. *Eur J Med Chem*. **2022**; 236: 114324
- 119) Soloperto A, Quaglio D, Baiocco P, Romeo I, **Mori M**, Ardini M, Presutti C, Sannino I, Ghirga S, Iazzetti A, Ippoliti R, Ruocco G, Botta B, Ghirga F, Di Angelantonio S, Boffi A. Rational design and synthesis of a novel BODIPY-based probe for selective imaging of tau tangles in human iPSC-derived cortical neurons. *Sci Rep*. **2022** Mar 28;12(1):5257. doi: 10.1038/s41598-022-09016-z.
- 118) Kowalczyk T, Merez-Sadowska A, Rijo P, **Mori M**, Hatziantoniou S, Górski K, Szemraj J, Piekarski J, Śliwiński T, Bijak M, Sitarek P. Hidden in Plants-A Review of the Anticancer Potential of the Solanaceae Family in In Vitro and In Vivo Studies. *Cancers (Basel)*. **2022** Mar 11;14(6):1455. doi: 10.3390/cancers14061455.
- 117) Hammer Q, Dunst J, Christ W, Picarazzi F, Wendorff M, Momayyezi P, Huhn O, Netskar HK, Maleki KT, García M, Sekine T, Sohlberg E, Azzimato V, Aouadi M; Karolinska COVID-19 Study Group; Severe COVID-19 GWAS Group, Degenhardt F, Franke A, Spallotta F, **Mori M**, Michaëlsson J, Björkström NK, Rückert T, Romagnani C, Horowitz A, Klingström J, Ljunggren HG, Malmberg KJ. SARS-CoV-2 Nsp13 encodes for an HLA-E-stabilizing peptide that abrogates inhibition of NKG2A-expressing NK cells. *Cell Rep*. **2022**; 38(10): 110503.
- 116) **Mori M***, Supuran CT. Acipimox inhibits human carbonic anhydrases. *J Enzyme Inhib Med Chem*. **2022**; 37(1):672-679

- 115) Casciaro B, Ghirga F, Cappiello F, Vergine V, Loffredo MR, Cammarone S, Puglisi E, Tortora C, Quaglio D, **Mori M**, Botta B, Mangoni ML. The Triprenylated Anthranoid Ferruginin A, a Promising Scaffold for the Development of Novel Antibiotics against Gram-Positive Bacteria. *Antibiotics* **2022**, 11, 84
- 114) Ferrera L, Cappiello F, Loffredo MR, Puglisi E, Casciaro B, Botta B, Galiotta LJV, **Mori M***, Mangoni ML. Esc peptides as novel potentiators of defective cystic fibrosis transmembrane conductance regulator: an unprecedented property of antimicrobial peptides. *Cell Mol Life Sci.* **2021**. doi: 10.1007/s00018-021-04030-2
- 113) Picarazzi F, Manetti F, Marigo V, **Mori M.*** Conformational insights into the C-terminal mutations of human rhodopsin in retinitis pigmentosa. *J Mol Graph Model.* **2022**; 110: 108076
- 112) Platella C, Ghirga F, Zizza P, Pompili L, Marzano S, Pagano B, Quaglio D, Vergine V, Cammarone S, Botta B, Biroccio A, **Mori M***, Montesarchio D. Identification of Effective Anticancer G Quadruplex-Targeting Chemotypes through the Exploration of a High Diversity Library of Natural Compounds. *Pharmaceutics* **2021**, 13, 1611.
- 111) Azzimato V, Chen P, Barreby E, Morgantini C, Levi L, Vankova A, Jager J, Sulen A, Diotallevi M, Shen JX, Miller A, Ellis E, Rydén M, Na Slund E, Thorell A, Lauschke VM, Channon KM, Crabtree MJ, Haschemi A, Craige SM, **Mori M**, Spallotta F, Aouadi M. Hepatic miR-144 drives fumarase activity preventing NRF2 activation during obesity. *Gastroenterology.* **2021**: S0016-5085(21)03410-7. doi: 10.1053/j.gastro.2021.08.030
- 110) Bonandi E, **Mori M**, Infante P, Basili I, Di Marcotullio L, Calcaterra A, Catti F, Botta B, Passarella D. Design and Synthesis of New Withaferin A Inspired Hedgehog Pathway Inhibitors. *Chemistry.* **2021**;27(32):8350-8357. doi: 10.1002/chem.202100315
- 109) Pediconi N, Ghirga F, Del Plato C, Peruzzi G, Athanassopoulos CM, **Mori M**, Crestoni ME, Corinti D, Ugozzoli F, Massera C, Arcovito A, Botta B, Boffi A, Quaglio D, Baiocco P. Design and Synthesis of Piperazine-Based Compounds Conjugated to Humanized Ferritin as Delivery System of siRNA in Cancer Cells. *Bioconjug Chem.* **2021**;32(6):1105-1116.
- 108) Zheng Y, Yang XW, Schols D, **Mori M**, Botta B, Chevigné A, Mulinge M, Steinmetz A, Schmit JC, Seguin-Devaux C. Active Components from *Cassia abbreviata* Prevent HIV-1 Entry by Distinct Mechanisms of Action. *Int. J. Mol. Sci.* **2021**, 22, 5052
- 107) Boccuto A, Dragoni F, Picarazzi F, Lai A, Della Ventura C, Veo C, Giammarino F, Saladini F, Zehender G, Zazzi M, **Mori M**, Vicenti I. Sofosbuvir Selects for Drug-Resistant Amino Acid Variants in the Zika Virus RNA-Dependent RNA-Polymerase Complex In Vitro. *Int. J. Mol. Sci.* **2021**, 22(5), 2670
- 106) Ghirga F, Quaglio D, **Mori M**, Cammarone S, Iazzetti A, Goggiamani A, Ingallina C, Botta B, Calcaterra A. A unique high-diversity natural product collection as a reservoir of new therapeutic leads. *Org. Chem. Front.*, **2021**,8, 996-1025
- 105) Gelardi ELM, Colombo G, Picarazzi F, Ferraris DM, Mangione A, Petrarolo G, Aronica E, Rizzi M, **Mori M**, La Motta C, Garavaglia S. A Selective Competitive Inhibitor of Aldehyde Dehydrogenase 1A3 Hinders Cancer Cell Growth, Invasiveness and Stemness In Vitro. *Cancers (Basel).* **2021**; 13 (2): 356.
- 104) Picarazzi F, Vicenti I, Saladini F, Zazzi M, **Mori M.*** Targeting the RdRp of Emerging RNA Viruses: The Structure-Based Drug Design Challenge. *Molecules.* **2020**; 25 (23): 5695.
- 103) Cusinato J, Cau Y, Calvani AM, **Mori M.*** Repurposing drugs for the management of COVID-19. *Expert Opin Ther Pat.* **2020** Dec 31:1-13
- 102) Infante P, Malfanti A, Quaglio D, Balducci S, De Martin S, Bufalieri F, Mastrotto F, Basili I, Garofalo M, Lospinoso Severini L, **Mori M**, Manni I, Moretti M, Nicoletti C, Piaggio G, Caliceti P, Botta B, Ghirga F, Salmaso S, Di Marcotullio L. Glabrescione B delivery by self-assembling micelles efficiently inhibits tumor growth in preclinical models of Hedgehog-dependent medulloblastoma. *Cancer Lett.* **2021**; 499:220-231.
- 101) **Mori M**, Ciaco S, Mély Y, Karioti A. Inhibitory Effect of Lithospermic Acid on the HIV-1 Nucleocapsid Protein. *Molecules.* **2020**; 25 (22): 5434.
- 100) Ballone A, Picarazzi F, Prosser C, Davis J, Ottmann C, **Mori M.*** Experimental and Computational Druggability Exploration of the 14-3-3 ζ /SOS1pS¹¹⁶¹ PPI Interface. *J Chem Inf Model.* **2020**. 60(12):6555-6565
- 99) Caggiano C, Guida E, Todaro F, Bielli P, **Mori M**, Ghirga F, Quaglio D, Botta B, Moretti F, Grimaldi P, Rossi P, Jannini EA, Barchi M, Dolci S. Sempervirine inhibits RNA polymerase I transcription independently from p53 in tumor cells. *Cell Death Discovery* (2020) 6:111
- 98) Giuntini G, Monaci S, Cau Y, **Mori M**, Naldini A, Carraro F. Inhibition of Melanoma Cell Migration and Invasion Targeting the Hypoxic Tumor Associated CAXII. *Cancers (Basel).* **2020** Oct 17;12(10):E3018.
- 97) Kuchlyan J, Martinez-Fernandez L, **Mori M[§]**, Gavvala K, Ciaco S, Boudier C, Richert L, Didier P, Tor Y, Improta R, Mély Y. What Makes Thienoguanosine an Outstanding Fluorescent DNA Probe? *J Am Chem Soc.* **2020**; 142 (40): 16999-17014
- 96) Menzel J, Kownatzki-Danger D, Tokar S, Ballone A, Unthan-Fechner K, Kilisch M, Lenz C, Urlaub H, **Mori M**, Ottmann C, Shattock MJ, Lehnart SE, Schwappach B. 14-3-3 binding creates a memory of kinase action by stabilizing the modified state of phospholamban. *Sci Signal.* **2020**; 13(647).
- 95) Quaglio D, Mangoni ML, Stefanelli R, Corradi S, Casciaro B, Vergine V, Lucantoni F, Cavinato L, Cammarone S, Loffredo MR, Cappiello F, Calcaterra A, Erazo S, Ghirga F, **Mori M***, Imperi F, Ascenzioni F, Botta B. ent-Beyerane Diterpenes as a Key Platform for the Development of ArnT-Mediated Colistin Resistance Inhibitors. *J Org Chem.* **2020**; 85(16):10891-10901.
- 94) Barcherini V, Almeida J, Lopes EA, Wang M, Magalhães E Silva D, **Mori M**, Wang S, Saraiva L, Santos MMM. Potency and Selectivity Optimization of Tryptophan-Derived Oxazolisoindolinones: Novel p53 Activators in Human Colorectal Cancer. *ChemMedChem.* **2020**. doi: 10.1002/cmde.202000522
- 93) de Souza ACA, **Mori M**, Sens L, Rocha RF, Tizziani T, de Souza LFS, Domeneghini Chiaradia-Delatorre L, Botta M, Nunes RJ, Terenzi H, Menegatti ACO. A chalcone derivative binds a putative allosteric site of YopH: Inhibition of a virulence factor of *Yersinia*. *Bioorg Med Chem Lett.* **2020**; 30 (16): 127350.
- 92) Maj P, **Mori M**, Sobich J, Markowicz J, Uram L, Zieliński Z, Quaglio D, Calcaterra A, Cau Y, Botta B, Rode W. Alvaxanthone, a Thymidylate Synthase Inhibitor with Nematocidal and Tumoricidal Activities. *Molecules* **2020**, 25(12), 2894

- 91) Ghirga F, Stefanelli R, Cavinato L, Lo Sciuto A, Corradi S, Quaglio D, Calcaterra A, Casciaro B, Loffredo MR, Cappiello F, Morelli P, Antonelli A, Rossolini GM, Mangoni M, Mancone C, Botta B, **Mori M**, Ascenzioni F, Imperi F. A Novel Colistin Adjuvant Identified by Virtual Screening for ArnT Inhibitors. *J Antimicrob Chemother.* **2020** Jun 8:dkaa200
- 90) Malancona S, **Mori M**[§], Fezzardi P, Santoriello M, Basta A, Nibbio M, Kovalenko L, Speziale R, Battista MR, Cellucci A, Gennari N, Monteagudo E, Di Marco A, Giannini A, Sharma R, Pires M, Real E, Zazzi M, Dasso Lang MC, De Forni D, Saladini F, Mely Y, Summa V, Harper S, Botta M. 5,6-Dihydroxypyrimidine Scaffold to Target HIV-1 Nucleocapsid Protein. *ACS Med. Chem. Lett.* **2020**, 11, 766–772.
- 89) Quaglio D, Corradi S, Erazo S, Vergine V, Berardozi S, Sciubba F, Cappiello F, Crestoni ME, Ascenzioni F, Imperi F, Delle Monache F, **Mori M**, Loffredo MR, Ghirga F, Casciaro B, Botta B, Mangoni ML. Structural Elucidation and Antimicrobial Characterization of Novel Diterpenoids from *Fabiana densa* var. *ramulosa*. *ACS Med. Chem. Lett.* **2020**, 11, 760–765
- 88) Ciaco S, Humbert N, Real E, Boudier C, Francesconi O, Roelens S, Nativi C, Seguin-Devaux C, **Mori M**^{*}, Yves Mély. A Class of Potent Inhibitors of the HIV-1 Nucleocapsid Protein Based on Aminopyrrolic Scaffolds. *ACS Med. Chem. Lett.* **2020**, 11, 698–705.
- 87) Diukendjieva A, Zaharieva MM, **Mori M**^{*}, Alov P, Tsakovska I, Pencheva T, Najdenski H, Křen V, Felici C, Bufalieri F, Di Marcotullio L, Botta B, Pajeva I. Dual SMO/BRAF Inhibition by Flavonolignans from *Silybum marianum*. *Antioxidants (Basel).* **2020**; 9 (5). pii: E384.
- 86) Quatrini L, Gelardi ELM, Coviello V, Sartini S, Ferraris D, **Mori M**, Nakano I, Garavaglia S, La Motta C. Imidazo[1,2-a]pyridine Derivatives as Aldehyde Dehydrogenase Inhibitors: Novel Chemotypes to Target Glioblastoma Stem Cells. *J Med Chem.* **2020**. doi: 10.1021/acs.jmedchem.9b01910
- 85) Iralde-Lorente L, Tassone G, Clementi L, Franci L, Munier CC, Cau Y, **Mori M**, Chiariello M, Angelucci A, Perry MWD, Pozzi C, Mangani S, Botta M. Identification of Phosphate-Containing Compounds as New Inhibitors of 14-3-3/c-Abl Protein-Protein Interaction. *ACS Chem Biol.* **2020**. doi: 10.1021/acscchembio.0c0003
- 84) Quaglio D, Infante P, Di Marcotullio L, Botta B, **Mori M**^{*}. Hedgehog signaling pathway inhibitors: an updated patent review (2015-present). *Exp Opin Ther Pat* **2020**:1-16, doi: 10.1080/13543776.2020.1730327
- 83) Batista FAH, Ramos SL Jr, Tassone G, Leitão A, Montanari CA, Botta M, **Mori M**^{*}, Borges JC. Discovery of small molecule inhibitors of *Leishmania braziliensis* Hsp90 chaperone. *J Enzyme Inhib Med Chem.* **2020** Dec;35(1):639-649
- 82) Humbert N, Kovalenko L, Saladini F, Giannini A, Pires M, Botzanowski T, Cherenok S, Boudier C, Sharma KK, Real E, Zaporozhets OA, Cianfrani S, Seguin-Devaux C, Poggialini F, Botta M, Zazzi M, Kalchenko VI, **Mori M**, Mély Y. (Thia)calixarenephosphonic Acids as Potent Inhibitors of the Nucleic Acid Chaperone Activity of the HIV-1 Nucleocapsid Protein with a New Binding Mode and Multitarget Antiviral Activity. *ACS Infect Dis.* **2020** Feb 21. doi: 10.1021/acsinfectdis.9b00290
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- 80) **Mori M**^{*}, Manetti F, Botta B, Tafi A. In Memory of Maurizio Botta: His Contribution to the Development of Computer-Aided Drug Design. *J Chem Inf Model.* **2019**; 59(12): 4961-4967
- 79) Cirigliano A, Amelina A, Biferali B, Maccone A, Mozzetta C, Bianchi MM, **Mori M**, Botta B, Pick E, Negri R, Rinaldi T. Statins interfere with the attachment of *S. cerevisiae* mtDNA to the inner mitochondrial membrane. *J Enzyme Inhib Med Chem.* **2020**; 35 (1): 129-137
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