



Michele Casoria

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EDUCATION AND TRAINING

15/11/2024 – CURRENT Parma, Italy
POSTDOCTORAL RESEARCHER University of Parma

31/10/2021 – 31/10/2024 Sesto Fiorentino, Italy
PHD STUDENT University of Florence

Final Discussion will be in first trimester of 2025.

Address Via della Lastruccia, 13, 50019, Sesto Fiorentino, Italy | **Field of study** Physical Chemistry

01/04/2024 – 31/07/2024 Paris, France
PHD VISITING STUDENT École nationale supérieure de chimie de Paris

09/01/2018 – 21/09/2021 Sesto Fiorentino (FI), Italy
MASTER DEGREE IN CHEMISTRY LM-57 University of Florence

Address Via della Lastruccia, 13 -, 50019, Sesto Fiorentino (FI), Italy | **Field of study** Synthesis, Structure and properties of organic compounds |

Final grade 110/110 cum laude | **Number of credits** 120 | **Thesis** SYNTHESIS AND BIOLOGICAL EVALUATION OF CELL-PENETRATING PEPTIDES

07/04/2021 – 31/07/2021 Cologne, Germany
MASTER'S INTERNSHIP University of Cologne, Institute for Biochemistry - Germany

Preparation by Solid-phase peptides Synthesis a series of Cell-penetrating peptides
Peptides analyze by HPLC, IR and Mass.
CD spectroscopy to get insights into secondary structure formation.
Peptides evaluation of antimicrobial activity by INT-Assay with gram-positive and gram-negative bacteria, calculation of MIC by fitting curve dose-response.
Haemolysis assay with human red blood cells.
Cytotoxicity Assay with tumor and non-tumor cells.
Measur of intracellular uptake using Flow-Citometry and Fluorescence Microscopy.

Prof. AnnaMaria Papini (supervisor) at University of Florence
Prof. Ines Neundorf (Co-rapporteur) at University of Cologne

Address Zülpicher Str. 47a, 50674, Cologne, Germany | **Field of study** Peptide Chemistry, Chemical Biology, | **Level in EQF** EQF level 1 |

Number of credits 30 + 6 | **Thesis** Synthesis and biological evaluation of Cell-penetrating Peptides

31/08/2014 – 21/02/2018 Fisciano (SA), Italy
BACHELOR'S DEGREE IN CHEMISTRY L-27 University of Salerno, Department of Chemistry and Biology A. Zambelli

Address Via Giovanni Paolo II, 132, 84084, Fisciano (SA), Italy | **Field of study** Chemistry | **Final grade** 110/110

31/08/2018 – 30/11/2018 Fisciano (SA), Italy
BACHELOR TRAINING University of Salerno

Synthesis of five new cyclic peptoids containing (2S,4R)-4-hydroxyproline (Hyp) residues using a mixed "submonomer/monomer" approach.
Alkali metal cation affinities and ion transport activities were assessed by experimental (NMR and HPTS assay in liposomes).

Address Via Giovanni Paolo II, 132, 84084, Fisciano (SA), Italy | **Field of study** Peptide Chemistry | **Final grade** Bachelor Degree |

Thesis Synthesis of five new cyclic peptoids containing (2S,4R)-4-hydroxyproline (Hyp) residues

Link <https://pubs.rsc.org/ja/content/articlelanding/2018/ob/c8ob01522h#!divAbstract>

PUBLICATIONS

2024
[Machine Learning Reveals Structural Properties of Monosaccharides and their Peptide Conjugates](#)

Proceedings of 37th EPS and 14th IPS

M. Casoria, M. Macchiagodena, C. Bazzicalupi, C. Andreini, A. M. Papini, G. Cardini, M. Pagliai

2024
[An Advanced Database for GlycoPeptide Structure Exploration to build GlycoPeptideStructure Hub: GPS Hub](#)

Proceedings of 37th EPS and 14th IPS

M. Casoria, M. Macchiagodena, C. Bazzicalupi, C. Andreini, A. M. Papini, G. Cardini, M. Pagliai

2024
[Triazole-Bridged Peptides with Enhanced Antimicrobial Activity and Potency against Pathogenic Bacteria](#)

ACS Infect. Dis. 2024, 10, 2717–2727

2023
[Upgrading of the general AMBER force field 2 for fluorinated alcohol biosolvents: A validation for water solutions and melittin solvation](#)

J. Pep. Sci, 2023 e3543

M. Casoria, M. Macchiagodena, P. Rovero, C. Andreini, A. M. Papini, G. Cardini, M. Pagliai

● CONFERENCES AND SEMINARS

25/08/2024 – 29/08/2024 Florence
37th European Peptide Symposium (EPS) and 14th International Peptide Symposium (IPS).

Poster presentation:

- An Advanced Database for GlycoPeptide Structure Exploration to build GlycoPeptideStructure Hub: GPS Hub
- Machine Learning Reveals Structural Properties of Monosaccharides and their Peptide Conjugates

Links [10.17952/37EPS.2024.P1277](https://doi.org/10.17952/37EPS.2024.P1277) | [10.17952/37EPS.2024.P1278](https://doi.org/10.17952/37EPS.2024.P1278)

11/02/2024 – 16/02/2024 Ventura, California, United States
Gordon Research Conference on Chemistry and Biology of Peptides

23/09/2023 – 23/09/2023 Florence, Italy
Scientific day dedicated to young researchers of ItPS

Oral presentation: Bringing Immunology into the Realm of Chemistry: Structural and dynamic properties of TCR-peptide-MHC complex.

20/09/2023 – 22/09/2023 Pisa, Italy
VIII Congresso Nazionale della Divisione di Chimica Teorica e Computazionale della SCI

Oral Presentation: Structural properties of N-glycosylated Proteins

28/08/2022 – 02/09/2022 Sitges, Spain.
36th European Peptide Symposium (EPS) and 12th International Peptide Symposium (IPS).

Poster presentation: From a bioinformatic approach to synthetic conformational peptide epitopes to disclose molecular mechanism of aberrant glucosylation in multiple sclerosis.

15/06/2022 – 15/06/2022 Naples, Italy.
4th National Congress of Italian Peptide Society (ItPS)

Oral presentation: Molecular Dynamic approach on synthetic conformational peptides to detect epitopes in autoimmune disease.

08/04/2022 – 08/04/2022 Florence, Italy
WORKSHOP DELLA DIVISIONE DI CHIMICA TEORICA E COMPUTAZIONALE

Oral presentation: From a bioinformatic approach to synthetic conformational peptide epitopes to disclose molecular mechanism of aberrant immune response in auto-immune diseases.