

WORK EXPERIENCE

15/03/2022 - 15/09/2022 Boston , United States PhD VISITING STUDENT HARVARD T. H. CHAN SCHOOL OF PUBLIC HEALTH

I joined the research group of Professor Catteruccia to work on malaria transmission-blocking strategies. I tested *in vivo* and *in vitro* chemical compounds synthesized before by the research group of Professor Biava and Poce from Department of Chemistry and Pharmaceutical Technologies, Sapienza University of Rome, to understand how they affect parasite survival in mosquitoes. During this screening I had the opportunity to also understand mosquito biology and how it is influenced by the presence of Plasmodium falciparum.

01/11/2020 - CURRENT Rome, Italy PHD STUDENT SAPIENZA UNIVERSITY OF ROME

Since November 2020 I have started my PhD program in Pharmaceutical Sciences. My work project consists in the development and synthesis of compounds with antiviral activity, especially against the serotypes Coxsackievirus A9-B3 of Enteroviruses B. I am also following one more project which consists in the development of new pyrazole- derivatives which play a role in transmission blocking of malaria.

09/2018 - 02/2020 Rome, Italy INTERNSHIP FARMACIA OSTIENSE SNC

In this internship at Farmacia Ostiense I understood how a pharmacist works and which liability he has.

EDUCATION AND TRAINING

Rome, Italy

QUALIFICATION TO THE PROFESSION OF PHARMACIST Sapienza University of Rome

Address P.le Aldo Moro 5, Rome, Italy

10/2014 - 06/07/2020 Rome, Italy MASTER'S DEGREE IN CHEMISTRY AND PHARMACEUTICAL TECHNOLOGY Sapienza University of Rome

During my experimental thesis I worked in the research group of Professor Secci, from the Department of Chemistry and Pharmaceutical Technologies of Sapienza University of Rome. The field of the research was organic synthesis of potent antitumoral compounds with an activity against Eg5. I have learned all the techniques related to synthesis, purification, and characterization of organic compounds with pharmaceutical activity.

Address P.le Aldo Moro 5, Rome, Italy | Field of study Chemistry and pharmaceutical technology |

Final grade 110 cum laude

Thesis Development and synthesis of new idrazo-thiazoles with an activity focused on Eg5

Address Via Pantanelle 1, Terracina, Italy | Field of study classical high school diploma | Final grade 94/100

LANGUAGE SKILLS

Mother tongue(s): **ITALIAN**

Other language(s): **ENGLISH**

| UNDERSTANDING | SPEAKING | WRITING |
|---------------|----------|---------|
| B2 | B2 | B1 |

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Profficient user

DIGITAL SKILLS

| ADDITIONAL INFORMATION |
|---|
| Liquid chromatography Teledyne Combiflash system High Performance Liquid Chromatography (HPLC) Crystallization |
| Technical expertise |
| Microsoft Office ChemDraw professional Mestrenova PrismaGraphPad |

PUBLICATIONS

Malaria transmission blocking compounds: a patent review (IF: 6.714. 2021) - 2022

This review covers innovative transmission-blocking inventions patented between 2015 and October 2021. The focus is on chemical interventions which could be used as "chemical vaccines" to prevent transmission (small molecules, carbohydrates, and polypeptides).

Direct-Acting Antivirals and Host-Targeting Approaches against Enterovirus B Infections Recent Advances (IF: 5.215. 2021)

- 2023

Enterovirus B (EV-B)-related diseases, which can be life threatening in high-risk populations, have been recognized as a serious health problem, but their clinical treatment is largely supportive, and no selective antivirals are available on the market. As their clinical relevance has become more serious, efforts in the field of anti-EV-B inhibitors have greatly increased and many potential antivirals with very high selectivity indexes and promising in vitro activities have been discovered. The scope of this review encompasses recent advances in the discovery of new compounds with anti-viral activity against EV-B, as well as further progress in repurposing drugs to treat these infections. Current progress and future perspectives in drug discovery against EV-Bs are briefly discussed and existing gaps are spotlighted.