

CURRICULUM VITAE

FORMATO EUROPEO PER IL CURRICULUM VITAE



INFORMAZIONI PERSONALI

Nome e Cognome
Data di nascita
Telefono
Telefono cellulare
Indirizzo posta elettronica
Incarico attuale

Michele D'Ambrosio

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michele.dambrosio@uniroma1.it

PostDoc Researcher – Sapienza University of Rome

ISTRUZIONE E FORMAZIONE

- Date (da – a)
- Nome e tipo di istituto di istruzione o formazione
- Qualifica conseguita
- Date (da – a)
- Nome e tipo di istituto di istruzione o formazione

2014-2021

Sapienza University of Rome. Master's Degree in Pharmaceutical Chemistry and Technology

Master's Degree

February – June 2018

Visiting Erasmus+ Student, University of Surrey, Guildford, England

November 2021 – October 2024

Sapienza University of Rome, Department of Chemistry and Technology of Drugs. Doctoral course in Pharmaceutical Sciences, XXXVII Cycle

November 2024 – Current

Sapienza University of Rome, Department of Chemistry and Technology of Drugs. PostDoc Researcher.

September 2023 – May 2024

Visiting Scholar, University of Pennsylvania, Philadelphia, USA

MADRELINGUA**ALTRE LINGUE**

- Capacità di lettura
- Capacità di scrittura
- Capacità di espressione orale

**CAPACITÀ E COMPETENZE
TECNICHE**

*Con computer, attrezzature
specifiche, macchinari, ecc.*

ALTRO (PARTECIPAZIONE A
CONVEGNI, SEMINARI,
PUBBLICAZIONI,
COLLABORAZIONI A RIVISTE, ECC.
ED OGNI ALTRA INFORMAZIONE
CHE IL COMPILANTE RITIENE
DI DOVER PUBBLICARE)

ITALIAN**ENGLISH**

EXCELLENT

EXCELLENT

EXCELLENT

As a researcher in the field of pharmaceutical sciences, my work is focused on drug design and the discovery of novel anticancer agents.

One area of my research is focused on the development of tubulin polymerization inhibitors. These compounds have shown promising anticancer activity in preclinical studies and are being investigated as potential therapeutics. Amongst these, ferroptosis inducers stand out as a distinct class, representing a promising strategy for the treatment of cancer. My work has involved the design and synthesis of tubulin polymerization inhibitors that can induce ferroptosis in cancer cells, and the characterization of these compounds using various analytical techniques.

Another area of my research is focused on the development of allosteric modulators of the Wnt/ β -Catenin pathway, a new challenging target for cancer therapy, due to its double-sided aspect. The aim is to design and synthesize new modulators in order to downregulate the aberrant activity of the pathway, while preserving its basal activity in healthy tissues.

During my tenure as a visiting scholar at the University of Pennsylvania, my primary research centered on natural products. Specifically, I dedicated my efforts to the total synthesis of Discodermolide and its analogues, compounds exhibiting significant potential in combating cancer through their promising biological activity.

Overall, my experience in drug design, drug discovery, medicinal chemistry, and the analysis of compounds using techniques such as NMR provides me with a strong foundation for a career in pharmaceutical research.

Articles

1. Puxeddu, M.; Wu, J.; Bai, R.; D'Ambrosio, M.; Nalli, M.; Coluccia, A.; Manetto, S.; Ciogli, A.; Masci, D.; Urbani, A.; Fionda, C.; Coni, S.; Bordone, R.; Canettieri, G.; Bigogno, C.; Dondio, G.; Hamel, E.; Liu, T.; Silvestri, R.; La Regina, G. Induction of Ferroptosis in Glioblastoma and Ovarian Cancers by a New Pyrrole Tubulin Assembly Inhibitor. *Journal of Medicinal Chemistry* **2022**, 65 (23), 15805–15818.
2. Nalli, M.; Di Magno, L.; Wen, Y.; Liu, X.; D'Ambrosio, M.; Puxeddu, M.; Parisi, A.; Sebastiani, J.; Sorato, A.; Coluccia, A.; Ripa, S.; Di Pastena, F.; Capelli, D.; Montanari, R.; Masci, D.; Urbani, A.; Naro, C.; Sette, C.; Orlando, V.; D'Angelo, S.; Biagioni, S.; Bigogno, C.; Dondio, G.; Pastore, A.; Stornaiuolo, M.; Canettieri, G.; Liu, T.; Silvestri, R.; La Regina, G. Novel N-(Heterocyclylphenyl)Benzensulfonamide Sharing an Unreported Binding Site with T-Cell Factor 4 at the β -Catenin Armadillo Repeats Domain as an Anticancer Agent. *ACS Pharmacology & Translational Science* **2023**, 6 (7), 1087–1103.

3. Masci, D.; Puxeddu, M.; Di Magno, L.; D'Ambrosio, M.; Parisi, A.; Nalli, M.; Bai, R.; Coluccia, A.; Sciò, P.; Orlando, V.; D'Angelo, S.; Biagioni, S.; Urbani, A.; Hamel, E.; Nocentini, A.; Filiberti, S.; Turati, M.; Ronca, R.; Kopecka, J.; Riganti, C.; Fionda, C.; Bordone, R.; Della Rocca, G.; Canettieri, G.; Supuran, C. T.; Silvestri, R.; La Regina, G. 4-(3-Phenyl-4-(3,4,5-Trimethoxybenzoyl)-1H-Pyrrol-1-yl)Benzenesulfonamide, a Novel Carbonic Anhydrase and Wnt/ β -Catenin Signaling Pathway Dual-Targeting Inhibitor with Potent Activity against Multidrug Resistant Cancer Cells. *Journal of Medicinal Chemistry* **2023**, *66* (21), 14824–14842.
4. Puxeddu, M.; Ling, L.; Ripa, S.; D'Ambrosio, M.; Nalli, M.; Parisi, A.; Sciò, P.; Coluccia, A.; Granese, A.; Santelli, M.; Masci, D.; Cuřínová, P.; Naro, C.; Sette, C.; Pastore, A.; Stornaiuolo, M.; Bigogno, C.; Dondio, G.; Di Magno, L.; Canettieri, G.; Liu, T.; Silvestri, R.; La Regina, G. Development of N-(4-(1H-Imidazol-1-yl)phenyl)-4-chlorobenzenesulfonamide, a Novel Potent Inhibitor of β -Catenin with Enhanced Antitumor Activity and Metabolic Stability. *Journal of Medicinal Chemistry* **2024**, *67* (22), 20298–20314.

Poster communications

M. D'Ambrosio. Discovery of a novel pyrrole derivative as a tubulin polymerization inhibitor agent capable of inducing ferroptosis in glioblastoma and ovarian cancers. European School of Medicinal Chemistry 2022, July 3rd – 7th, **2022**, Urbino, Italy.

Oral communications

M. D'Ambrosio. New tubulin polymerization inhibitors as ferroptosis inducers to treat cancer. XI EDITION BeMM Symposium, September 30th, **2024**, Rome, Italy.

I give consent to process my data with the purpose of the recruitment process, in accordance to the Regulation of the European Parliament 679/2016, regarding the protection of natural persons and free movement of such data.