FEDERICO IACOVELLI

Qualifications

28/01/2016 Ph.D. in Chemical Sciences, XXVIII cycle, obtained at the macroarea of sciences MM.FF.NN. of the University of Rome "Tor Vergata". Thesis title: "Design and characterization of polyhedral DNA nanostructures through modeling techniques and classical molecular dynamics".

10/10/2012 Master's Degree in Bioinformatics, obtained with a grade of 110/110 laude at the macro-area of sciences MM.FF.NN. of the University of Rome "Tor Vergata". Thesis title: "Study of classical molecular dynamics as a function of temperature of a DNA nanostructure designed to incorporate proteins: the hairpin nanocage".

24/05/2010 Bachelor's degree in Human Biology, obtained at the macro-area of sciences MM.FF.NN. of the University of Rome "Tor Vergata". Thesis title: "Construction of a database for the reconstruction of the centers of gravity of the Y chromosome".

Titles

14/02/2022 Assistant Professor BIO/11 (Molecular Biology), Department of Biology of the Macroarea of Sciences MM.FF.NN. of the University of Rome "Tor Vergata".

Main lines of research

- 2013 – today

Design of three-dimensional self-assembling DNA nanostructures for drug delivery and specific targeting of cell receptors.

- 2018 – today

Computational prediction and experimental validation of microbiome-modifiers microRNAs for CRC prevention and treatment.

(Department of Biology, University of Rome "Tor Vergata") to verify the interaction between plant miRNAs and human target genes.

- 2020 – today

Molecular docking studies and classical molecular dynamics of the interaction between natural, synthetic compounds and innate immunity proteins with respiratory syncytial virus and SARS-CoV-2 membrane glycoproteins.

Research products

Bibliometric parameters as of 08/02/2024:

- Number of peer-reviewed journal papers: 61
- Number of citations (Scopus): 1134

- H-index (Scopus): 18