BIOGRAPHICAL SKETCH

NAME: **Bruno Catalanotti**

POSITION TITLE: **Researcher in Medicinal Chemistry**

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	Completion Date MM/YYYY	FIELD OF STUDY
University of Napoli Federico II- Faculty of Pharmacy	5 years specialistic degree	07/1994	Pharmaceutical Sciences
Medical Research Council di Leicester (UK)	post-graduate fellowship	12/1996	Mass Spectrometry
University of Napoli Federico II- Faculty of Pharmacy	PhD	01/2000	Synthesis and structural analysis of nucleosides and oligonucleotides
University of Salerno - Faculty of Pharmacy (IT)	Post-doc	06/2002	Computer aided drug design
University of Napoli Federico II- Faculty of Pharmacy	Post-doc	12/2003	Computer aided drug design
University of Barcelona - Department of Fisico-Quimica (ES)	Visiting researcher	02/2012	Molecular Dynamics applied to drug design

Personal Statement

Dr. Bruno Catalanotti scientific interests are focused to the study of protein-protein interactions and the dynamic investigation of drug-target interactions as mean for the design of new drugs.

His training to computational methods applied to drug design started in 1999 when he moved to the group of Prof. Caterina Fattorusso, where he worked until 2010. During this period Dr. Catalanotti applied many computational techniques (i.e. protein structure analysis, bioinformatics, docking calculations, semiempirical methods) to the design and the study of the mechanism of action of drugs in many fields of medicinal chemistry, contributing to the design of anti-infective agents (Malaria, HIV), SNC targeting drugs (cholinesterases inhibitors, atypical antipsychotic agents), potential novel cardiomodulators (cardiac 5HT3 selective ligands), and apoptotic agents.

In 2011, he created his own research, starting new projects and establishing new collaborations. He also spent one year abroad in the group of prof. FJ Luque of the University of Barcelona (Spain) to enrich his scientific background with the expertise in molecular dynamics methods applied to drug design. In particular, in the last years, his main research interests were focused to application of computational methods to:

i) the investigation of molecular basis of ubiquitination pathways involved in cancer and Parkinson disease;

ii) the study of the dynamics of nucleic acids and analogues as powerful tools to control gene expression

iii) the development of new modulators of bile acids receptors for the treatment of metabolic disorders.

Positions and Honors

1996-1999 PhD student in 'Pharmacologically Active Natural Substances' in the Department of Chemistry of Natural Substances of the University of Napoli Federico II

2000-2002 2 years Post-doc in Computer Aided Drug Design at the University of Salerno

2002-2003 1,5 years Post-doc in Computer Aided Drug Design at the Department of Department of Chemistry of Natural Substances of the University of Napoli Federico II.

2011-2012: one year visiting researcher at the University of Barcelona in the group of Prof. Luque.

2004- today he is permanent researcher in Pharmaceutical Chemistry at the University of Napoli "Federico II", where he actually works in the Department of Pharmacy.

2011-2012: component for designation of the Dean of the "Commissione Statuto" that wrote the University of Napoli Federico II Statute.

2017 - today: Member of the Internationalization Committee of the Department of Pharmacy.

2018 January to December: Member of the union metropolitan secretariat of FLC-CGIL, designated to university policies.

2013 - 2021: Two terms as representative of professors in the Academic Senate of the University of Napoli Federico II.

2019 - 2024: Elected as representative of Italian Researchers in Chemistry in the National University Council (Two terms)

2019 - 2021 Nominated by the Academic Senate as member of the scientific board of the University Committee for Innovation in didactics.

2019 - today: Member of the board of the European Universities Alliance AURORA

2021 - today: Institutional coordinator of the Aurora R&I project H2020-IBA-SwafS-Support-2-2020

2021 - today: Member of the Board of the CSI- the University Centre for ICT services

2021 . Nominated Digital officer

2023: Member of the expert panel for the evaluation of topic HORIZON-HLTH-2023-DISEASE-03-04.

2023- today: Director of the PharmaTec Academy, a training course for master graduates carried out in collaboration with pharmaceutical industries on RNA-based drugs and gene therapy.

2024: Member of the expert panel for the evaluation of topic HORIZON-HLTH-2024-DISEASE-08-20.

Contribution to Science

The scientific activity of Dr. Catalanotti encompassed many different topics in medicinal chemistry and consists in 56 articles on peer reviewed international journals (H-index 23; Total Cit. 1614; source Scopus, Apr 2024).

He also filed an Italian patent application "Steroli nel trattamento e/o nellaprevenzione dell'infezione da Sars-Cov2", no.102020000011092 in the name of BAR Pharmaceuticals S.r.L.

Complete List of Published Work in ORCID: http://orcid.org/0000-0002-7532-6959

Research Support

Dr. Bruno Catalanotti participated to many regional and national projects (Legge 5, PRIN, FIRB), as well as to Eu FP6 funded cooperation projects (ANTIMAL).

Responsibility roles:

- WP leader in the FP7- REGPOT project NATPHARMA (2009-2011),
- P.I. of the ISCRA-CINECA class B project UBA1DYN (HP10B81QWA), and of many ISCRA-CINECA class C projects.
- P.I. of a research Unit within the project SATIN (2018-2020; POR FESR 2014-2020 PIATTAFORME ONCOLOGICHE)
- P.I. of the research grant "Sviluppo di derivati degli acidi biliari come agenti antivirali" from BAR Pharmaceuticals S.r.L. (2020)