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**BIOGRAPHICAL SKETCH**


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<b>NAME:</b> Pittalà, Valeria	<b>POSITION TITLE:</b> Associate professor Medicinal Chemistry (CHIM/08)		
EDUCATION/TRAINING			
<b>INSTITUTION AND LOCATION</b>	<b>DEGREE</b>	<b>MM/YEAR</b>	<b>FIELD OF STUDY</b>
Faculty of Pharmacy, University of Catania	Master degree	03/1995	Chemistry and Pharmaceutical Technologies
University of Catania	PhD	04/1999	Medicinal Chemistry

**A. Personal Statement.**

I am a highly motivated drug discovery scientist with more than twenty years' experience. My strengths include my proven interpersonal skills, ability to take initiative, and efficiency in achieving given objectives. I have extensive knowledge of drug discovery processes and a broad background in medicinal chemistry, combinatorial chemistry, and organic synthesis. I have been involved in a number of multidisciplinary projects in various therapeutic areas, I published several peer-reviewed papers for each of them and I am coauthors of patents registered worldwide.

**B. Positions and Honors.****B.1. Positions and Employment**

11/1998 – 11/2002	Research Scientist. Member of <i>Combinatorial Chemistry Group</i> (R&D) – Pharmacia Corporation, 10 Pasteur Road, 20014 Nerviano (MI), Italy.
11/2002 – 02/2020	RTI Medicinal Chemistry (CHIM08), Department of Drug Science, University of Catania, Italy
03/2020 – present	Associate Professor (CHIM08), Department of Drug Science, University of Catania, Italy

**B.2. Other Experience and Professional Memberships**

Member	Italian Chemical Society (Società Chimica Italiana, SCI)
Member	Giunta del Dipartimento di Scienze del Farmaco 2016-2020
2019 – present	Journal Topic Board member of <i>International Journal of Molecular Science</i> IF 4.2
2018 – present	Editorial board member of <i>Recent Patents on Anti-Cancer Drug Discovery</i> IF 2.1
2018 – present	Editorial board member of <i>Mini-Reviews in Medicinal Chemistry</i> IF 2.8
2017 – present	Member of the PhD Academic Board in Biotechnology [DOT1708221]
2009 – 2016	Member of the PhD Academic Board in Pharmaceutical Sciences
02/2019	Visiting Professor at the Department of Molecular Medicine and Nanomedicine Unit, Arabian Gulf University, Manama, Bahrein.
04/2018	Visiting Professor at the Department of Molecular Medicine, Arabian Gulf University, Manama, Bahrein.
03/2017	Visiting Professor at the Department of Molecular Medicine, Arabian Gulf University, Manama, Bahrein.
09/2000 – 11/2000	Visiting Researcher at Pharmacia Corporation, Kalamazoo, MI 49001, United States.
05/1998 – 09/1998	Visiting PhD at the Department of Organic Chemistry, University of Granada, Spain.

**B.3. Reviewer Positions***Journals*

ChemMedChem, Mini-Reviews in Medicinal Chemistry, Bioorganic and Medicinal Chemistry, European Journal of Medicinal Chemistry, Current Medicinal Chemistry, Seminars in Cancer Biology, Cells, Inorganica Chimica Acta, Neuroscience and Biobehavioral Reviews

**B.4. Honors**

11/2020	National Scientific Qualification (ASN) for Full Professor
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## C. Contribution to Science

My early investigations were focused on the development of new methods, validation and analysis in production of targeted libraries for different kinases including Aurora and CDK2. I contributed to the discovery and identification of danusertib (phase I-II clinically investigated) by being co-inventor of bicyclopiprazoles chemical class (US7531531, US7541354, WO2002012242). Selected bicyclopiprazole derivatives are available to the scientific community through various catalogues (more than 60), i.e. danusertib is available from Selleckchem (Cat. No.S1107), Ontario Chemicals, Inc. (Cat. No. D3316), and many others.

My research interests include the synthesis, structure-activity relationship studies, and preliminary pharmacological evaluation of ligands for G-protein Coupled Receptors, such as  $\sigma_1$  and  $\sigma_2$  receptors,  $\alpha_1$  adrenergic, serotonin 5-HT<sub>7</sub> and 5-HT<sub>1A</sub> receptors. Another active area of investigation is the development of inhibitors and inducers of the NRF2/Keap1 axis with a specific focus on HO-1. Altogether, these research activities have resulted in the identification of tools to study the pharmacology of these biological systems *in vitro* and *in vivo*. My research has led around 90 original papers published in peer-reviewed journals and 7 patent applications.

### C.1. Summary of the scientific production (ORCID: 0000-0003-1856-0308)

Cit. Scopus 1597;

h-index: 24

N. 7 International Patent Applications (A1, A2, or B2)

N. 95 Peer-reviewed publications in journals with impact factor. Among these, 33 as first, last or corresponding author

## D. Research Support

### D.1. Ongoing Research Support

#### D.1.1. PNR 2015–2020

Title: BONE++ Sviluppo di Micro e Nanotecnologie per la Predittività, la Diagnosi, la Terapia e i Trattamenti Rigenerativi delle Alterazioni Patologiche dell'Osso e Osteo-Articolari – Settore Salute - N. Domanda ARS01\_00693. Unit responsible: RI 4.2 - Sviluppo e Caratterizzazione del Prototipo di Protesi (OR4 - Sviluppo di Sistemi Avanzati Innovativi per lo Stelo Femorale di Protesi d'Anca)

#### D.1.2. Founder Department of Life Sciences (Arabian Gulf University, Bahrein)

2019–2020

Title: A combined virtual and experimental approach for High Throughput Screening of Protein Disulfide Isomerases inhibitors to identify novel anti-inflammatory agent. Unit responsible (Research Objective #4: Set up a rational drug design strategy based on active compounds identified by the screening and synthesize more potent and specific leads)

#### D.1.3. Programma Ricerca di Ateneo UNICT 2020–22 linea 2; project number 57722172126.

2020–2022

Title: Modulazione dell'Eme ossigenasi nella Terapia Antitumorale (META)

### D.2. Completed Research Support

#### D.2.1. Piano per la ricerca 2016-2018, linea di intervento 2 – University of Catania

2016–2018

Title: Targeting heme oxygenase-1 to improve cancer therapy

#### D.2.2. Finanziamento delle attività base di ricerca – MIUR

2017–2018

#### D.2.3. PRIN 2015

2015–2017

Title: Early neuroprotective and anti-inflammatory treatment to prevent the development of diabetic retinopathy

#### D.2.4. FIR – University of Catania

2014–2015

Title: Ruolo dello stress ossidativo e dell'HO-1 nelle complicanze del diabete: effetto di sostanze naturali e/o di loro derivati sintetici in un modello sperimentale *in vivo*.

#### D.2.5. PRIN 2003

2003–2005

Sviluppo di ligandi selettivi per i recettori dell'endotelina

### D.3. Funding Agency

Italian Ministry of University and Scientific Research (MIUR), Arabian Gulf University (Bahrein)