

## **Dr. MARIA VALERIA RAIMONDI, PhD**

### **Current Employment:**

- Assistant Professor in Medicinal Chemistry, University of Palermo (Italy)
- Aggregate Professor in Drugs' Analysis, Master Degree in Pharmacy, University of Palermo (Italy)
- Lab Chief for Laboratory of Synthesis of Heterocyclic Compounds with Potential Biological Activity, Department of Biological, Chemical and Pharmaceutical Sciences and Technologies (STEBICEF), Medicinal Chemistry and Pharmaceutical Technologies Section - University of Palermo, Via Archirafi 32, 90123 Palermo, Italy

### **Education and Training**

#### **Education**

March 2009-March 2010

Dep. of Pharmaceutical Chemistry, University of Pavia (Italy)

Title of qualification awarded: Post graduated Master in Drug Design and Development

Thesis Title: Identification of novel sigma receptor ligands. Design and synthesis of a drug discovery library of beta-aminoketones (Tutor: Prof. Simona Collina)

July 2000-February 2004

Dep. of Medicinal Chemistry and Technology, University of Palermo (Italy)

Title of qualification awarded: PhD in Pharmaceutical Science

Thesis Title: Synthesis and Antitumoral Activity of New Heterocyclic Compounds (Tutor: Prof. Giuseppe Daidone)

October 1994-November 1999

Faculty of Pharmacy, University of Palermo (Italy)

Title of qualification awarded: Master Degree (5 years) in Pharmacy

Full marks (110/110 summa cum laude, with recognition of outstanding thesis)

Thesis Title: Synthesis and Antimicrobial Activity of New Phenoxyacetamidic Derivatives (Supervisor: Prof. Salvatore Plescia)

## **Training**

March 2009-March 2010

Dep. of Pharmaceutical Chemistry, University of Pavia (Italy)

Position held: As student of Post graduated Master in Drug Design and Development, I work with the Medicinal Chemistry group.

Main activities: Microwave assisted synthesis and Polymer Assisted Solid Phase Synthesis of new compounds.

July 2000-July 2003

Dep. of Medicinal Chemistry and Technology, University of Palermo (Italy)

Position held: PhD Student in Medicinal Chemistry

Thesis Title: Synthesis and Antitumoral Activity of New Heterocyclic Compounds (Supervisor: Prof. Giuseppe Daidone)

December 1999-June 2000

Institute of Haematology, University of Palermo (Italy)

Position held: Training in Molecular Biology

Main activities: Biological Evaluation of Newly-Synthesized Compounds (Supervisor: Prof. Stefania Grimaudo)

March 1997-October 1999

Dep. of Medicinal Chemistry and Technology, University of Palermo (Italy)

Position held: Training in Medicinal Chemistry

Main activities: Synthesis and Antimicrobial Activity of New Heterocyclic Compounds (Supervisor: Prof. Salvatore Plescia)

## **Employment and Research Experience**

January 2020-July 2020

University of Vienna - Faculty of Life Sciences - Division of Pharmaceutical Chemistry

Position held: Visiting Scientist in Medicinal Chemistry

Main activities: Design and optimization of FGFR4 ligands by structure-based computational approaches and virtual screening (Supervisor: Univ.-Prof. Dr. Thierry Langer)

July 2018-September 2018

University of Hamburg - Fakultät MIN - Fachbereich Chemie - Organische Chemie

Position held: Visiting Scientist in Medicinal Chemistry

Main activities: Synthesis and structure-activity relationships of benzyloxyacetic acid-derived LpxC-inhibitors as novel antibiotics (Supervisor: Prof. Ralph Holl)

December 2004 onwards

Dep. of Biological, Chemical and Pharmaceutical Sciences and Technologies, (STEBICEF),  
University of Palermo

Position held: Assistant Professor in Medicinal Chemistry

Main activities and responsibilities:

- 1) Lab Chief for Laboratory of Synthesis of Heterocyclic Compounds with Potential Biological Activity
- 2) Person in charge of the use of Lab Instruments (NMR, FT-IR, HPLC, LC-MS, GC-MS, Microwave Reactor, Automatic Chromatography)
- 3) Author and Co-author of several publications on international peer-reviewed journals
- 4) Participant in MIUR-funded projects as a collaborator. Title Projects: Heterocyclic derivatives of pharmaceutical interest: design, synthesis and biological evaluation

September 2003-November 2004

Dep. of Medicinal Chemistry and Technology, University of Palermo (Italy)

Position held: Young Scientist in Medicinal Chemistry

Main activities: Synthesis and Anticancer Activity of New Heterocyclic Derivatives

2000: Principal Investigator of a Young Researchers Project financed by Ministero dell'Istruzione dell'Università e della Ricerca (MIUR) of the Italian Government

Title of the research program: Synthesis and biological evaluation of heterocyclic derivatives with antitumor activity

### **Teaching Activity**

September 2011 onwards

Master Degree in Pharmacy, University of Palermo

Position held: Aggregate Professor in Drugs' Analysis

July 2020

PhD Course in Oncology and Experimental Surgery, University of Palermo

Position held: Assistant Professor in Pharmacovigilance and drug interactions in cancer therapy

### **Memberships of Scientific Societies**

Member of:

- Società Chimica Italiana (SCI), Divisione di Chimica Farmaceutica
- Associazione Siciliana per la Lotta contro i Tumori (ASLOT)

### **Peer-reviewing activity for the following Journals:**

Journal of Medicinal Chemistry (ACS); European Journal of Medicinal Chemistry (Elsevier); Molecules (MDPI); Antibiotics (MDPI); Medicinal Chemistry (Bentham Science); Heterocyclic Communications (De Gruyter); RSC Advances (Royal Society of Chemistry)

### **Scientific interests**

1. Synthesis and antimicrobial evaluation of new compounds with phenoxyacetamidic and iodobenzamidic structure.
2. Synthesis and antiproliferative activity of new derivatives with triazenic, tetrazepinonic and indazolocarboxyamidic structure.
3. Design and synthesis of new derivatives with a 4-quinazolinone structure, potential inhibitors of folate receptors.
4. Synthesis of new pyrrole derivatives related to pyrrolomycin inhibitors of Sortase A.
5. Synthesis of new pyrazole and indazole derivatives, potential inhibitors of CDK1.
6. Synthesis and molecular modeling of pyrazole[3,4-d]pyrimidine derivatives as selective COX-2 inhibitors.
7. Identification of new sigma receptor ligands. Design and synthesis of a beta-aminoketones drug discovery library.
8. Microwave-assisted organic synthesis (MAOS) of compounds with potential antitumor activity.
9. Synthesis of polycyclic structures with marked antitumor activity in vitro.
10. Qualitative and quantitative analysis of industrial hydrocolls from the citrus industries.