



Cristiano Biancucci

WORK EXPERIENCE

[06/05/2024]

Pharmacist

Farmacie Italiane

City: Milano

EDUCATION AND TRAINING

[01/11/2020 – 27/02/2024]

Ph.D. (Doctor Europaeus qualification) in Molecular and Biomolecular Science

Università degli Studi di Palermo www.unipa.it

City: Palermo | Country: Italy | Field(s) of study: Medicinal Chemistry | Thesis: Design and synthesis of new 3-amino-1,2,4-triazine derivatives as PDK1 inhibitors

Tutor: Prof. Patrizia Diana

[04/2023 – 08/2023]

Visiting PhD student

Université Paris Cité <https://u-paris.fr/en/>

City: Parigi | Country: France | Field(s) of study: Computational Chemistry

In-depth study of the Drug Discovery aspect, so Molecular Docking, Virtual Screening, Molecular Dynamics, MMPBSA, MMGBSA.

[01/01/2020 – 31/10/2020]

Pre-doctoral fellowship

Università degli Studi di Palermo www.unipa.it

City: Palermo | Country: Italy | Field(s) of study: Medicinal Chemistry

Winner of research scholarship in Medicinal Chemistry: BS-RIC 127-2019 - "Design and synthesis of new kinases inhibitors"

Tutor: Prof. Patrizia Diana

[2013 – 2019]

Master's degree in Pharmacy

Università degli Studi di Palermo www.unipa.it

City: Palermo | Country: Italy | Field(s) of study: Farmacia e Farmacia Industriale (LM13) | Final grade: 110/110 cum laude | Thesis: Synthesis and antitumor activity evaluation of new polycyclic compounds

Experimental thesis in Medicinal Chemistry

Tutor: Maggio Benedetta

General subject: Chemistry, Pharmaceutical technology, Pharmacology, Toxicology.

Professional subject: Medicinal Chemistry, Organic Chemistry, Analysis of medicines.

High school Diploma

I.I.S. Boscardin

City: Vicenza | **Country:** Italy | **Field(s) of study:** Biology and Chemistry

LANGUAGE SKILLS

Mother tongue(s): Italian

Other language(s):

English

LISTENING B2 READING C1 WRITING B2

SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

ORGANIZATIONAL SKILLS

Description:

Good organizational skills honed during the laboratory experiences both in high school and University. Furthermore, the experience acquired during my experimental thesis path in **Medicinal Chemistry** provided me with outstanding **management and planning skills** in the **Organic Chemistry** field. These skills were further improved during my **research scholarship period** at Università degli studi di Palermo. In the course of my **Ph.D.** period my abilities have grown considerably, this allowed me to exponentially improve my skills about **Chemistry of synthesis** and obtained good skills about the **Drug Discovery** aspect of **Computational Chemistry**.

Strong **propensity for results** and significant ability about **time management**. Outstanding capacity to work under pressure, coupled with remarkable attitude to solve difficulties (**problem solving**). Worth mentioning are also **analytic thinking** and **critical thinking** developed during my years of working in **pharmaceutical research**.

TECHNICAL SKILLS

Description:

During my years of work both in the Medicinal Chemistry and Computational Chemistry laboratories I have acquired and improved skills about:

- rational design** of a **scaffold (Drug Design)** which can have a potential **biological activity** towards a **biological target**
- the **potential modifications** of the scaffold in order to **improve its interaction with the target** (study of Structure Activity Relationship **SAR**)
- the **planning** and the **development** of an **effective synthetic pathway** which allows the synthesis of a **library of compounds**
- the ability to manipulate chemical compounds and to **assemble** and **monitor chemical reactions** with **different reagents and conditions: heated** and **cooled condition**, in **inert atmosphere** such as under **Nitrogen** or **Argon** atmosphere and with or without **Schlenk system**
- purification** techniques of chemical compounds such as **crystallization, recrystallization, liquid chromatography, automated liquid chromatography (Biotage)**.
- characterization** techniques of chemical compounds such as **NMR, IR, UV**
- theoretical evaluation** of **protein-ligand interaction** through **Molecular Docking** and **Molecular Dynamics analysis**.

Proven abilities to use the following techniques and tools:

Liquid Chromatography (LC).

Thin Layer Chromatography (TLC).

IR spectroscopy.

NMR spectroscopy:

-¹H-NMR

-¹³C-NMR

-DEPT

-APT

-HMBC

-HSQC

Rotavapor BUCHI

Proven skills to use software for **Drug Discovery** and **theoretical evaluation of biological system behaviour** such as:

-**Autodock Vina**

-**Raccoon** for Virtual Screening

-**Amber** for Molecular Dynamics, MMPBSA e MMGBSA

-**VMD**

-**Pymol**

-**Obabel**

-**Chimera**

-**Avogadro**

-**ChemDraw**

-**ChemSketch**

Excellent skills to use **SciFinder**.

OTHER IT SKILLS

Description:

Good IT skills including use of software such as PowerPoint, Word and Excel.

COMMUNICATION AND INTERPERSONAL SKILLS

Description:

Good communication and relational skills. Great management skills acquired during the internship, during both my, research scholarship and Ph.D. periods, as well as during my period abroad, in Paris. The experiences acquired are extremely important for teamwork, in the shape of building a constructive dialogue with other people and a positive confrontation with colleagues (**teamwork**).

POSTER

Description:

Carbone, D.; Biancucci, C.; De Franco, M.; Pecoraro, C.; Cascioferro S.; Cirrincione, G.; Parrino, B.; Gandin, V.; and Diana, P.; "SIMPLIFIED 1,2,4-TRIAZINE COMPOUNDS: UNLOCKING ENHANCED ANTITUMOR EFFICACY VIA PDK INHIBITION"; XXVIII National Meeting on Medicinal Chemistry (NMMC28).

Autorizzo il trattamento dei miei dati personali presenti nel CV ai sensi dell'art. 13 d. lgs. 30 giugno 2003 n. 196 - "Codice in materia di protezione dei dati personali" e dell'art. 13 GDPR 679/16 - "Regolamento europeo sulla protezione dei dati personali".