

CONTACT INFORMATION Email: irenebasili.ib@gmail.com

Nationality : Italian

EXPERIENCE

Rome, Italy

November 2019 - Present

PhD student

Sapienza University, Dept. Molecular Medicine

Tutor: Prof.ssa Lucia Di Marcotullio, Sapienza University, Dept. of Molecular Medicine, Rome, Italy

Rome, Italy

November 2017 - July 2019

Master thesis trainee

Sapienza University, Dept. Molecular Medicine

Supervisor: Prof.ssa Lucia Di Marcotullio, Sapienza University; Dept. of Molecular Medicine
Experimental thesis: Identification of new dissolution strategies of Hedgehog/Gli1 inhibitor Glabrescione B for the treatment of Medulloblastoma

Rome, Italy

March 2017 - October 2017

Bachelor thesis trainee

Sapienza University, Dept. of Biology and Biotechnology "Charles Darwin"

Supervisor: Prof. Carlo Presutti, Sapienza University, Dept. of Biology and Biotechnology "Charles Darwin"

Experimental thesis: Characterization of circCacna1c circular RNA in murine hippocampus

Rome, Italy

January 2018 - January 2019

Assistant technician

Sapienza University, Dept. of Biology and Biotechnology "Charles Darwin"

This activity is based on a public competition for University students and consists of working in Chemistry, histology, microbiology, molecular and cell biology laboratories for 150 hours per year providing help to the professor in many different tasks (room and samples preparation). This activity provided me a remuneration.

EDUCATION

Rome, Italy

October 2017 - July 2019

Master Degree in Genetics and Molecular

Biology Sapienza University

- Relevant modules accomplished:

Human Genetics, Stem Cells Molecular Biology, Genetic Expression and Epigenetic Control in Eukaryotic Cells, Structure Analysis of Proteins, Molecular Immunopathology, Pharmacology in Drug Discovery, Clinic Molecular Biology, Molecular Microbiology, Oncology.

- Graduated with Honours (110/110 cum laude)

Rome, Italy

2014 - 2017

Bachelor Degree in Biotechnology

Sapienza University, Dept. of Pharmacy and Medicine

- Relevant modules accomplished:

Cellular Biology, Genetics, Bioinformatics, Pharmacology, Human Physiology, Organic and Inorganic Chemistry, Pharmaceutical Chemistry, Molecular Biology, Biochemistry, Embryology and Histology, Human Anatomy, Microbiology and Medical Microbiology elements.

- Score
110/110

Guidonia (RM), Italy

High School Diploma

Liceo Scientifico "Ettore Majorana"

LANGUAGES

French
Elementary

English
Advanced

DIGITAL SKILLS

Good command of Microsoft Office Suite
(Word; Excel; Power-Point)

Basic command of Image J, Graphpad Prism, Pymol; Molegro Virtual Docker, Photoshop

HONOURS & AWARDS

"LazioDisco" Scholarship 2017-2018
"LazioDisco" Scholarship 2018-2019
Fondi di Ateneo "Avvio alla ricerca di tipo I" 2021

PUBLICATIONS

- Harnessing the Activation of RIG-I Like Receptors to Inhibit Glioblastoma Tumorigenesis
BUFALIERI, FRANCESCA; BASILI, IRENE; DI MARCOTULLIO, LUCIA; INFANTE, PAOLA.
Front Mol Neurosci. 2021 Jul 8; doi:10.3389/fnmol.2021.710171. eCollection 2021.
- Design and Synthesis of new Withaferin A inspired Hedgehog pathway inhibitors
BONANDI, ELISA; MORI MATTIA; INFANTE, PAOLA; **BASILI, IRENE**; DI MARCOTULLIO, LUCIA; CALCATERRA ANDREA; CATTI, FEDERICA; BOTTA BRUNO; PASSARELLA, DANIELE
Chemistry- A European Journal, accepted for publication March 2, 2021
- Glabrescione B delivery by self-assembling micelles efficiently inhibits tumor growth in preclinical models of Hedgehog-dependent medulloblastoma.
PAOLA, INFANTE; ALESSIO, MALFANTI; QUAGLIO, DEBORAH; DE MARTIN, SARA; BUFALIERI, FRANCESCA; MASTROTTO, FRANCESCA; BASILI, IRENE; GAROFALO, MARIANGELA; LOSPINOSO SEVERINI, LUDOVICA; MORI, MATTIA; MANNI, ISABELLA; MORETTI, MARTA; NICOLETTI, CARMINE; PIAGGIO, GIULIA; CALICETI, PAOLO; BOTTA, BRUNO; GHIRGA, FRANCESCA; SALMASO, STEFANO; DI MARCOTULLIO, LUCIA
Cancer Lett. 2021 Feb 28; 499:220-231. doi: 10.1016/j.canlet.2020.11.028. Epub 2020 Nov 26
- The RNA-binding ubiquitin ligase MEX3A affects glioblastoma tumorigenesis by inducing ubiquitylation and degradation of RIG-I.
BUFALIERI, FRANCESCA; CAIMANO, MIRIAM; **BASILI, IRENE**; PAGLIA, FRANCESCO; SAMPIRISI, LUIGI; LORICCHIO, ELENA; PETRONI, MARIALAURA; CANETTIERI, GIANLUCA; SANTORO, ANTONIO; INFANTE, PAOLA; DI MARCOTULLIO, LUCIA
Cancers, 12, 321 (2020); doi:10.3390/cancers12020321
- A Smo/Gli multitarget hedgehog pathway inhibitor impairs tumor growth
LOSPINOSO SEVERINI, LUDOVICA; QUAGLIO, DEBORAH; **BASILI, IRENE**; GHIRGA, FRANCESCA; BUFALIERI, FRANCESCA; CAIMANO, MIRIAM; BALDUCCI, SILVIA; MORETTI, MARTA; ROMEO, ISABELLA; LORICCHIO, ELENA; MARODER, MARELLA; BOTTA, BRUNO; MORI, MATTIA; INFANTE, PAOLA; DI MARCOTULLIO, LUCIA
Cancers, 11(10), 1518 (2019); doi: 10.3390/cancers11101518

COMMUNICATION SKILLS

- Good communication skills gained through my experience as tutor for high school and university students;
- Good ability to analyze and divulgate my own work in a critical and comprehensive way.

ORGANIZATIONAL/MANAGER SKILLS

- Good leadership skills gained through experiences in organisation of events related to my personal studies;
- Good ability to design and conduct experimental projects in the biological and biotechnology fields; excellent adaptability to work under pressure;
- excellent time management skills.

JOB RELATED SKILLS

- Excellent attitude to set up experimental activity taking into account methodologies more adequate and updated;
 - Excellent ability to critically analyze work results and be able to consequently modify the experimental strategy.
-

.

