



Alice Giusto

ABOUT ME

As a
can

WORK EXPERIENCE

[02/2022 – 09/2023]

Master Degree 2-years Internship

Molecular Medicine department (University of Pavia)

City: Pavia

Country: Italy

During my full-time internship at the Molecular Medicine department under the supervision of **Professor Antonella Forlino**, I undertook a project focused on the study of **genetic diseases** such as skeletal *Osteogenesis Imperfecta*. My research delved into the physiopathology and genetic pathways of these conditions, utilizing genetically **mutated** and **transgenic zebrafish lines** also gaining expertise in DNA extraction and genotyping.. Through extensive histological analysis, I acquired proficiency in cryo-sectioning, staining, **immunofluorescence**, and both **confocal and widefield analysis**. Additionally, I conducted morphometric, qualitative, and quantitative analyses using software such as **Las and ImageJ**. Statistical analyses were performed using Microsoft Excel and **Prism**. Then, during the latter part of my research, I shifted focus to another family of genetic diseases known as **ciliopathies**. This involved generating models using morpholino (**antisense oligonucleotides**) to develop a method for **dissecting the role of Variants of Unknown Significance (VUS)**. This phase of the project required skills in genome editing, manual microinjection, immunofluorescence analysis, confocal localization, and image acquisition, **cell cultures** and plasmid construction.

[10/2021 – 10/2023]

Science educator

Festival della Scea

City: Genoa

Country: Italy

Science outreach to adults and children every year on various biological topics, including hands-on labs, collaborating with other scientists in a dynamic and stimulating environment.

[06/11/2023 – 01/12/2023]

Substitute at secondary school

Liceo Scientifico O. Grassi

Address: Via Corridori 2r, Savona, Italy

A one month substitution as an highschool Professor of Natural Sciences, Chemistry and Biology.

[10/2022]

Scholarship at the Action AndBiology Campus

Worldrise Onlus

City: Milan

Country: Italy

A 7 days experience with professional scientists learning methods and protocols for environmental preservation.

[02/2021 – 07/2021]

Bachelor Degree Internship

University of Genova

City: Genoa

**Country:** Italy

An internship in the **physiology** department under the supervision of **Professor Elena Grasselli**, where I learned how to assess the spread of the amphibian disease Chytridiomycosis caused by the fungus Batrachochytrium dendrobatidis. I acquired skills in the use of **real-time PCR**, with qualitative/quantitative analysis, and hands-on experience with instruments like thermocyclers, bead beaters, common laboratory equipment, biological safety cabinets, various reagents, and more.

EDUCATION AND TRAINING

[10/2021 – 09/2023]

Master Degree in Molecular Biology and Genetics (MBG)*University of Pavia (UNIPV)***City:** Pavia**Country:** Italy**Field(s) of study:** Molecular Biology and genetics | Bioinformatics | Biotechnology**Final grade:** 110/110 **Level in EQF:** EQF level 7**Type of credits:** LM-6 **Number of credits:** 120**Thesis:** Zebrafish as a tool for genetic diseases

AN entirely taught in english programme

[14/07/2022]

24 CFU for teaching*University of Pavia***City:** Pavia**Country:** Italy

Acquisition of credits necessary to teach chemistry, biology and earth science in Italian's highschools.

[09/2018 – 09/2021]

Bachelor Degree*University of Genova (UNIGE)***City:** Genoa**Country:** Italy**Field(s) of study:** Environmental and Biological Sciences**Final grade:** 105/110**Thesis:** Assessment of the chytridiomycosis' spreading in amphibians, included in the WWF project 'Gestire'

[09/2012 – 07/2017]

Highschool Diploma*Liceo Scientifico Orazio Grassi***City:** Savona**Country:** Italy**Field(s) of study:** Applied Sciences (Informatic curriculum)

[29/11/2023]

Qualification for the profession of biologist in Italy*University of Genova***LANGUAGE SKILLS****Mother tongue(s):** Italian**Other language(s):****English****LISTENING** C1 **READING** C2 **WRITING** C1**SPOKEN PRODUCTION** C1 **SPOKEN INTERACTION** C1



French

LISTENING B2 READING B2 WRITING A2

SPOKEN PRODUCTION B1 SPOKEN INTERACTION B1

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

DIGITAL SKILLS

Microsoft Office | Microsoft PowerPoint | Microsoft Excel | R (programming language) |
Microsoft Word | C++ | SQL | Adobe Photoshop | Biorender | Prism | ImageJ | Las (Leica
Software) | EndNote | Linux Terminal Programming | Oracle Virtual Box | Oracle Virtual Box |
Basic bash programming | Primer designing (GeneRunner, OLIGO7, NCBI Primer-BLAST) | BLAST

PUBLICATIONS

[2023] **Abstract SISC 2023: Modelling ciliopathies in zebrafish: a morpholino approach**

Reference: Carla Aresi, Francesca Tonelli, Alice Giusto, Concetta Mazzotta, Enza Maria
Valente, Antonella Forlino

Il sottoscritto, consapevole che – ai sensi dell'art. 76 del D.P.R. 445/2000 – le dichiarazioni mendaci, la falsità negli atti e l'uso di atti falsi sono puniti ai sensi del codice penale e delle leggi speciali, dichiara che le informazioni rispondono a verità. Il sottoscritto in merito al trattamento dei dati personali esprime il proprio consenso al trattamento degli stessi nel rispetto delle finalità e modalità di cui al d.lgs. n. 196/2003.

Savona, 08/01/2024