



Umberto Monaco

I am a highly motivated biologist, with a solid theoretical background and excellent practical skills. I love testing myself with new challenges and am constantly looking for growth opportunities.

WORK EXPERIENCE

Department of Industrial Engineering - University of Bologna

Address: Department of Industrial Engineering - University of Bologna, Viale del Risorgimento 2, Bologna, 40136, Bologna, Italy

[01/11/2024 – 31/10/2025]

University researcher - research fellowship

Project "Metastra" - retrospective study "WP2 (Work Package 2)"

Segmentation of thoracic and lumbar tumor vertebrae using 3D Slicer

Reading CT scans and patient reports

Report and planning of the retrospective study "WP2"

Activities performed at "Laboratorio di Tecnologia medica, Istituto Ortopedico Rizzoli"

Department of Physics - University of Bologna

City: Bologna | **Country:** Italy

[10/2023 – 07/2024]

Student research intern

Study on the effects of Antimycin A on the HuT-78 lymphoblastoid cell line

Prof. Claudia Testa, Dr. Iorio Egidio

Analysis of 1H-NMR spectra using TopSpin 4.3.0 Bruker

Statistical Analysis using MetaboAnalyst

Multi-Omic Computational Analysis

Evaluation of lipid increase

Thesis title: "The role of the mitochondria in the formation of 'mobile lipids' in human HuT-78 lymphoblastoid cells"

Department of Chemistry - University of Catania

City: Catania | **Country:** Italy

[09/2021 – 05/2022]

Student research assistant

Study on the effects of electronic cigarette on human monocytes

Study on the effects of Mangiferin on the human Beas-2B cell line

Study on the effects of Opuntia extract on human epithelial cells

Cell cultures

Real-time PCR

ELISA

A.S. Nutrition

City: Valverde (CT) | **Country:** Italy

[09/2018 – 08/2022]

Seller of sport supplements

Sale of supplements in store and delivery

Ability to relate to the customer

Knowledge of macromolecules, chemical compounds and their effect on metabolism

EDUCATION AND TRAINING

[10/2022 – 07/2024]

Master's Degree LM-6 in "Health Biology"

University of Bologna - Department of Pharmacy and Biotechnology (FABIT) <https://corsi.unibo.it/magistrale/BiologiaSalute>

City: Bologna | **Country:** Italy | **Field(s) of study:** Natural sciences, mathematics and statistics: • *Biology* | **Final grade:** 110/110 | **Level in EQF:** EQF level 7 | **Thesis:** The role of the mitochondria in the formation of "mobile lipids" in human HuT-78 lymphoblastoid cells

NMR analysis

Statistical and multi-omics analysis

DNA/RNA extraction and sequencing (NGS, Sanger)

Protein study methods (PCA, FRET)

Immunoenzymatic methods (Western Blot, FISH, ELISA)

Spectrometry methods (NMR, mass)

Chromatography methods (LC, GC, HPLC)

[10/2019 – 07/2022]

Bachelor's Degree L-13 in "Biological Sciences"

University of Catania <https://www.unict.it/it/didattica/lauree-triennali/2023-2024/scienze-biologiche>

City: Catania | **Country:** Italy | **Field(s) of study:** Natural sciences, mathematics and statistics: • *Biology* | **Final grade:** 110/110 con lode | **Level in EQF:** EQF level 6 | **The sis:** The diet in Crossfit

Cell cultures

PCR and rtPCR

ELISA

Inorganic, organic and bio-chemistry

Microbiology

Genetics

Physiology

LANGUAGE SKILLS

Mother tongue(s): Italian

Other language(s):

English

LISTENING C1 **READING** C2 **WRITING** B2

SPOKEN PRODUCTION B2 **SPOKEN INTERACTION** C1

SKILLS

Cell Culturing | Microbiology and Molecular Biology techniques | Image Processing, Image Analysis, Image Segmentation | Python programming | HTML programming | Statistical Analysis | Microsoft Office

RECOMMENDATIONS

Name: Claudia Testa Associate Professor

PHYS-06/A Physics for life sciences, the environment and cultural heritage

Alma Mater Studiorum - Università di Bologna

Department of Physics and Astronomy "Augusto Righi"

Viale Berti Pichat 6/2, Bologna, Italy

Email: claudia.testa@unibo.it

Name: Egidio Iorio Researcher

[Istituto Superiore di Sanità](#)

Core facilities

Rome, Italy

Email: egidio.iorio@iss.it

OTHER

Other skills

- Excellent interpersonal skills
- Precision and attention to detail
- Dedication to work

CERTIFICAZIONI

[21/11/2022]

Certificate of Specific Laboratory Training

Specific Training Certificate - Low Risk

Specific Training Certificate - Medium risk

[16/01/2024]

Certificate of passing the linguistic aptitude test: **ENGLISH LANGUAGE SUITABILITY B - 2**

MANAGEMENT AND LEADERSHIP SKILLS

Work management

- Ability to plan work and commitments
- Analytical and presentation skills
- Problem Solving
- Ability to work alone and/or in a group
- Versatility

Consapevole delle sanzioni penali, nel caso di dichiarazioni non veritiere, di formazione o uso di atti falsi, richiamate dall'art. 76 del D.P.R. 445/2000, dichiaro che il curriculum vitae da me redatto ha valore di autocertificazione di quanto in esso contenuto ai sensi degli artt. 46 e 47 del D.P.R. 445/2000.

Autorizzo il trattamento dei miei dati personali ai sensi del D.lgs. 196 del 30 giugno 2003 e ss.mm.ii. e del Regolamento UE 2016/679 (GDPR) ai fini della ricerca e selezione del personale.

SI ALLEGA A CORREDO DEL CV FOTOCOPIA DI UN DOCUMENTO VALIDO DI RICONOSCIMENTO.

Luogo, data _____

In fede

[apporre firma autografa] _____

