Giorgia Mano

MASTER DEGREE IN BIOMEDICAL ENGINEERING

PROFESSIONAL SUMMARY

Master's degree in Biomedical Engineering at the University of Pavia with a *Bachelor's degree in the same field.*
Solid foundation in tissue engineering, bioinformatics, synthetic biology, biochemistry, and cell and molecular biology.
Passionate about innovation in life sciences, with particular interest in tissue regeneration and genetic engineering.
Motivated and proactive, with experience in collaborative environments and a strong drive to contribute, learn, and stay up to date with the latest biomedical technologies.
Open to international opportunities.

TECH SKILLS:

- **Programming Languages:** C, Python
- **Tools & Technologies:** MATLAB, Abaqus, Inventor (AutoCAD), ANSYS, ImageJ, 3D Slicer, Access, Nanoparticles Syntesis, TEM, DLS, Ft-IR, Zeta Potential, Cell Culture, Flow Cytometry, Western Blot, Immunofluorescence (Widefield, Confocal).
- **Soft Skills:** Teamwork, Problem Solving, Project Management, Effective Communication, Analytical Thinking, Adaptability, Multidisciplinary Collaboration, Technical Presentations.

CERTIFICATIONS:

- ETS - TOEIC PROGRAM
- SPANISH OLS - EUROPEAN SOLIDARITY CORPS

LANGUAGES:

- ITALIAN (NATIVE)
- ENGLISH (FLUENT)
- SPANISH (FLUENT)

PROJECTS:

(see at MyProjects)

EDUCATION

Master's Degree in Biomedical Engineering: | 2023 - 2026
Cells, Tissues and Biomedical Devices
University of Pavia, Italy

- **Internship Thesis Title**: *Convalent Interfacial Engineering of Mesoporous Silica Nanoparticles for Optimized PEI-Mediated PRPF31-GFP Plasmid Delivery in Retinal Gene Therapy.*
- **Relevant Coursework:** Tissue Engineering, Synthetic Biology, Biochemistry, Additive Manufacturing, Genetics, Biomedical Instrumentation.

Bachelor's Degree in Biomedical Engineering | 2018-2023
University of Pavia, Italy

- **Thesis title:** *Minimum Variance Beamforming.*
- **Relevant Coursework:** Bioimages and Biosignals, Clinical Engineering, Engineered Cellular Systems, Pharmacokinetic Models.

WORK EXPERIENCE

Institute of Materials Science of Seville (ICMS) & Andalusian Center of Molecular Biology and Regenerative Medicine (CABIMER) | Erasmus Internship | OCT 2025 - FEB 2026
Seville - Spain

- Developed non-viral nanocarriers (mesoporous silica nanoparticles) for gene therapy, focusing on delivery efficiency and biocompatibility.
- Performed nanoparticle synthesis, surface functionalization, and advanced characterization (TEM, DLS, FT-IR, Zeta Potential).
- Conducted in vitro experiments on HEK293 cells, using flow cytometry, fluorescence microscopy, and Western blotting to evaluate performance.
- Identified key limitations in transfection efficiency, analyzing nanoparticle–DNA interactions and improving stability through polymer coating strategies.

PUBLICATIONS

Article – *Core-shell mesoporous silica nanoparticles for gene delivery: Desing principles and strategies to overcome biological barriers*

COURSES AND CERTIFICATIONS

Digital Professions - Fenice Accademy | Sep 2026
Compressed Gas Safe Handling Course - Linde | Dec 2025