GIULIA CRIVELLO

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28 years (27/12/1995) | Italian

My drive is to contribute to the biomedical field, developing biotechnologies that will enhance patients' lives and transform the healthcare system. I'm willing to prove myself with innovative projects, working in dynamic international settings.

EDUCATION

POLITECNICO DI TORINO Nov 2020 – July 2024

Ph.D. cum laude in Bioengineering and Medical-Surgical Sciences

Development of nanoparticles and biomaterials for controlled drug delivery
Period abroad (6 months): Prof. Tzanov lab, UPC, Barcellona, Spain.
Quality Awards for Doctoral Research of Politecnico of Torino

EPFL Sept. 2017 – March 2020

Master's degree in bioengineering

- Master thesis: Cancer stem cell research - Nick Barker lab, Singapore – Matthias Lütolf, EPFL supervisor
- Specialization: Regenerative Medicine and Biotechnology
- GPA: 5.46/6

POLITECNICO DI TORINO Sept. 2014 – Jul. 2017

Bachelor's degree in biomedical engineering

- Graduation score: 110/110
- Bachelor thesis: Electrospun nanofiber for cell differentiation – Politecnico di Torino.
- Part of "Progetto Talenti": the best 200 students of the Politecnico di Torino.

WORK EXPERIENCE

- **DISTAL - University of Bologna** Jan 2025 – Current
  - Researcher - prof. Enrico Luchinat group
  - Monitoring enzymatic reactions and biological processes by time-resolved nuclear magnetic resonance
- **CERM - University of Florence** Sept 2024 – Dec 2024
  - Researcher - prof. Marco Fragai group
  - Production of recombinant proteins and their characterization through NMR spectroscopy
- **T-REM3DIE - Torino** May 2020 –Oct 2020
  - Collaboration with the start-up
  - Development of a medical device for tendon repair
- **A*star - Singapore** Sept. 2019 – Mar. 2020
  - Internship (full-time) - IMB department, Nick Barker lab
  - Study the effect of AQP5 in gastric cancer with mouse models and cancer cell lines
- **ABIONIC - Lausanne** Feb. 2019 – Aug. 2019
  - Internship (full-time) - R&D department
  - Study of gold functionalization in a microfluidic system for immunoassay and data collection for the publication of Putallaz et al. (2019)
- **EPFL - Lausanne** Sept. 2018 – Jan. 2019
  - Lab project (part-time) – Li Tang laboratory
  - Mechanical stimulation of the immune system through cell-hydrogel interaction

PERSONAL SKILLS

LAB SKILLS:

- Animal experience: Mice, Zebrafish
- Cell culture: bacteria, T cells, cancer and human cell lines, electroporation, lipofection, bacteria transformation
- Lab skills: bioassay, sterility tests, bacteria count, qPCR, immune assays, western blot, BCA, immunofluorescence, immunohistochemistry, ELISA, affinity chromatography, electrophoresis, confocal microscopy, recombinant protein production, extraction and purification, NMR spectroscopy
- Nanomaterials synthesis, characterization and functionalization of polymers, hydrogel production and functionalization, rheology, electrospinning, 3D printing, spectroscopy Vis and IR, FTIR, SEM, HPLC, pHmeter

SOFTWARES:

- Good knowledge of Microsoft Office
- Basic knowledge of Matlab, Solidwork, ImageJ, R and python

LANGUAGES

ITALIAN	mother tongue	**FRENCH**	B2
ENGLISH	C1	**SPANISH**	B1

PUBLICATIONS

- Crivello, G., et al. "In vitro models of bacterial biofilms: innovative tools to improve understanding and treatment of infections." Nanomaterials 13.5 (2023): 904.
- Crivello, Giulia, et al. "Lignin–Cobalt Nano-Enabled Poly (pseudo) rotaxane Supramolecular Hydrogel for Treating Chronic Wounds." Pharmaceutics 15.6 (2023): 1717.

CONGRESSES

- Crivello, G., Mattu, C., Boffito, M., Tzanov, T., & Ciardelli, G. "Lignin-based nanoparticles with phthalocyanine functionality for photothermal treatment of bacterial biofilm". **Poster** at: WBC 2024: World Biomaterial Congress, Daegu (South Korea), 26 – 31/05/2024.
- Crivello, G., Mattu, C., Boffito, M., Tzanov, T., & Ciardelli, G. "Multi-functional supramolecular hydrogel based on custom-made polyurethanes for fighting inflammation by combined delivery of natural phenols and nitric oxide". **Oral presentation** at: WBC 2024: World Biomaterial Congress, Daegu (South Korea), 26 – 31/05/2024.
- Crivello, G., Mattu, C., Boffito, M., Tzanov, T., & Ciardelli, G. "Polyphenolic lignin-based material enzymatically conjugated with a custom-made polyurethane hydrogel for reducing inflammation in chronic wounds". **Oral presentation** at: SIB 2023 Congresso Nazionale Societa' Italiana Biomateriali, Camerino (Italy), 03 -06/07/2023.
- Crivello, G., Orlandini, G., Morena, A. G., Mattu, C., Boffito, M., Tzanov, T., & Ciardelli, G. "Dual-function nanoparticles loaded in a custom-made polyurethane hydrogel for chronic wound treatment". **Oral presentation and e-poster** at: EWMA 2023: The 33rd Conference of The European Wound Management Association, Milan (Italy), 03 - 05/05/2023.

AWARDS

- E-POSTER PRIZE EWMA 2023 The E-Poster prize is awarded to an Electronic Poster that is: Visually appealing, is well laid out in a logical manner, has relevant and interesting content and clear conclusions (2023)
- Editor's choice article 2023. Certificate of publication for the article titled: 'In Vitro Models of Bacterial Biofilms: Innovative Tools to Improve Understanding and Treatment of Infections' (2023)
- Part of "Progetto Talenti" granted by Cassa Risparmio Torino: the best 200 students of the Politecnico di Torino.
- Quality Awards for Doctoral Research 36th and 37th cycles of Politecnico of Torino

HOBBIES

- Italian champion under 14 and under 16 of Athletics (400m hurdles)
- Horseback trips
- Rock climbing
- Travel coordinator