## **Actual position:**

- Tenure-track assistant professors (RTD-B)- Scientific-Disciplinary Sector 03/D2 Drug technology, socioeconomics and regulations) at the University of Torino.
- National Scientific qualification as associate in the Italian higher education system, in the call 2021/2023 (Ministerial Decree n. 553/2021 and 589/2021) for the disciplinary field of 03/D2 Drug technology, socioeconomics and regulations. (Academic Recruitment Field 03/D Medicinal and food chemistry and applied technologies, according to the national classification). The validity of the qualification is eleven years, starting from the 03/10/2022.
- Member of the Interdepartmental Center Polito BIO Med Lab of the Politecnico of Torino.
- Member of the Consorzio Interuniversitario Nazionale per la Scienza e Tecnologia dei Materiali (INSTM), Italy.
- National Metrology Institute of Italy, Torino
- Member of the Interuniversity Center for the Promotion of the 3R Principles in Teaching and Research.

## **Previous employment**

- Principal investigator of the Vesicular Viral Vector Substitute (3VS) project (Proof of Concept Grants). 50K, 24 April 2023-6 months.
- Non-tenured assistant professor (RTDA). Scientific-Disciplinary Sector BIO/10 BIOCHEMISTRY) at the Politecnico of Torino. From 01-05-2021to 21-12-2023.
- January 2021- December 2023. Scientific collaborator of the MOLECULAR ENGINEERING LAB (MOLE) of the Applied Science and Technology (DISAT) department of the Politecnico of Torino.
- January 2018-December 2020 Research fellow representative for the Department of Applied Science and Technology (DISAT) of the Politecnico Torino, Torino, Italy.
- January 2017-December 2020: Senior Research fellow (C-4 Category), supervisor and coordinator of the biological laboratory of the TNH research group of the Applied Science and Technology (DISAT) department of the Politecnico Torino, Torino, Italy.
- December 2013-December 2016: Research Scientist at the Physical Science and Engineering Department of the King Abdullah University of Science and Technology, Saudi Arabia.
- November 2010-December 2013: PostDoc Senior at the Italian Institute of Technology (IIT), Genova, (Italy). Neuroscience and Brain Technologies Department and Nanostructures Facilities.
- October 2009-October 2010: Molecular biology automation specialist. Molinette University Hospital, Torino, Italy.
- September 2007-August 2009: Postdoctoral Fellow. Near-infrared spectroscopy for functional studies of brain activity in human. Health Sciences Dept., University of L'Aquila, Italy.
- January 2005-January 2006: Postdoctoral Fellow. Study of the interactions between saporin, a ribosome-inactivating protein, and DNA by atomic force microscopy. Physics and BBA (Basic and Applied Biology) Depts., University of L'Aquila, Italy.
- September 2005-January 2006: Herbal scientific consultant of the Pharmanature parapharmacy, L'aquila, Italy.
- January 2001-January 2004: PhD student in Microsystems engineering at the Faculty of Engineering of Tor Vergata University, Rome, Italy.
- Founding member of the non-profit Association Ithacam (International Centre For Innovation In Pharmaceutical Manufacturing And Medicines).

#### **Patents:**

- "Method for obtaining highly concentrated populations of extracellular vesicles (EVs) washed of their physio-pathological cargo". PCT/IB2022/060343.
- "BIOMIMETIC NON IMMUNOGENIC NANOASSEMBLY FOR THE ANTITUMOR THERAPY". United States Patent Application Publication Pub . No .: US 2020/0330616 A1, Pub . Date : Oct. 22, 2020.
- "A biomimetic nanoporous carrier comprising an inhibitor directed towards the native form of IDH2 protein" (Original title: "Vettore nanoporoso biomimetico comprendente un inibitore diretto verso la forma nativa della proteina IDH2" Italian Patent N. IT102019000001009 of 23rd January 2019.

- "Sonosensitizing agent and its method of activation" (Original title: "Agente sonosensibilizzante e suo metodo di attivazione") Italian Patent N. 102018000009966 of 31th Oct. 2018,
- "Biomimetic Non-Immunogenic Nanoassembly for the Antitumor Therapy" European Patent N. 18807126.0-1109 Date of filing 30/10/18, Priority IT/13.11.17/ITA201700129243.
- "Dispositivo per l'ottenimento di colture cellulari in tre dimensioni, procedimento per la sua realizzazione e impiego di tale dispositivo". N. TO2012A000331. FONDAZIONE ISTITUTO ITALIANO DI TECNOLOGIA

## Professional Society Membership

- SITELF\_SOCIETÀ ITALIANA DI TECNOLOGIA E LEGISLAZIONE FARMACEUTICHE
- International Society for Extracellular Vesicles from 2017
- Società Italiana di Biochimica e Biologia Molecolare from 2021
- FEBS: Federation of European Biochemical Societies from 2021
- IUBMB: International Union of Biochemistry and Molecular Biology from 2021
- European Society for Biomaterials from 2021
- National Interuniversity Consortium of Materials Science and Technology (INSTM) from 2021
- Italian Society of Extracellular Vesicles (EVIta) from 2018-2020
- Full member of the Tissue Engineering & Regenerative Medicine International Society (TERMIS) 2015-2016

# **Editorial board membership**

- Editor of Materials (ISSN 1996-1944). https://www.mdpi.com/journal/materials/sectioneditors/biomaterials
- Editor of Pharmaceutics (ISSN 1999-4923) https://www.mdpi.com/journal/pharmaceutics
- Associate editor of the American Journal of Biomedical Science & Research. https://biomedgrid.com/associate-editors.php
- Editorial Board Member of Clinical Medical Reviews and Reports https://www.auctoresonline.org/journals/clinical-medical-reviews-andreports/editorial-board
- Guest Editor for the special issue "Metal and Metal Oxide Nanoparticles: Design, Characterization, and Biomedical Applications" of Materials (ISSN 1996-1944), MDPI.
- https://www.mdpi.com/journal/materials/special\_issues/Metal\_Metal\_Oxide\_Nanopart\_Des\_Charact\_ Biomed\_Appl
- Guest Editor for the special issue Nano-bio interactions: Ecotoxicology and Cytotoxicity of Nanomaterials. Frontiers. https://www.frontiersin.org/research-topics/10154/nano-bio-interactionsecotoxicology-and-cytotoxicity-of-nanomaterials.
- Guest editor for the Special Issue "Advances on Cancer Molecular Mechanisms and Immunotherapy". A special issue of International Journal of Molecular Sciences (ISSN 1422-0067). This special issue belongs to the section "Molecular Oncology". https://www.mdpi.com/journal/ijms/special\_issues/cancer\_molecular\_immunotherapy
- Guest editor for the Special Issue "In Vitro Model for Micro and Nano Technologies".
  A special issue of Cells (ISSN 2073-4409).
  https://www.mdpi.com/journal/cells/special issues/model nano