PERSONAL INFORMATION

Federica Foglietta

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Female | *22/05/1987* | *Italian*

Enterprise	University	EPR
☐ Management Level	☐ Full professor	☐ Research Director and 1st level Technologist / First Researcher and 2nd level Technologist
☐ Mid-Management Level	☐ Associate Professor	☐ Level III Researcher and Technologist
☐ Employee / worker level	☒ Researcher and Technologist of IV, V, VI and VII level / Technical collaborator	☐ Researcher and Technologist of IV, V, VI and VII level / Technical collaborator

WORK EXPERIENCE

2022 **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 05/G1 - Pharmacology, clinical pharmacology and pharmacognosy**

2021-today **Researcher (RTDA) at the Department of Drug Science and Technology, University of Torino (Italy)**

2019 **Research Fellow**
Duration of 12 months (from 1st December 2019 to 30th November 2020) financed by Associazione Italiana per la Ricerca sul Cancro (AIRC, IG 22041).
Research Project: “Development of spheroids of ovarian carcinoma and study of the sonodynamic effect induced by doxorubicin-loaded liposomes”
Supervisor: Prof. Enzo Terreno.
Location: Department of Molecular Biotechnology and Health Sciences, University of Torino (Italy).

2018 **Research Fellow**
Duration of 12 months (from 1st December 2018 to 30th November 2019) financed by Progetto San Paolo. Research Project: “Study of the effects generated by the application of low intensity ultrasound on tumour cells treated with chemotherapeutic liposomes”.
Supervisor: Prof. Enzo Terreno.
Location: Department of Molecular Biotechnology and Health Sciences, University of Torino (Italy).

2017-2018 **Research Associate**
Duration from 1st June 2017 to 31st august 2018.
Research project: “Evaluation of ultrasound responsive microbubbles in three dimensional pancreatic models”.
Supervisor: Prof. John Callan.
Location: School of Pharmacy and Pharmaceutical Science, Ulster University, Coleraine Campus (Northern Ireland, UK)

2016 **EMBO Short-Term Fellowship**
Duration of 3 months (from 1st October 2016 to 31st December 2016) financed by European Molecular Biology Organization (EMBO).
Research project: "Engineered perfused three-dimensional models: first steps towards a new tailored pharmacology approach in breast cancer".
Supervisor: Prof. Giulio C. Spagnoli.
Location: Department of Biomedicine, University Hospital Basel (Switzerland).

2016 **Fondazione Umberto Veronesi Post-doctoral fellowship**
Duration of 6 months (from 1st April 2016 to 30th September 2016).
Research Project: "Engineered perfused three-dimensional breast cancer model: first steps towards a

tailored approach for drug optimization".
Supervisor: Prof. Giulio C. Spagnoli.
Location: Department of Biomedicine, University Hospital Basel (Switzerland).

2015 **Fellowship training in research**
Duration of 3 months (from 15th December 2015 to 15th March 2016) financed by Associazione Italiana per la Ricerca sul Cancro (AIRC).
Research Project "In vivo sonodynamic therapy: evaluation of cavitation effects on cancer tissue with innovative sonosensitizers".
Location: Department of Drug Science and Technology, University of Torino (Italy).
Supervisor: Dr. Loredana Serpe.

2015 **Fellowship training in research financed by AIRC**
Duration of 5 months (from 16th March 2015 to 15th August 2015)
Research project "In vivo sonodynamic therapy: evaluation of cavitation effects on cancer tissue with innovative sonosensitizers".
Location: Department of Drug Science and Technology, University of Torino (Italy).
Supervisor: Dr. Loredana Serpe.

2014 **Fellowship training in research financed by AIRC**
Duration of 12 months (from 13th January 2014 to 12th January 2015)
Research Project: "In vivo sonodynamic therapy: evaluation of cavitation effects on cancer tissue with innovative sonosensitizers".
Supervisor: Prof. Franco Dosio.
Location: Department of Drug Science and Technology, University of Torino (Italy).

2012 **Fellowship training in research financed by the Ministry of Health as part of the Call "Young Scientists 2008"**
duration of 20 months (from 1st February 2012 to 30th September 2013)
Research Project: "Sonodynamic therapy: high energy shock waves and porphyrin compounds for treatment of solid tumours".
Supervisor: Prof. Giancarlo Cravotto.
Location: Department of Drug Science and Technology, University of Torino (Italy).

EDUCATION AND TRAINING

2017 **Northern Ireland Licence Training Group (NILTG) for in vivo models (PIL A e PIL B) at the Coleraine Campus, Ulster University (Northern Ireland, UK)**

2014 **Qualification as Biologist at the University of Pavia (Italy)**

2012-2014 **Ph.D. Degree in Pharmaceutical and Biomolecular Sciences at the Department of Drug Science and Technology at the University of Torino (Italy)**
Dissertation Title: "Sonodynamic Therapy: High Energy Shock Waves and Porphyrin Compounds for the Treatment of Solid Tumours". Ph.D. Mentor: Dr. Roberto Canaparo

2009-2011 **Master's Degree in Cellular and Molecular Biology at University of Torino (Italy)**
Grade: 104/110
Dissertation Title: "Cholesterylbutyrate solid lipid nanoparticles: in vitro study of anticancer activity".
Supervisors: Dr. Roberto Canaparo and Dr. Loredana Serpe.

2009 **Research traineeship at the Citofluorimetric Laboratory at Maria Vittoria Hospital in Torino (Italy)**
Duration 3 months
Supervisor: Dr. Caterina Martini.

2006-2009 **Bachelor's Degree in Biological Sciences at University of Torino (Italy)**
Grade: 103/110

Disseration Title: “Cytofluorimetric quantification of foetal-maternal haemorrhage”.
Supervisor: Dr. Riccardo Autelli.

PERSONAL SKILLS

Mother tongue: Italian

Other language: English: professional proficiency
French: basic communication skills, working knowledge

Job-related skills: Plan, organize and assume long-term and short-term research projects in the fields of drug delivery systems and photodynamic and sonodynamic treatments.

Digital skills: Advanced knowledge of Excel, Word, Powerpoint, Graphpad Prism, R Project for Statistical Computing, FCS Express 4 Flow Cytometry, FlowJo, BioRad CFX Manager, Leica Application Suite V3, Image J.

Technical skills: Molecular biology skills: Genomic DNA, total RNA and protein extraction from cells and tissues, Real Time PCR, Western Blot, ELISA assay.
Cellular biology skills: Immortalized cell culture, stem cell culture, cell co-culture, 3D cell models, pharmacological applications of tissue engineering, manipulation of cells in a bioreactor, fluorescent and confocal microscopy, immunofluorescence staining, citofluorimetric analysis.
In vivo skills: use of syngenic in vivo models, animal handling and in vivo imaging

WORK ACTIVITIES

Awards: 2012: 3rd Prize of the “3D Cell Culture World Games” by 3D Biomatrix with a proposal idea on neuroblastoma spheroids to evaluate the anticancer efficacy of Sonodynamic Therapy.

Editorial Activity: Co-Guest Editor of Special Issue "Ultrasound in Anticancer and Antimicrobial Therapy" in Pharmaceutics
Review Editor per Frontiers in Immunology, Editorial Board in Inflammation
Reviewer for the following international journals:

- Journal of Pharmacy and Pharmacology
- International Journal of Pharmaceutics
- Frontiers
- Molecular Biology Reports
- Pharmaceutics
- Molecules
- Pharmaceutics
- Current Pharmaceutical Design
- Letters in Drug Design & Discovery
- Current Cancer Drug Targets
- Open Life Sciences
- Cardiovascular & Haematological Agents in Medicinal Chemistry

Invited presentation: Oral Communication entitled “Ovarian cancer cells under ultrasound exposure of doxorubicin show an enhanced immunogenic cell death” in the 5th International Caparica Conference on Ultrasonic-based, 31st May – 03rd June 2021, Caparica – Portugal.

Grants: 2016: EMBO Short-Term Fellowship 12209,8 Euro for a period of 3 months at Department of Biomedicine, University Hospital Basel (Switzerland) for a project entitled “Engineered perfused three-dimensional models: first steps towards a new tailored pharmacology approach in breast cancer”
2016: Fondazione Umberto Veronesi Post-Doctoral Fellowship of 15000,0 euro for a period of 6 months at the Department of Biomedicine, University Hospital Basel (Switzerland) for a project entitled “Engineered perfused three-dimensional breast cancer model: first steps towards a tailored approach for drug optimization”

Patent: 2020: PCT- The International Patent System, PCT/IB2020/052014 for the patent “Method of activation of sonosenzitizing agent”.
Inventors: Loredana Serpe, Roberto Canaparo, Federica Foglietta, Andrea Francovich, Giovanni

Durando, Valentina Alice Cauda, Giancarlo Cicero, Nadia Garino, Giancarlo Canavese, Tania Limongi, Luisa Racca, Andrea Ancona, Marta Canta.
2019: “Sonosensitizing agent and its method of activation” (original title: agente sonosensibilizzante e suo metodo di attivazione) - Italian Patent n. IT102018000009966.
Inventors: Loredana Serpe, Roberto Canaparo, Federica Foglietta, Andrea Francovich, Giovanni Durando, Valentina Alice Cauda, Giancarlo Cicero, Nadia Garino, Giancarlo Canavese, Tania Limongi, Luisa Racca, Andrea Ancona, Marta Canta.

ADDITIONAL INFORMATION

Total number of publications in peer-review journals	36
Total number of citations	982
H index	17

“Autorizzo l’ISS e l'Associazione NanoInnovation al trattamento dei miei dati personali e la loro conservazione ai fini organizzativi e amministrativi, secondo quanto previsto dal Regolamento UE 2016/679”

Updated on 31st July, 2023

Federica Foglietta