PERSONAL INFORMATION

Laura Marchetti

University of Pisa
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Scopus ID 16834912400
WOS ID: AAB-9843-2019

Sex Female | *Date of birth* 15/03/1980 | *Nationality* Italian

Enterprise	University	EPR
☐ Management Level	☐ Full professor	☐ Research Director and 1st level Technologist / First Researcher and 2nd level Technologist / Principal Investigator
☐ 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

Dec 2021 – present
Senior Researcher (RTDB) in Molecular Biology (SSD BIO/11)
Department of Pharmacy, University of Pisa, Italy
- Teaching and research activities in molecular biology and related disciplines

Jan 2019 – Nov 2021
Junior Researcher (RTDA) in Molecular Biology (SSD BIO/11)
Department of Pharmacy, University of Pisa, Italy
- Teaching and research activities in molecular biology and related disciplines

Sept 2015 – Dec 2018
Senior post-Doc researcher
Italian Institute of Technology, Pisa Laboratories, Italy
- Research activity in molecular neurobiology, biomaterials and nanotechnology

July 2010 – Aug 2015
Post-Doc researcher
Scuola Normale Superiore, Pisa, Italy
- Research activity in molecular neurobiology, ligand-receptor interactions and computational biology

EDUCATION AND TRAINING

Jan 2006 – Jun 2010
PhD in Molecular Biology, Scuola Normale Superiore, Pisa, Italy
- Thesis discussed on the 10th June 2010, grade: 70/70 cum laude

Jun 2005 – Dec 2005
Graduate Fellowship, Scuola Normale Superiore, Pisa, Italy

Oct 1999 – Mar 2005
Master Degree in Pharmaceutical Biotechnologies, University of Padova, Italy
- Thesis discussed on the 5th March 2004, grade: 110/110 cum laude

Mar 2004 – Feb 2005
Experimental thesis period at the Chemical Biology Laboratory of Prof. Dr. M. Famulok, University of Bonn, Germany

WORK ACTIVITIES

Awards
- **2020:** Awarded the front cover image at Nano Letters journal (https://pubs.acs.org/toc/nalefd/20/5)
- **2019:** Awarded a research commentary at PNAS journal (doi.org/10.1073/pnas.1914583116)
- **2011:** Winner of a FEBS Youth Travel Fund for the participation at the FEBS practical course "Viral Expression Vectors for Basic and Applied Studies", Institute of Technology, Tartu, ESTONIA

Editorial activity
- **Associate Editor** for Frontiers in Molecular Biosciences; **Review editor** an **ad hoc reviewer** for ACS, Frontiers and MDPI editorial groups; Chapter **contributor to two books** ("Neurotrophic Factors: Methods and Protocols", ed. Springer Humana Press, 2018; " Silicon Carbide for Medical Devices", ed. Elsevier, 2022).

Invited talks and lectures

- Society of Italian Biochemistry and Molecular Biology Annual Meeting, "The neurotrophin signalling network: From intracellular dynamics to therapeutic targeting", 23rd September **2021**
- 5th International Synthetic & Systems Biology Summer School (SSBSS 2018), " Single molecule tracking reveals the oligomerization state of activated neurotrophin receptors in live cell membranes", Certosa di Pontignano, Siena, Italy, 25th July **2018**
- Seminar "Single molecule imaging and tracking of neurotrophins and their receptors in living neuronal cells" at DANDRITE Lab headed by Prof. A. Nykjaer, Department of Biomedicine, University of Aarhus, Denmark, 29th October **2015**

Conference committees and organization

- Co-chair of the Session Platform "Molecular, Cellular, and Experimental Neuroscience: Reception, Plasticity, and New Approaches", at Biophysical Society 60th Annual Meeting, Los Angeles California, USA, 27th February -2nd March **2016**
- Co-organizer of the Under 40 Symposium "Neurotrophins in physiology and pathology: novel molecular and cellular perspectives" al Congresso SINS XVI, Cagliari, Italy, 8-11 October **2015**

Grants

- **2021-24:** Workpackage leader of the Human Frontiers Science Program project entitled "Structural damage to axons resulting from repetitive mechanical motion"
- **2020-23:** Team member of the Tuscany Region Bando Ricerca Salute 2018, entitled: "Smart bioactive personalised and implantable 3d printed scaffold for tendon regeneration".
- **2020-22:** Team member of the University of Pisa PRA_2020_92 project entitled: "Quantum computing, technologies and applications".
- **2020-21:** Team member of the University of Pisa Proof-of-Concept SPARK Pisa entitled: "Fret sensor for the Assessment of Coronavirus Titre"
- **2019-20:** Workpackage leader of the project "Innovative Combinatory Chemotherapy approaches for Colorectal Cancer Treatment", funded by Beneficentia Stiftung Foundation
- **2014-18:** Team member of the European FET Flaghsip Human Brain Project (HBP), Grant agreement number 604102, SGA1-2 n. 720270

Patents

- **2008**: European patent N. 08165522.7-1212: "Novel pH- and anion- concentration-responsive GFP mutant, a chimeric protein comprising such a mutant and a method for the combined assaying of the pH and anion concentration".
- **2007:** Italian patent N. TO2007A000687: "Nuovo mutante di GFP sensibile al pH e alla concentrazione di anioni, proteina chimerica comprendente tale mutante e procedimento di determinazione combinata del pH e della concentrazione di anioni".

ADDITIONAL INFORMATION

Bibliometric indexes

total number of publications in peer-review journals in the last 10 years (2013-2023): **38**
total journal Impact Factor wos 2021 (average IF/paper) of the last 10 years: **241.4** (**6.35**)
total number of citations (scopus) **1401**
H index (scopus) **18**

Relevant publications

- Human Microglia Extracellular Vesicles Derived from Different Microglia Cell Lines: Similarities and Differences Ceccarelli L., **Marchetti L.***, Rizzo M.,Moscardini A., Cappello V., Da Pozzo E., Romano M., Giacomelli C., Bergese, P., Martini, C., ACS Omega, 2022, 7(27), pp. 23127–23137.

- **Marchetti L.**, Nifosì R., Martelli P.L., Martini C., D'Elia, M. Quantum computing algorithms: getting closer to critical problems in computational biology, Briefings in Bioinformatics, 2022, 23(6), pp. 1–15.

- Convertino D.*, Fabbri F., Mishra N., Mainardi M., Cappello V., Testa G., Capsoni S., Albertazzi L., Luin S., **Marchetti L.***,$, and Coletti C.*,$, "Graphene Promotes Axon Elongation through Local Stall of Nerve Growth Factor Signaling Endosomes", Nano Letters, 2020, 20, 5, 3633–3641

- **Marchetti L.***,$, Bonsignore F$, Gobbo F$, Amodeo R, Calvello M, Jacob A, Signore G, Schirripa Spagnolo C, Porciani D, Mainardi M, Beltram F, Luin S*, Cattaneo A*, "Fast-diffusing p75NTR monomers support apoptosis and growth cone collapse by neurotrophin ligands", PNAS 2019 Sept 12, 2019, doi: 10.1073/pnas.1902790116

- Gobbo F, **Marchetti L**, Jacob A, Pinto B, Binini N, Pecoraro Bisogni F, Alia C, Luin S, Caleo M, Fellin T, Cancedda L, Cattaneo A., "Activity-dependent expression of Channelrhodopsin at neuronal synapses", Nat Commun, 2017 Nov 20;8(1):1629. doi: 10.1038/s41467-017-01699-7.

- Porciani D, Tedeschi L, **Marchetti L**, Citti L, Piazza V, Beltram F, Signore G., "Aptamer-Mediated Codelivery of Doxorubicin and NF-κB Decoy Enhances Chemosensitivity of Pancreatic Tumor Cells.", Mol Ther Nucleic Acids. 2015 Apr 28;4:e235.

For the complete list of publications, see: https://arpi.unipi.it/simple-search?query=laura%5C+marchetti&location=&sort_by=score&order=desc&rpp=10&etal=0&filtername=author&filterquery=rp97535&filtertype=authority

Pisa, 15/05/2023