



UNIVERSITÀ
DEGLI STUDI
DELL'AQUILA



DISCAB
Dipartimento di Scienze
Cliniche Applicate
e Biotecnologiche

CURRICULUM VITAE



PERSONAL INFORMATION	<p>Name and Surname: Irene Fasciani Department: Biotechnological and applied, clinical sciences Address (work): Via Vetoio Coppito 2 City: L'Aquila postal code 67100 Nation: Italy E-mail address (work): irene.fasciani@univaq.it</p>
CURRENT POSITION	<p>Researcher (RTDa)</p>
<p>EDUCATION OTHER QUALIFICATIONS</p>	<p>[Oct 2012 – 8 Apr 2016] PhD Degree in "Neurobiology of neurodegenerative diseases, plasticity and neural development" Thesis title: An internal ribosome entry site, present within the third cytoplasmic loop, enables the expression of the carboxyl-terminal domain of muscarinic M2 and M3 receptors University of L'Aquila</p> <p>[Jul 2012] Professional Biologist National Habilitation University of L'Aquila</p> <p>[Oct 2009 – Mar 2012] Master's degree in "Biology Applied to Biomedical Research" (LM-06) Final grade: 110/110 cum laude Thesis title: Role of protein oligomerization in the evolutionary adaptation University of L'Aquila</p> <p>[Oct 2005 – Oct 2009] Bachelor's degree in "Biological Sciences" (L-12) Final grade: 109/110 Thesis title: Neurophysiological mechanisms and experimental basis of epilepsy University of L'Aquila</p>
ACADEMIC APPOINTMENTS	<p>[1 Mar 2023 – present] Researcher (RTDa) – SSD BIO/14 Title: Sviluppo di una piattaforma biotecnologica per lo studio di farmaci con proprietà allosteriche e agonisti/antagonisti super-selettivi, "biased drugs" Fundings: Fondi PNRR – Ecosistemi per l'Innovazione, progetto Vitality</p>



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	<p>Total duration: 3 years Department of Biotechnological and Applied Clinical Sciences, University of L'Aquila</p> <p>[1 Mar 2020 – 28 Feb 2023] Post-doctoral Research Fellowship – SSD BIO/14 Title: Study of the neurotoxicity mechanism of light on dopaminergic neurons This fellowship has been funded by Dompé Farmaceutici S.p.A. Total duration: 3 years Department of Biotechnological and Applied Clinical Sciences, University of L'Aquila</p> <p>[1 Jul 2019 – 28 Feb 2020] Research Fellowship – SSD BIO/14 Title: Study of the anti-inflammatory action of Reparixin on CXCR1/CXCR2 receptors This fellowship was funded by Dompé Farmaceutici S.p.A. Total duration: 8 months Department of Biotechnological and Applied Clinical Sciences, University of L'Aquila</p> <p>[1 Dec 2016 – 31 May 2019] Post-doctoral Research Fellowship – SSD BIO/14 Title: Characterization of an Internal Ribosome Entry Site (IRES) in the third cytoplasmic loop of muscarinic receptors as regulatory mechanism of receptor trafficking and dimerization This fellowship was funded by Dompé Farmaceutici S.p.A. From May 2018 to September 2018: maternity leave (5 months) Total duration: 2 years Department of Biotechnological and Applied Clinical Sciences, University of L'Aquila</p> <p>[1 Mar 2016 – 30 Sep 2016] Research Fellowship – SSD BIO/14 Title: Characterization of a new IRES-dependent translational mechanism of muscarinic M2 and M3 receptors This fellowship was funded by Dompé Farmaceutici S.p.A. Total duration: 7 months Department of Biotechnological and Applied Clinical Sciences, University of L'Aquila</p>
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<p>TEACHING EXPERIENCE</p>	<p>[2023 – 2024] Pharmacology and Clinical Toxicology (2 CFU Lab) B0397– SSD BIO/14 Master course in Medical Biotechnology (B4D) Department of Biotechnological and Applied Clinical Sciences, University of L'Aquila</p> <p>[2023 – 2024] Biotechnological drugs and vaccine innovations (2 CFU Lab) DB0139– SSD BIO/14 Master course in Medical Biotechnology (B4D3) Department of Biotechnological and Applied Clinical Sciences, University of L'Aquila</p> <p>[2022 – 2025] Teaching assistant – SSD BIO/14 Pharmacology and Clinical Toxicology Master course in Medical Biotechnology Department of Biotechnological and Applied Clinical Sciences, University of L'Aquila</p> <p>[2022 – 2025] Teaching assistant – SSD BIO/14 Pharmacological and toxicological, applied Methodologies SSD BIO/14 Bachelor course in Biotechnology Department of Biotechnological and Applied Clinical Sciences, University of L'Aquila</p> <p>[2019 – 2022] Teaching assistant – SSD BIO/14 Psychopharmacology Master course in Applied and Psychological Sciences Department of Biotechnological and Applied Clinical Sciences, University of L'Aquila</p> <p>[26 May 2020] Seminar Title: Biological and pharmacological aspects of post-traumatic stress disorder Seminar for Master's students in Applied Psychological Sciences and Clinical Applied Psychology. Department of Biotechnological and Applied Clinical Sciences, University of L'Aquila</p>
<p>RESEARCH ACTIVITIES</p>	<p>Identification of new pharmacological targets as biased drugs;</p>



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	<p>Study of the detrimental effects of artificial light on dopaminergic neurons; Interaction of dopaminergic allosteric ligands with dopaminergic D2/D3 dimers; Study of the effects of Reparixin on CXCR1 and CXCR2 chemokine receptors, in-vitro and ex-vivo; Identification of an internal ribosome entry site (IRES) in M2 and M3 muscarinic receptor mRNAs; Extracellular vesicle formation induced by DDT (dichlorodiphenyltrichloroethane) as potential risk factor for Parkinson's disease; Study of the radio- and chemo-resistance of rhabdomyosarcoma mesenchymal tumor cells; In-vivo and in-vitro studies of the hephrin receptor signalling in colorectal cancer; Cellular and molecular approach aimed at studying the interaction between the viral Spike protein and the cellular ACE2 membrane protein for Anti-Covid 19 strategies; Nitric oxide synthesis inhibitors prevent muscarinic receptor down-regulation induced by pilocarpine- and kainic acid.</p>
<p>RESPONSIBILITY IN ACADEMIC ACTIVITIES</p>	<p>Tutoring PhD Students of the Experimental Medicine Doctorate Program, University of L'Aquila; Tutoring Master's degree students of the Medical Biotechnologies and Molecular-Cellular Biotechnologies Courses, University of L'Aquila.</p>
<p>EDITORIAL BOARD, EDITORIAL ACTIVITIES, SOCIETY MEMBERSHIP</p>	<p>Member of Italian National order of Biologists</p>
<p>SCIENTIFIC ACHIEVEMENTS BIBLIOMETRIC INDICATORS</p>	<p>Scopus Author ID: 55923596100 https://orcid.org/0000-0002-0345-082X (Hirsch (H) Index 9, total number of quotes 226, median number of quotes by article 9.81)</p>
<p>SELECTED PUBLICATIONS</p>	<ol style="list-style-type: none"> Fasciani I, Carli M, Petragano F, Colaianni F, Aloisi G, Maggio R, Scarselli M, Rossi M. GPCRs in Intracellular Compartments: New Targets for Drug Discovery. <i>Biomolecules</i>. 2022 Sep 22;12(10):1343. doi: 10.3390/biom12101343. PMID: 36291552; PMCID: PMC9599219. IF= 6.064, CIT= 0 Petragano F*, Fasciani I*, Mannoury la Cour C, di Cara B, Aloisi G, Carli M, Kolachalam S, Rossi M, Marampon F, Scarselli M, Millan MJ, Maggio R. Interaction of the preferential D3 agonist (+)PHNO with dopamine D3-D2 receptor heterodimers and diverse classes of monoamine receptor: relevance for PET imaging. <i>Eur J Pharmacol</i>. 2022 Jun 15;925:175016. doi: 10.1016/j.ejphar.2022.175016. Epub 2022 May 8. PMID: 35545150. IF=



5.195; CIT= 0

3. Fasciani I, Petragnano F, Aloisi G, Marampon F, Rossi M, Coppolino MF, Rossi R, Longoni B, Scarselli M, Maggio R. A New Threat to Dopamine Neurons: The Downside of Artificial Light. *Neuroscience*. 2020 Apr 15;432:216-228. doi: 10.1016/j.neuroscience.2020.02.047. Epub 2020 Mar 4. PMID: 32142863. IF= 3.708; CIT= 5

4. Fasciani I, Petragnano F, Aloisi G, Marampon F, Carli M, Scarselli M, Maggio R, Rossi M. Allosteric Modulators of G Protein-Coupled Dopamine and Serotonin Receptors: A New Class of Atypical Antipsychotics. *Pharmaceuticals (Basel)*. 2020 Nov 14;13(11):388. doi: 10.3390/ph13110388. PMID: 33202534; PMCID: PMC7696972. IF= 5.215; CIT= 6

5. Fasciani I, Pietrantonio I, Rossi M, Mannoury la Cour C, Aloisi G, Marampon F, Scarselli M, Millan MJ, Maggio R. Distinctive binding properties of the negative allosteric modulator, [3H]SB269,652, at recombinant dopamine D3 receptors. *Eur J Pharmacol*. 2018 Jan 15;819:181-189. doi: 10.1016/j.ejphar.2017.12.002. Epub 2017 Dec 6. PMID: 29223348. IF= 5.195; CIT= 4

6. Capannolo M*, Fasciani I*, Romeo S, Aloisi G, Rossi M, Bellio P, Celenza G, Cinque B, Cifone MG, Scarselli M, Maggio R. The atypical antipsychotic clozapine selectively inhibits interleukin 8 (IL-8)-induced neutrophil chemotaxis. *Eur Neuropsychopharmacol*. 2015 Mar;25(3):413-24. doi: 10.1016/j.euroneuro.2014.12.002. Epub 2014 Dec 18. PMID: 25554564. IF= 5.415; CIT= 11

7. Maggio R, Fasciani I, Carli M, Petragnano F, Marampon F, Rossi M, Scarselli M. Integration and Spatial Organization of Signaling by G Protein-Coupled Receptor Homo- and Heterodimers. *Biomolecules*. 2021 Dec 3;11(12):1828. doi: 10.3390/biom11121828. PMID: 34944469; PMCID: PMC8698773. IF= 6.064; CIT= 2

8. Maggio R, Fasciani I, Rossi M, Di Gregorio J, Pietrantonio I, Puca V, Flati V, Scarselli M. Variants of G protein-coupled receptors: a reappraisal of their role in receptor regulation. *Biochem Soc Trans*. 2016 Apr 15;44(2):589-94. doi: 10.1042/BST20150239. PMID: 27068974. IF= 4.919; CIT= 2

9. Marampon F, Di Nisio V, Pietrantonio I, Petragnano F, Fasciani I, Scicchitano BM, Ciccarelli C, Gravina GL, Festuccia C, Del Fattore A, Tombolini M, De Felice F, Musio D, Cecconi S, Tini P, Maddalo M,



Codenotti S, Fanzani A, Polimeni A, Maggio R, Tombolini V. Pro-differentiating and radiosensitizing effects of inhibiting HDACs by PXD-101 (Belinostat) in in vitro and in vivo models of human rhabdomyosarcoma cell lines. *Cancer Lett.* 2019 Oct 1;461:90-101. doi: 10.1016/j.canlet.2019.07.009. Epub 2019 Jul 17. PMID: 31325529. IF= 9.756; CIT= 11

10. Carli M, Kolachalam S, Longoni B, Pintaudi A, Baldini M, Aringhieri S, Fasciani I, Annibale P, Maggio R, Scarselli M. Atypical Antipsychotics and Metabolic Syndrome: From Molecular Mechanisms to Clinical Differences. *Pharmaceuticals (Basel)*. 2021 Mar 8;14(3):238. doi: 10.3390/ph14030238. PMID: 33800403; PMCID: PMC8001502. IF= 5.215; CIT= 33

11. Colapietro A, Gravina GL, Petragnano F, Fasciani I, Scicchitano BM, Beirinckx F, Pujuguet P, Saniere L, Van der Aar E, Musio D, De Felice F, Mattei V, Martellucci S, Maggio R, Tombolini V, Festuccia C, Marampon F. Antitumorigenic Effects of Inhibiting Ephrin Receptor Kinase Signaling by GLPG1790 against Colorectal Cancer Cell Lines In Vitro and In Vivo. *J Oncol.* 2020 Feb 27;2020:9342732. doi: 10.1155/2020/9342732. PMID: 32184826; PMCID: PMC7063197. IF= 4.501; CIT= 2

12. Capannolo M, Ciccarelli C, Molteni R, Fumagalli F, Rocchi C, Romeo S, Fasciani I, Aloisi G, Zani BM, Riva MA, Maggio R. Nitric oxide synthase inhibition reverts muscarinic receptor down-regulation induced by pilocarpine- and kainic acid-evoked seizures in rat fronto-parietal cortex. *Epilepsy Res.* 2014 Jan;108(1):11-9. doi: 10.1016/j.epilepsyres.2013.10.011. Epub 2013 Oct 28. PMID: 24246145. IF= 2.991; CIT= 2

L'AQUILA, 13/6/2023