Personal Information

Family, First name	Azarnia Tehran, Domenico
Nationality	Italian
Date of birth	16.11.1987
Email	domenico.azarniatehran@unipd.it
ORCID identifier	0000-0001-8955-7240
Languages	Italian (native), English (fluent), German (beginner)
Current place of work	Department of Biomedical Sciences, University of Padova
Google scholar	https://scholar.google.com/citations?user=ysQAnAYAAAAJ&hl=it&oi=ao

Education and Professional Activities

Mar 2025 - now	**Assistant Professor** (Ricercatore a tempo determinato tipo B, RTDb) – Department of Biomedical Science, University of Padua, Italy
Mar 2025	**Obtained National Scientific qualifications as Associate Professor** for the disciplinary fields of **06/A2** – Experimental medicine, pathophysiology and clinical pathology; **05/E2** – Molecular biology; **05/F1** - Experimental biology; **06/N1** - Technology and methodology in medicine and nursing sciences.
Sept 2023 – Dec 2024	**Project Leader** funded by the Klaus Tschira Boost Fund – Department of Structural Interactomics - Leibniz Forschungsinstitut für Molekulare Pharmakologie (FMP), Berlin, Germany
July 2016 – Aug 2023	**Postdoctoral research fellow** – Department of Molecular Pharmacology and Cell Biology - Leibniz Forschungsinstitut für Molekulare Pharmakologie (FMP), Berlin
Nov 2019 – Dec 2019	**Visiting postdoctoral researcher** at the Bordeaux Neurocampus - Dynamique de l'organisation et des fonctions synaptiques, Bordeaux, France
Jan 2016 – June 2016	**Postdoctoral research fellow** - Department of Biomedical Sciences - University of Padova, Italy
Jan 2013 – Dec 2015	**PhD in Bioscience and Biotechnology** - University of Padova, Italy
Sept 2006 – Dec 2012	**Biology Bachelor (BSc)** in Biological Sciences and **Master of Science (MSc)** *cum laude* in Cell Biology - University of Rome "La Sapienza", Italy

Publications in Peer-Reviewed Journals (First/Last author paper) #senior authorship and *first authorship

Azarnia Tehran D.[#], Paola Pizzo[#]. The complex web of membrane contact sites in brain aging and neurodegeneration. **Cell. Mol. Life Sci. 2025**, accepted

Jasmeet Kaur Shergill, **Azarnia Tehran D.**[#] Mouse-derived Synaptosomes Trypsin Cleavage Assay to Characterize Synaptic Protein Sub-localization. ***Bio Protoc. 2025*** Jan 20;15(2):e5164. doi: 10.21769/BioProtoc.5164.

Azarnia Tehran D.[#], Kochlamazashvili G., Pampaloni N. P., Sposini S., Shergill J. K., Lehmann M., Pashkova N., Schmidt C., Löwe D., Napieczynska H., Heuser A., Plested A. J. R., Perrais D., Piper R. C., Haucke V.[#] and Maritzen T[#]. Selective endocytosis of Ca^{2+}-permeable AMPARs by the Alzheimer's disease risk factor CALM bidirectionally controls synaptic plasticity. ***Sci Adv. 2022*** May 27;8(21):eabl5032. doi: 10.1126/sciadv.abl5032

Azarnia Tehran D. and Maritzen T. Endocytic proteins: An expanding repertoire of presynaptic functions. ***Curr Opin Neurobiol. 2022*** Apr;73:102519. doi: 10.1016/j.conb.2022.01.004

Kuijpers M.*, **Azarnia Tehran D.***, Haucke V. and Soykan T. The axonal endolysosomal and autophagic systems. ***J Neurochem. 2021*** Aug; 158(3):589-602. doi: 10.1111/jnc.15287

Azarnia Tehran D.*, Lopez-Hernandez T.* and Maritzen T. Endocytic Adaptor Proteins in Health and Disease: Lessons from Model Organisms and Human Mutations. ***Cells. 2019*** Oct 29;8(11):1345. doi: 10.3390/cells8111345.

Azarnia Tehran D.[#] and Pirazzini M.[#]. Preparation of Cerebellum Granule Neurons from mouse or rat pups and evaluation of clostridial neurotoxin activity and their inhibitors by Western blot and immunohistochemistry. ***Bio Protoc. 2018*** Jul 5;8(13):e2918. doi: 10.21769/BioProtoc.2918

Azarnia Tehran D.[#] and Pirazzini M.[#]. Novel botulinum neurotoxins: exploring below the iceberg tip. ***Toxins (Basel). 2018*** May 10;10(5):190. doi: 10.3390/toxins10050190.

Azarnia Tehran D.*, Kuijpers M.* and Haucke V. Presynaptic endocytic factors in autophagy and neurodegeneration. ***Curr Opin Neurobiol. 2018*** Feb;48:153-159. doi: 10.1016/j.conb.2017.12.018

Azarnia Tehran D.[#], Pirazzini M.[#], Leka O., Mattarei A., Lista F., Binz T., Rossetto O., Montecucco C. Hsp90 is involved in the entry of clostridial neurotoxins into the cytosol of nerve terminals. ***Cell Microbiol. 2017*** Feb;19(2). doi: 10.1111/cmi.12647

Zornetta I.*, **Azarnia Tehran D.***, Arrigoni G.*, Anniballi F., Bano L., Leka O., Zanotti G., Binz T., Montecucco C. The first non Clostridial botulinum-like toxin cleaves VAMP within the juxtamembrane domain. ***Sci Rep. 2016*** Jul 22;6:30257. doi: 10.1038/srep30257

Azarnia Tehran D.*, Zanetti G.*, Oneda L., Florigio L., Fillo S., Binz T., Clifford C.C., Rossetto O., Montecucco C., Paradisi C., Mattarei A., Pirazzini M. A novel inhibitor prevents the peripheral neuroparalysis of botulinum neurotoxins. ***Sci Rep. 2015*** Dec 16;5:17513. doi: 10.1038/srep17513

Zanetti G.*, **Azarnia Tehran D.***, Pirazzini M., Binz T., Shone C.C., Fillo S., Lista F., Rossetto O., Montecucco C. Inhibition of botulinum neurotoxins interchain disulfide bond reduction prevents the peripheral neuroparalysis of botulism. ***Biochem Pharmacol. 2015*** Dec 1;98(3):522-30. doi: 10.1016/j.bcp.2015.09.023

Pirazzini M.*, **Azarnia Tehran D.***, Zanetti G., Megighian A., Scorzeto M., Fillo S., Shone C.C., Binz T., Rossetto O., Lista F., Montecucco C. Thioredoxin and its reductase are present on synaptic vesicles, and their inhibition prevents the paralysis induced by botulinum neurotoxins. ***Cell Rep. 2014*** Sep 25;8(6):1870-1878. doi: 10.1016/j.celrep.2014.08.017

Publications in Peer-Reviewed Journals (Collaborative work)

Pirazzini M, **Azarnia Tehran D.**, Zanetti G., Rossetto O., Montecucco C. Hsp90 and Thioredoxin-Thioredoxin Reductase enable the catalytic activity of Clostridial neurotoxins inside nerve terminals. ***Toxicon. 2018*** Jun 1;147:32-37. doi: 10.1016/j.toxicon.2017.10.028

Anniballi F., Fillo S., Giordani F., Auricchio B., **Azarnia Tehran D.**, Di Stefano E., Mandarino G., De Medici D., Lista F. Multiple-locus variable number of tandem repeat analysis as a tool for molecular epidemiology of botulism. ***Infect Genet Evol. 2016*** Dec;46:28-32. doi: 10.1016/j.meegid.2016.10.014

Schnell L., Mittler A.K., Mattarei A., **Azarnia Tehran D.**, Montecucco C., Barth H. Semicarbazone EGA inhibits uptake of diphtheria toxin into human cells and protects cells from intoxication. ***Toxins (Basel). 2016*** Jul 15;8(7):221. doi: 10.3390/toxins8070221

Schnell L., Mittler A.K., Sadi M., Popoff M.R., Schwan C., Aktories K., Mattarei A., **Azarnia Tehran D.**, Montecucco C., Barth H. EGA protects mammalian cells from Clostridium difficile CDT, Clostridium perfrigens iota toxin and Clostridium botulinum C2 toxin. ***Toxins (Basel). 2016*** Apr 1;8(4):101. doi: 10.3390/toxins8040101

Pirazzini M., **Azarnia Tehran D.**, Leka O., Zanetti G., Rossetto O., Montecucco C. On the translocation of botulinum and tetanus neurotoxins across the membrane of acidic intracellular compartments. ***Biochim Biophys Acta. 2016*** Mar;1858(3):467-74. doi: 10.1016/j.bbamem.2015.08.014

Giordani F., Fillo S., Anselmo A., Palozzi A.M., Fortunato A., Gentile B., **Azarnia Tehran D.**, Ciammaruconi A., Spagnolo F., Pittiglio V., Anniballi F., Auricchio B., De Medici D., Lista F. Genomic characterization of italian Clostridium botulinum group I strains. ***Infect Genet Evol. 2015*** Dec;36:62-71. doi: 10.1016/j.meegid.2015.08.042

Pirazzini M., **Azarnia Tehran D.**, Zanetti G., Lista F., Binz T., Shone CC., Rossetto O., Montecucco C. The thioredoxin reductase-thioredoxin redox system cleaves the interchain disulphide bond of botulinum neurotoxins on the cytosolic surface of synaptic vesicles. ***Toxicon. 2015*** Dec 1;107(Pt A):32-6. doi: 10.1016/j.toxicon.2015.06.019

Fellowship, grants and invited presentations to internationally recognized conferences

Mar 2025 - now	Awarded the "**Rita Levi Montalcini for young researchers**" (Italian Ministry of University and Research), Dept. of Biomedical Sciences, University of Padova, Italy *This prestigious program aims to attract talented researchers back to Italy, offering funding to support independent research projects and facilitate their integration into Italian academic institutions.*
Sept 2023 – Aug 2025	Awarded the **Klaus Tschira Boost Fund** from the German Scholars Organization (GSO) *This highly competitive fund (<5% success rate) provides flexible financial support for independent projects, empowering researchers to pursue innovative scientific ideas.*
Aug 2023	Selected speaker at the ISN-ESN Group Leaders Symposia, Porto, Portugal
Nov 2022	Selected speaker at the Membrane Trafficking Virtual Community (online)
Oct 2022	Selected speaker at the 8th European Synapse Meeting, Coimbra, Portugal
July 2022	Selected speaker at Friday Seminar series, organized by the Leibniz-Forschungsinstitut für Molekulare Pharmakologie (FMP), Berlin, Germany
Nov 2020	Selected speaker at the Berlin Postdoc Day 2020, MDC, Berlin, Germany
Sept 2017 – Aug 2019	**Alexander von Humboldt Fellowships** for postdoctoral researchers *This prestigious and competitive fellowship (<20% success rate) supports outstanding scientists from all disciplines and nationalities, offering two years of funding to conduct independent research.*
Jan 2016 – June 2016	Postdoctoral fellowship supported by Italian Ministry of Defence
Mar 2016	Invited speaker at the Brain Awareness Week (BAW), Padua, Italy
June 2015	Selected speaker at the European workshop on toxins, Braga, Portugal
Mar 2015	Invited speaker at the CBRN conference, Antibes, France
Dec 2014	Selected speaker at the 22nd SFET of Toxicology, Paris, France
Jan 2013 – Jan 2016	PhD fellowship supported by Italian Ministry of Defence

Prizes and Awards

May 2023	Selected as "**Emerging Group Leader**" at the ISN-ESN European Society of Neurochemistry 2023, Porto, Portugal *This international recognition offers mid-career researchers the opportunity to enhance their visibility and foster collaborations within the neurochemistry community.*
Oct 2022	**Best talk at the 8th European Synapse Meeting**, Coimbra, Portugal *This biennial meeting aims to foster collaboration within the European synapse community. I had the opportunity of presenting and discussing my scientific findings in an international environment.*
Dec 2020	Best talk at the Berlin Science Postdoc Day 2020
Apr 2017	**Marie Sklodowska-Curie Actions Seal of Excellence** (H2020-MSCA-IF-2016, Proposal number 747806, Proposal acronym: PreSynAct).
Jan 2017	Best scientific discovery of the year - TOXINS 2017 (INA – International Neurotoxin Association)
June 2015	FEMS Young Scientists Meeting Grant for attending ETOX17, Braga, Portugal
Oct 2013	First poster prize at the ABCD national PhD meeting
Oct 2013	Travel grant from ABCD national PhD meeting

Since my PhD, I have been recognized for my contributions to the scientific community through competitive awards, invited talks and international recognitions, reflecting my ability to secure competitive funding for innovative research projects. I have also been invited to present my work at internationally recognized seminar series and conferences, fostering collaboration and actively engaging with the entire scientific community.

Teaching/training experiences and editorial activities

Mar 2025 - now	Member of eLife Ambassadors community
Mar 2025 - now	2025 ASAPbio Fellow
Mar 2025 - now	Early-Career Reviewer for eLife
Mar 2025 - now	PREreview Championship Program
July 2024 - now	Editorial board member – Journal of Biological Chemistry (JBC)
Mar 2024 - now	Editorial assistant and Section Editor at Bio-protocol Journal
Since 2024	Review Editor for Frontiers in *Molecular Neuroscience*, Molecular Signalling and Pathways section
2024	EMBO Lab Leadership Course - Laboratory Leadership for Group Leaders (online)
2024	EMBO Course - Scientific Integrity: How to Publish Reproducible Results (online)
2024	Career & Leadership Development Program, KONU Deutschland & German Scholars Organization e.V
Aug 2022	Invited lecture, Neuroscience Lecture Series, DZNE, Bonn, Germany
July 2022	Instructor for workshop: "Introduction to Experimental Neuroscience", Bordeaux Summer Schools, Bordeaux Neurocampus, France
2021	EMBO Lab Leadership Course - Laboratory Leadership for Postdocs (online)
2021	EMBO Course - Communicating Research: Paper writing & short presentations (online)
June 2021	Invited lecture, Neurobiology Seminar Series, TU Kaiserslautern (online)
2016 – 2023	Organizing and teaching practical course - Advanced Methods Course – Membrane trafficking and Signalling (FU Berlin)
2019	The CAJAL Advanced Neuroscience Training Programme – « Advanced Techniques for Synapse Biology », 3 weeks course, Bordeaux, France
2016 – now	Supervision of 2 Bachelor students, 7 Master students during their lab rotations and research internships (2-6 months), and 4 PhD students, FMP, Berlin
2016 - now	Reviewer for eLife, Molecular neurobiology, Translational neurodegeneration, mSphere, Journal of pharmacology and experimental therapeutics, Computational and structural biotechnology journal, Pharmacology and therapeutics, Bio-protocol journal, Toxins, International journal of molecular sciences, Medical sciences, Biomolecules, Pathogens, Cells, Brain sciences.

I have actively contributed to the scientific community through various roles, including editorial responsibilities and supervision of students at different academic levels. In addition, while serving as editorial board member and reviewer for several peer-reviewed journals, I have engaged in initiatives aimed at promoting transparency, collaboration, and inclusivity in scholarly publishing, thereby actively supporting open peer review and advocate for more equitable research practices.

Diverse career paths

2024 - now	EMBA candidate – Quantic School of Business and Technology
2024 - now	Advisory Council Member Harvard Business Review
2025	PRINCE2® Foundation and Practitioner Certifications
2024	Obtained the "Strada Education Foundation Leadership Scholarship", "Quantic Impact Scholarship" and "Recruitment Scholarship" from the Quantic School of Business and Technology in recognition of my academic achievements.

I have pursued diverse career paths and opportunities for growth. Currently, I am enrolled an Executive MBA program, where I am acquiring skills in strategic management, leadership, and technology transfer, which align with my goal of developing patents, spin-offs, and startups in neuroscience. Additionally, I have obtained the PRINCE2® Foundation and Practitioner certifications.

Memberships of scientific societies and programme

2013 - now Member of scientific societies: German Society for Biochemistry and Molecular Biology (GBM - since 2024), American Society for Biochemistry and Molecular Biology (ASBMB – since 2024), Human Proteome organization (HUPO - since 2023), International Society for Neurochemistry (ISN – since 2023), Italian Society for Neuroscience & Federation of European Neuroscience Societies (SINS & FENS - since 2018), Italian Society of Microbiology and Microbial Biotechnology & Federation of European Microbiological Societies (SIMGBM & FEMS– since 2016).

Other activities

Aug 2017 – Aug 2019 Co-organiser and Chair, Postdoc Day 2018 and 2019, Max Delbrück Center for Molecular Medicine (MDC), Berlin, Germany

Aug 2017 – Aug 2019 Postdoc representative of the FMP-MDC Postdoctoral Association – Organisation Postdoc day Berlin, 2018 and 2019

Jan 2015 – Dec 2015 PhD student representative for PhD school of Bioscience and Biotechnology

I have contributed to the research community by organizing workshops and seminars and by representing peers at institutional and network levels. These roles have allowed me to foster collaboration, support skill development and advocate for early-career researcher.