Elena Spoleti

PERSONAL STATEMENT

Currently working in the research & development sector of a parapharmaceutical company, I graduated in Pharmaceutical Biotechnology following the degree in Biological Sciences. I got a PhD in the Molecular Neuroscience lab in Campus Bio-Medico of Rome, focusing my interests on brain disease. During past years I practiced artistic gymnastic at a competitive level and I worked as gymnastic coach and judge: these activities taught me how to manage my time as well to make decisions in a short time and under stress. I am an enthusiastic and hard-working person with good analytical and communication skills; I am highly organized particularly when dealing with multiple projects, confident with planning experiments, procedures and trials in line with scientific literature and guidelines.

CURRENT POSITION

Research & Development Sector of Parapharmaceutical company (January 2024) Rome, Italy

SKILLS ACQUIRED

- Designing and carrying out experiments, data analysis and interpretation
- Defining protocols and procedures for *in-vitro*, *ex-* and *in-vivo* experiments in line with research law and guidelines
- Researching scientific literature and writing technical reports and scientific papers
- Organization of laboratory activities for students working as assistant within my department at university
- Electrophysiological recordings (patch clamp and Multi-Electrode Array) in rodent brain slices combined with optogenetics in rodent brain slices,
- In vivo optogenetics in freely moving mice and animal stereotaxic surgery
- Animal handling, rodent transcardial perfusion and brain slice preparation

EDUCATION (November 2020 - April 2024)

PhD in Science and Engineering for Humans and the Environment (Bioscience) Campus Bio-Medico di Roma, UCBM Supervisors: Prof. Marcello D'Amelio, Dr. Paraskevi Krashia

Licensed Profession of Biologist - Section A (November 2020)

Tuscia University – UNITUS

Post-graduate training internship (February-October 2020)

Laboratory of Molecular Neuroscience of Campus Bio-Medico University of Rome and IRCCS Santa Lucia Foundation Supervisors: Prof. Marcello D'Amelio, Dr. Paraskevi Krashia

Master of Science in Pharmaceutical Biotechnology - LM-9 (2017-2019)

La Sapienza, University of Rome **Thesis**: Alterazione dell'eccitabilità in neuroni CA1 dell'ippocampo ventrale in topi Tg2576 modello animale della malattia di Alzheimer Supervisor: Prof. Massimiliano Renzi Graduation mark: 110/110 cum laude

Bachelor's Degree in Biological Sciences - L-13 (2014-2017)

Università degli studi Roma Tre **Thesis**: Il ruolo della luce nella regolazione ormonale dei ritmi circadiani e stagionali - Bibliographic searches Supervisor: Prof. Sandra Incerpi Graduation mark: 108/110

High School Diploma in Humanistic studies (2008-2013)

Liceo Classico Tito Lucrezio Caro, Roma Graduation mark: 100/100

FOREIGN LANGUAGES

- English (B2)
- German (A2)

COMPUTER SKILLS

Good knowledge of belonging to the package OFFICE (Word, Excel, Power Point) and software for analysis (Clampex package, Igor-Neuromatic, GraphPad Prism)

GRANTS, AWARDS AND QUALIFICATIONS

- Premio "Laureati eccellenti" La Sapienza, University of Rome (19th October 2020)
- University Strategic Projects Young Researcher Scientific Independence Campus Bio-Medico University of Rome (1st January 2022)
- Membership Brayn 2022 (27th July 2022)
- Joined the workshop "Refinement nelle procedure chirurgiche nel modello animale" (27th July 2022; Fondazione Santa Lucia CERC)

PUBLICATIONS https://www.ncbi.nlm.nih.gov/myncbi/18WKbqYssTjoln/bibliography/public/

Spoleti Elena et al., "Dopamine neuron degeneration in the Ventral Tegmental Area causes hippocampal hyperexcitability in experimental Alzheimer's Disease" Mol Psychiatry. 2024 May;29(5):1265-1280. doi: 10.1038/s41380-024-02408-9. Epub 2024 Jan 16. PubMed PMID: 38228889. Role: co-author

La Barbera Livia et al., "Calcium handling: a strategy to fight neurodegeneration in Alzheimer's disease" Neural Regen Res. 2023 Dec;18(12):2685-2686. doi: 10.4103/1673-5374.374004. PubMed PMID: 37449622. Role: co-author.

Krashia Paraskevi et al., "The VTA dopaminergic system as diagnostic and therapeutical target for Alzheimer's disease" Front Psychiatry. 2022;13:1039725. doi: 10.3389/fpsyt.2022.1039725. eCollection 2022. PubMed PMID: 36325523. Role: co-author.

Spoleti Elena et al., "Early derailment of firing properties in CA1 pyramidal cells of the ventral hippocampus in an Alzheimer's disease mouse model" Exp Neurol. 2021 Dec 30;:113969. doi: 10.1016/j.expneurol.2021.113969. [Epub ahead of print] PubMed PMID: 34973962. Role: co-author

La Barbera Livia et al., "Nilotinib restores memory function by preventing dopaminergic neuron degeneration in a mouse model of Alzheimer's Disease" Prog Neurobiol. 2021 Jul;202:102031. doi: 10.1016/j.pneurobio.2021.102031. Epub 2021 Mar 5. PubMed PMID: 33684513. Role: co-author D'Addario Sebastian L et al., Resilience to anhedonia-passive coping induced by early life experience is linked to a long-lasting reduction of Ih current in VTA dopaminergic neurons. Neurobiol Stress. 2021 May;14:100324. doi: 10.1016/j.ynstr.2021.100324. eCollection 2021 May. PubMed PMID: 33937445; PubMed Central PMCID: PMC8079665. Role: co-author

WORK EXPERIENCES

Artistic gymnastic coach and judge (2011-2019)

S.S. Lazio Ginnastica Flaminio, Rome

2nd level regional coach and 1st level judge (Federazione Ginnastica d'Italia - FGI certified) Skills acquired:

- Team working
- Collaboration with other coaches
- Managing groups of 15 and more children
- Working and making decisions in very short time

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