

CURRICULUM VITAE - SCIMIA NOEMI

PERSONAL INFORMATION

Date of birth: 25-02-1999

Email: noemi.scimia@unito.it

Languages: Italian, English



● **EDUCATION**

○ 18/10/2024:

Master's Degree in Biotechnology for Neuroscience, Department of Neuroscience Rita Levi Montalcini, University of Turin, Italy. Supervisor: Prof. Stanga Serena. Thesis title: "Brain iron distribution and mitochondrial features in the early phases of amyloidosis in 5xFAD mouse model".

○ April 2022:

Bachelor's Degree in Biotechnology, Department of Biological and Environmental Sciences and Technologies, University of Salento, Italy. Supervisor: Prof. Specchia Valeria. Thesis title: "eDNA metabarcoding and genetic diversity".
Grade: 101/110

○ July 2018:

Scientific High School Diploma in "Galileo Galilei" Institute, Monopoli, Italy.

● **OTHER TRAINING (if applicable)**

○ August 2017: thanks to **MLI International School**, I had the opportunity to spend two weeks at Griffith College of Dublin, Ireland, during which I took an English course which allowed me to improve my linguistic skills. During these two weeks I had the opportunity to interface with many people from different cultures.

Certification: MLI International School, First Certificate in English, 02/08/2017

○ September 2021- June 2022: I attended the training school and English language classes from "The Cambridge School" in Monopoli with a final exam mandatory to obtain the following certification.

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Certification: Cambridge English School, First Certificate in English, 18/06/2022

- **CURRENT POSITION(S)**

- **PhD student:** from November 2024 I have started a PhD program in Neuroscience at Neuroscience Institute Cavalieri Ottolenghi (NICO), University of Turin under the supervision of Prof. Serena Stanga. My research is focused in understanding the molecular mechanisms behind physiological brain aging and neurodegenerative diseases especially Alzheimer's disease (AD) and Amyotrophic Lateral Sclerosis (ALS).

- **PREVIOUS RESEARCH AND PROFESSIONAL POSITION(S) / PARTICIPATION TO RESEARCH GROUPS / FELLOWSHIP(S)**

- **Master's student internship January 2023 – November 2024:** from January 2023 I am attending an internship at Neuroscience Institute Cavalieri Ottolenghi (NICO), University of Turin under the supervision of Prof. Serena Stanga. My research team is focused in understanding the molecular mechanisms behind physiological brain aging and neurodegenerative diseases especially Alzheimer's disease (AD) and Amyotrophic Lateral Sclerosis (ALS).

During these two years I had the opportunity to learn a wide range of techniques at both the cellular and molecular levels. I have worked with different cell cultures such as fibroblasts, NSC34, C2C12, nerve-muscle co-cultures and human derived iPSCs. In addition, I have learned to perform immunohistochemistry analysis. This has been particularly valuable in understanding cellular functions and pathological conditions. I have developed skills in the use of different software (*e.g.* **Office Pack, GraphPad Prism, Image**) that allowed me to conduct multiple analyses including that on mitochondrial networks (**MiNa**).

Moreover, I had the opportunity to learn **mouse handling** with a particular focus on mouse breeding, genotyping and basic behavioral tests. This was and still is a formative period that allowed me to learn how to work in a team and allowed me to become very independent in my work.

- **Bachelor's student internship September 2022 – March 2022:**

From September to March 2022, I attended a traineeship at the genetics laboratory at the University of Salento, Italy under the supervisor of Prof. Specchia Valeria. During this period, I had the opportunity to explore the field of eDNA metabarcoding and genetic diversity. In

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order to characterize the genotype, I learned and independently performed classic PCR and genotyping on mouse models.

- **AWARDS AND PRIZES**

- 2022/2023 **Owner of Scholarship** obtained with the maximum score based on academic credits (by merit), Edisu Piemonte, University of Turin, Italy.
- 2021/2022 **Owner of Scholarship** obtained with the maximum score based on academic credits (by merit); Agenzia regionale per il Diritto allo studio Universitario Regione Puglia, (A.Di.S.U), University of Salento, Italy.
- 2020/2021 **Owner of Scholarship** obtained with the maximum score based on academic credits (by merit); Agenzia regionale per il Diritto allo studio Universitario Regione Puglia, (A.Di.S.U), University of Salento, Italy.
- 2019/2020 **Owner of Scholarship** obtained with the maximum score based on academic credits (by merit); Agenzia regionale per il Diritto allo studio Universitario Regione Puglia, (A.Di.S.U), University of Salento, Italy.

- **CAREER BREAKS**

From April 2022 to September 2022, immediately after earning my bachelor's degree, while waiting to enroll in the master's program, I worked in a shop, located in the historic center of Monopoli, which deals with the sale and production of handmade accessories. This work experience was fundamental for my personal growth. I have acquired greater skill in interacting with the public, improving my communication and working in a team.

- **PRESENTATION OF PAPERS, POSTER, GIVEN SPEECHES AT CONFERENCES AND SEMINARS (*if applicable*)**

2025: Poster Presentation: Stanga S., Lall D., Diaz F., Di Lullo E., Mezzanotte M., Chicote J., **Scimia N.**, Hernandez S., Sansa A., Prochiantz A., Svendsen C. A Role for dysfunctional mitochondria in ALS. 97° Congresso SIBS. Palermo, 10-13/04/2025.

2024: Poster Presentation: Mezzanotte M., Chicote J., **Scimia N.**, Toce A., Rosano V., Stanga S. Brain iron and mitochondrial features in 5xFAD mouse. XXXIV Congresso Nazionale Gruppo Italiano per lo Studio della Neuromorfologia "GISN". Catania, 22-23/11/2024

2024: Poster Presentation: Mezzanotte M., Chicote J., **Scimia N.**, Toce A., Stanga S. Brain iron dyshomeostasis and mitochondrial features' alteration in 5xFAD mouse model in the prepathological phase of Alzheimer's disease. 1° Congresso del comitato giovani degli Amici della Morfologia. "MorFuture" gli studi di morfologia tra tradizione e innovazione. Turin, Italy 12/13/04/2024

2024: Poster Presentation: Chicote J., Mezzanotte M., **Scimia N.**, Toce A., Stanga S. Iron and β amyloid deposition pattern in the adult 5xFAD mouse model for Alzheimer's disease. 1° congresso del

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comitato giovani degli Amici della Morfologia. “MorFuture” gli studi di morfologia tra tradizione e innovazione. Turin, Italy 12-13/04/2024

- **REFERENCE LETTERS (if required - please, see the Programme Information Sheet)**

- Stanga Serena, serena.stanga@unito.it, Tel.: +39 011 670 6632

- **LANGUAGE SKILLS**

Native speaker: **Italian**, Other language(s): **English (B2)**.

- **TECHNICAL SKILLS**

Mouse handling: mouse breeding, genotyping, basic behavioral tests. Sacrifice by perfusion and ability to use cryostat. **Cell biology techniques:** Cell culture NSC34, C2C12, nerve-muscle co-cultures, human derived iPSCs, Cell viability assay, Cell transfection, Confocal microscopy, Cytofluorimetric analysis (FACS). **Biochemical techniques:** mitochondria, DNA and RNA extraction and dosage from cells and tissues, SDS-PAGE and Western Blot, Immunocytochemistry, immunohistochemistry, DAB-enhanced Prussian Blue staining, Thioflavin staining, enzymatic analysis (Aconitase Test). **Molecular biology techniques:** classical PCR, RT, Real-Time qPCR. **Specific Software:** Office Pack, GraphPad Prism, ImageJ, Image Lab, MiNA (for *in silico* analysis of mitochondrial networks).



Università degli Studi di Torino
Bando di Selezione Pubblica per l'ammissione ai
Corsi di Dottorato – XL Ciclo
Call for Admission for PhD Positions - 40th cycle

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- **SOFT SKILLS**

Communication, organizational, problem-solving skills. Autonomous work/Team-work abilities.

Turin, April 22th 2025

SIGNATURE

Noemi Scimia