

CURRICULUM VITAE ET STUDIORUM: CHIARA LOSI



Personal data: Born in Carpi (MO), 15 Feb 2002
Present Position: PhD Student
Address: Department of Life Sciences, Via Campi 213/D, Modena
Phone: +39 0592055539
Email: chiara.losi@unimore.it
ORCID ID: 0009-0005-9961-3951
Scopus Author ID: 57327034400

EDUCATION

01 Nov 2025 – Current

PhD Student in Models and Methods for Material and Environmental Sciences (XLI cycle)

Department of Life Sciences, University of Modena and Reggio Emilia, Modena, Italy

Thesis: Cell diversity of invertebrate hemocytes and its relevance for development, immune and regenerative functions. Supervisor: Prof. Davide Malagoli

Oct 2023 – 16 Jul 2025

Master's degree in Bioscience – Curriculum Cellular and Molecular Biology for Biomedical Research (Class LM-6 – DM 270/04)

Department of Life Sciences, University of Modena and Reggio Emilia, Modena, Italy

Thesis: Analysis of the hemocyte population dynamics in *Pomacea canaliculata* using flow cytometry, microscopy and molecular biology-based approaches. Supervisor: Prof. Davide Malagoli

Final grade: 110/110 *cum laude et encomium*

Sep 2020 – 12 Oct 2023

Bachelor's degree in Biological Science (Class L-13 – DM 270/04)

Department of Life Sciences, University of Modena and Reggio Emilia, Modena, Italy

Thesis: First observation and characterisation of *Pomacea canaliculata* circulating cells after clodronate treatment.

Supervisor: Prof. Davide Malagoli, Co-supervisor: Dr. Sandro Sacchi

Final grade: 110/110 *cum laude*

Sep 2015 – 27 Jun 2020

High School Scientific Diploma – Curriculum Applied Sciences

Liceo scientifico Manfredo Fanti, Carpi (MO), Italy

Final grade: 100/100 *cum laude*

Attended SCHOOLS

18 Aug 2025 – 23 Aug 2025

2025 Glasgow Bioinformatics Summer School

School of Infection & Immunity, University of Glasgow, Scotland

Topics:

- Bioinformatics of NGS data: basics of Linux, use of Artemis for mapping and analysis of SNP and CNV, basics of R for bulk RNA-seq analysis and data visualization.
- Single-cell transcriptomics analysis using the Seurat package in R.
- Introduction to pseudo-time analysis of single-cell transcriptomes and spatial transcriptomics.

11 Sep 2024 – 12 Sep 2024

19° Course of Confocal Microscopy: Theoretical and Practical Bases

Department of Life Sciences and CIGS, University of Modena and Reggio Emilia, Modena, Italy

Topics:

- Lectures and practical sessions on the Leica DMI8 inverted confocal microscope and Nikon A1 HD25 microscope
- Fundamentals of digital image editing, using Fiji

VISITS AND STAYS

24 Feb 2025 – 31 May 2025

Erasmus+ Extra EU Traineeship

Alejandro Sánchez Alvarado Laboratory, Stowers Institute for Medical Research, Kansas City, MO, USA

Aim of the project: to identify loci for efficient and reproducible transgenesis using CRISPR/Cas9 technology for the annual killifish *Nothobranchius furzeri*.

SCIENTIFIC MEMBERSHIPS

Feb 2024 – Current

Italian Association of Developmental and Comparative Immunobiology (IADCI)

ORAL PRESENTATIONS as presenting Author

19 Feb 2025 – 21 Feb 2025, Alessandria, Italy

“Flow cytometry analysis reveals variable DNA content in non-proliferating hemocytes of the invasive freshwater snail *Pomacea canaliculata*”

Chiara Losi, Monica Montanari, Davide Malagoli

Oral presentation at the XXV Meeting of the Italian Association of Developmental and Comparative Immunobiology (IADCI).

14 Feb 2024 – 16 Feb 2024, Modena, Italy

“Hemolymph withdrawal transiently alters the ratio of hemocytes populations and promotes an increase in total hemocyte number in the invasive snail *Pomacea canaliculata*”

Chiara Losi, Monica Montanari, Sandro Sacchi, Davide Malagoli

Oral presentation at the XXIV Meeting of the Italian Association of Developmental and Comparative Immunobiology (IADCI).

POSTER PRESENTATIONS as presenting Author

10 Jun 2025 – 13 Jun 2025, Modena, Italy

“Screening of possible safe harbor landing sites for reproducible transgenesis in the annual killifish *Nothobranchius furzeri*”

Chiara Losi, Riley Galton, Daniel Zamora, Robert Schnittker, Alejandro Sánchez Alvarado

Poster presentation at the 70° Congress of the Italian Embryological Group – Italian Society of Development and Cell Biology (GEI-SIBSC).

“First evidence of control mechanisms over circulating hemocytes populations after hemolymph collection, in the snail *Pomacea canaliculata*”

Chiara Losi, Monica Montanari, Carlos Guerrero-Hernández, Davide Malagoli

Poster presentation at the 70° Congress of the Italian Embryological Group – Italian Society of Development and Cell Biology (GEI-SIBSC).

11 Jun 2024 – 14 Jun 2024, Naples, Italy

“Hemolymph withdrawal reveals a new biological context to study hemocyte proliferation and function in the snail *Pomacea canaliculata*”

Chiara Losi, Monica Montanari, Sandro Sacchi, Davide Malagoli

Poster presentation at 69° Congress of the Italian Embryological Group – Italian Society of Development and Cell Biology (GEI-SIBSC).

AWARDS

Nov 2025

Study Award – “Fondazione Francesco Manni”

Funded on competitive basis considering the exam grades obtained in 2023/2024 academic year, by Francesco Manni Foundation (Maranello, MO, Italy).

Jan 2025

Study Award – University of Modena and Reggio Emilia

Based on the proposal of a project aimed at improving curricular and extra-curricular activities as well as the exam grades obtained in 2023/2024 academic year.

Finalization: participation at the “Glasgow Bioinformatic Summer School 2025” (18-23 Aug 2025), organized by the School of Infection and Immunity, University of Glasgow, Scotland.

Dec 2024

Best Master presentation Award at BioMeeting – “Fondazione di Modena” and “Società dei Naturalisti e Matematici di Modena”

Best Master presentation at 3rd BioMeeting – Biology dissemination and communication (16 Dec 2024, Modena, Italy), organized by Department of Life Sciences, University of Modena and Reggio Emilia. Presentation title: “Hemolymph withdrawal as an ethically sustainable practise to investigate immunocytes differentiation and functions in the freshwater snail *Pomacea canaliculata*”.

Jan 2024

Study Award – University of Modena and Reggio Emilia

Based on the proposal of a project aimed at improving curricular and extra-curricular activities as well as the exam grades obtained in 2022/2023 academic year.

Finalization: participation at the XXIV Meeting of the Italian Association of Developmental and Comparative Immunobiology (IADCI) (14-16 Feb 2024, Modena, Italy) with an oral presentation, and at the 69° Congress of the Italian Embryological Group – Italian Society of Development and Cell Biology (GEI-SIBSC) (11-14 Jun 2024, Naples, Italy) with a flash-talk poster presentation.

25 Nov 2018 – 29 Nov 2018

Selected for the V International Youth Scientific Congress INVESTIGA

During the fourth year of high school, I was selected on the basis of a scientific presentation as a member of the Italian student committee participating in the V International Youth Scientific Congress INVESTIGA, held in Copenhagen, Denmark.

TEACHING ASSISTANCE

Oct 2025 – Current

Classroom Tutor (Academic year 2025/2026)

University of Modena and Reggio Emilia, Modena, Italy

As a tutor for the Master’s in Bioscience (LM-6), I support incoming students by answering their questions about the organisation of the course and lessons and helping them with their studies.

Oct 2024 – Jul 2025

Classroom Tutor (Academic year 2024/2025), 48 hours

University of Modena and Reggio Emilia, Modena, Italy

As a classroom tutor for fellow students on the Master’s degree in Bioscience (LM-6), I supported my colleagues in organising the study, planning group meetings and answering their questions about the topics covered during lessons.

Jan 2023 – Dec 2023

Tutor for students with SLD (Academic year 2022/2023), 120 hours

University of Modena and Reggio Emilia, Modena, Italy

As an undergraduate student, I tutored a colleague with SLD organising support activities and exercises finalized to the preparation of Maths, Physics and Chemistry exams of the Bachelor’s in Biological Sciences.

BRIEF DESCRIPTION OF THE RESEARCH ACTIVITY

I am interested in how the immune system develops, adapts and interacts with other systems to maintain homeostasis and at the same time recognize and either tolerate or get rid of non-self-entities. Although vertebrate models dominate research, many aspects of innate immune cells and their diversification during evolution remain unexplored. Using the freshwater snail *Pomacea canaliculata* as an innovative, sustainable and ethical model, my research investigates the development of innate immune cells. My current project focuses on the molecular characterisation of populations of *P. canaliculata* hemocytes (*i.e.* circulating cells) and exploits development and regeneration as biological contexts in which to investigate the timing of hemocyte specification and their roles beyond immune activation and responses.

OTHER INFORMATION

PROFESSIONAL AND PERSONAL SKILLS

Jan 2023 – Current

Work experience as Museum Educator and Operator, LIBRA 93, Campogalliano (MO), Italy

My position as Museum Educator and Operator at the Scale Museum in Campogalliano (MO) comprises the following activities:

- Organization of guided tours, adapting them to the characteristics and needs of the public.
- Creation and proposal of educational activities and workshops for children of different ages and backgrounds, aimed to promote scientific knowledge and the scientific method.

Languages

Italian: mother tongue

English: B2

Digital skills

Proficient in using Windows and MacOS, and basic knowledge of Linux.

Proficient in using word processing, spreadsheet and presentation software (Microsoft Office and equivalents), and in using communication programmes (Mail, Google Drive, Google Meet, Zoom, etc).

Scientific databases search (Scopus, PubMed, ResearchGate, etc.) and nucleotide and protein sequence databases search (NCBI, GenomeBrowser, UniProt, etc.).

SPORT ACTIVITY

I have practised equestrian vaulting at high level, participating at national and international competitions. My sport activity was recognised by the UniMORE Sport Excellence Programme, which is designed for student-athletes:

- A.Y. 2022/2023: based on the sport results achieved in 2021/2022 season
- A.Y. 2023/2024: based on the sport results achieved in 2022/2023 season

LIST OF SCIENTIFIC PUBLICATIONS ON INTERNATIONAL JOURNALS WITH IF RESEARCH ARTICLES

- Bergamini G., Sacchi S., Ferri A., Franchi N., Montanari M., Ahmad M., Losi C., Nasi M., Cocchi M., Malagoli D. **Clodronate Liposome-Mediated Phagocytic Hemocyte Depletion Affects the Regeneration of the Cephalic Tentacle of the Invasive Snail, *Pomacea canaliculata*.** *Biology* (2023), 12, 992
<https://doi.org/10.3390/biology12070992>

CONFERENCE PROCEEDINGS

- Losi C., Galton R., Zamora D., Schnittker R., Sánchez Alvarado A. **Screening of possible safe harbour landing sites for reproducible transgenesis in the annual killifish *Nothobranchius furzeri*.** *European Journal of histochemistry*, Vol. 69 No. s1, p. 39 (2025): Proceedings of the 70th Congress of the Italian Embryological Group-Italian Society of Development and Cell Biology (GEI-SIBSC) - Modena, 10-13 June 2025. <https://doi.org/10.4081/ejh.2025.4245>
- Losi C., Montanari M., Guerrero-Hernández C., Malagoli D. **First evidence of control mechanisms over circulating hemocytes populations after hemolymph collection, in the snail *Pomacea canaliculata*.** *European Journal of histochemistry*, Vol. 69 No. s1, p. 39 (2025): Proceedings of the 70th Congress of the Italian Embryological Group-Italian Society of Development and Cell Biology (GEI-SIBSC) - Modena, 10-13 June 2025. <https://doi.org/10.4081/ejh.2025.4245>
- Losi C., Montanari M., Malagoli D. **Flow cytometry analysis reveals variable DNA content in non-proliferating hemocytes of the invasive freshwater snail *Pomacea canaliculata*.** *Invertebrate Survival Journal*, Vol. 22: 15-29, p. 19 (2025): XXV scientific meeting of the Italian Association of Developmental and Comparative Immunology (IADCI), February 19-21, 2025, Department of Sciences and Technological Innovation - DISIT, University of Eastern Piedmont “Amedeo Avogadro”, Alessandria, Italy. <https://doi.org/10.25431/1824-307X/isi.v22i1.15-29>
- Losi C., Montanari M., Sacchi S., Malagoli D. **Hemolymph withdrawal reveals a new biological context to study hemocyte proliferation and function in the snail *Pomacea canaliculata*.** *European Journal of histochemistry*, Vol. 68 No. s1, p. 40 (2024): Proceedings of the 69th Congress of the Italian Embryological Group-Italian Society of Development and Cell Biology (GEI-SIBSC) - Naples, 11-14 June 2024. <https://doi.org/10.4081/ejh.2024.4071>
- Losi C., Montanari M., Sacchi S., Malagoli D. **Hemolymph withdrawal transiently alters the ratio of hemocytes populations and promotes an increase in total hemocyte number in the invasive snail *Pomacea canaliculata*.** *Invertebrate Survival Journal*, Vol. 21: 43-57, p. 48 (2024): XXIV scientific meeting of the Italian Association of Developmental and Comparative Immunology (IADCI), February 14-16, 2024, Department of Life Sciences - DSV, University of Modena and Reggio Emilia, National Academy of Sciences, Letters and Arts, Modena. <https://doi.org/10.25431/1824-307X/isi.v21i1.43-57>

I give consent to process my data with the purpose of the recruitment process, in accordance to the Regulation of the European Parliament 679/2016, regarding the protection of natural persons and free movement of such data.

Update 11 Nov 2025

A handwritten signature in dark ink, appearing to read "Chiara Lora".