

# ILARIA TROISIO

## PROFILE

Ilaria Troisio's bachelor's degree was in Animal Production, then she attained a master's degree in animal biotechnology after graduating from the University of Bologna. Currently, she is currently a Postdoctoral Research Fellow at the ANFI (Anatomy and Physiology) Service of the Department of Veterinary Medical Sciences at the same institution.

Ilaria's laboratory and in vivo activities range from Gene expression analyses, immunohistochemistry, Western Blot analyses, quantification of hormones with ELISA kit and Animal handling and training at the University experimental swine facility. Her main research focus is cellular metabolism, particularly in the field of animal reproduction, where she has developed laboratory protocols for mitochondrial bioenergetics and in vitro maturation and fertilization techniques. She has also contributed to the development of cell-free systems to study early stages of embryo development.

In 2024 she obtained her first first-author publication in the field of boar sperm preservation. Furthermore, she is a member of SO.FI.VET (Italian Society of Veterinarian Physiology).

## WORK EXPERIENCE

November 2025 to present: **Postdoctoral Research Fellow** at ANFI (Anatomy and Physiology) Service Department of Veterinary Medical Sciences, University of Bologna

November 2022 – October 2025: **PhD STUDENT** at ANFI (Anatomy and Physiology) Service Department of Veterinary Medical Sciences, University of Bologna

Nov 2025 **Teaching Tutor** at the Department of Pharmacy and Biotechnology, University of Bologna, course of Biotechnology and Animal Model

Nov 2023 **Teaching Tutor** at the Department of Pharmacy and Biotechnology, University of Bologna, course of Biotechnology and Animal Model

June 2023 - Sep 2023: **Teaching Tutor** at the Department Veterinary Medical Sciences, University of Bologna

July 2022 - Sep 2022: **Teaching Tutor** at the Department Veterinary Medical Sciences, University of Bologna

May 2022 - Oct 2022: **Graduate Attendee** at the BSBT-BIOC (Bioscience and Biotechnology – Biochemistry) Service, Department of Veterinary Medical Sciences, University of Bologna

## EDUCATION

November 2024- May 2025: **Period abroad** Departments of Farm Animal Health and of Cell Metabolism and Cancer at the Faculty of Veterinary Medicine

**Utrecht University**, the Netherlands



## PERSONAL INFORMATION



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## March 2022: **MASTER'S DEGREE IN ANIMAL BIOTECHNOLOGY,**

- Alma Mater Studiorum – University of Bologna

Thesis title: *“Effect of Bergamot Polyphenolic Fraction on cardiac mitochondria and on cell metabolism of Endothelial Cells using a porcine thoracic aorta model”*.

Final score: 110/110

## December 2018: **BACHELOR'S DEGREE IN ANIMAL PRODUCTIONS**

- Alma Mater Studiorum – University of Bologna

Thesis title: *“Fascioloides magna: History of unforeseeable event”*

Final score: 100/110

## **UNDERGRADUATE INTERNSHIP**

April 2017 – July 2017 - ICEA (Institute for Ethical and Environmental Certification) – Bologna

## **PRE-UNIVERSITY STUDIES**

Secondary school diploma: Scientific High School

## **TRAINING ACTIVITIES**

- November 2023: **PRINCIPLES OF MEDICAL STATISTICS FOR CLINICAL RESEARCH** – GIMBE FOUNDATION, Evidence of Health
- November 2023: **UNGULATES IN RESEARCH - "SWINE, SMALL RUMINANTS, AND CAMELIDS** - IZS (Experimental Zooprophyllactic Institute)
- October 2023: **ZEBRAFISH AS A MODEL ORGANISM: IN VITRO AND IN VIVO EXPERIMENTAL APPROACHES IN SCIENTIFIC RESEARCH** - IZS (Experimental Zooprophyllactic Institute)
- May 2023: **RNA-SEQ ANALYSIS COURSE** – Insubria University
- March 2023: **BIOLOGY AND MANAGEMENT OF LABORATORY ANIMALS' COURSE, RODENTS AND LAGOMORPHS** – IZS (Experimental Zooprophyllactic Institute)
- June 2020 - July 2020 **ON-LINE PATHBIO ANATOMY COURSE** *“Mouse Embryology, Anatomy, Histology, and Anatomical Basis of Imaging”* (with final certification) - PATHBIO CONSORTIUM - Universitat Autònoma de Barcelona

## **CONFERENCES**

- June 2025 - **78<sup>th</sup> SISVET Conference, Giardini Naxos (Italy)**  
*“Assessment of the protective role of MSC-derived extracellular vesicles against ischemic reperfusion injury in Porcine DCD hearts”* **Oral Presentation**
- October 2024 - **Turkish & Italian Joint International Animal Reproduction (TIAR)Congress** Antalya, (Turkey)  
*“Angiogenesis and oxidative stress pathways: a gene expression study in roe deer testis”* **Oral Presentation**
- August 2024 - **Boar Semen Preservation**, Vic (Spain)  
*“Essential oils and boar semen preservation: a comprehensive assessment of preliminary toxicity and efficacy”* **Poster presentation**

## **PROFESSIONAL ACCOLADES AND AWARDS**

- Winner of **Marco Polo scholarships**, mobility scholarship to Departments of Farm Animal Health and of Cell Metabolism and Cancer at the Faculty of Veterinary Medicine at Utrecht University, the Netherlands

*Funding a project with title “Pathways involved in autophagy of paternal mitochondria in fertilized oocytes”*

- **SO.FI.VET (Italian Society of Veterinarian Physiology) Award** for National and International Scientific Collaboration Projects for Young Researchers - Call for Proposals 2024

*Funding a training period at the “Cardiovascular Regenerative Medicine lab”, University of Padua.*

- **Best Dissertation** Annual Meeting 'Nutrition and Environment' and 'Membrane' groups **SIB - Italian Society of Biochemistry and Molecular Biology**, 2022.

- June 2024 – **77<sup>th</sup> SISVET Conference**, Parma (Italy)  
“Study of gene expression of angiogenesis and oxidative stress pathways in testicles of roe deer in different reproductive stages” **Oral Presentation**

“Use of hair in the analysis of the steroid profile of wild species: the case study of the Apennine wolf” **Poster presentation**

- May 2024 – **Minipig Research Forum**, Amsterdam (Netherlands)

- June 2023 – **76<sup>th</sup> SISVET Conference**, Bari, (Italy)

“Effects of inside-out submitochondrial particles (IO-SMPs) on mitochondria isolated from a porcine ex vivo model of donation after cardiocirculatory death (DCD) heart” **Oral presentation**

- September 2022 – **‘Nutrition and Environment’ and ‘Membrane’ groups SIB - Italian Society of Biochemistry and Molecular Biology**, Ancona (Italy)

“Bergamot derivative compounds effect on  $F_1F_0$ -ATPase and the mitochondrial permeability transition” **Oral presentation**

## PUBLICATIONS

“Molecular Investigations on Angiogenesis and Oxidative Stress in Roe Deer (*Capreolus capreolus*) Bucks' Testes Throughout the Reproductive Cycle”  
**Troisio I.**; Ventrella D.; Hausz B. L.; Cesauri M.; Vannetti N.I.; Bacci M.L.; Elmi A.; Zannoni A.; «Journal of Experimental Zoology Part A: Ecological and Integrative Physiology», (2026) DOI: <https://doi.org/10.1002/jez.70067>

“First validated liquid chromatography–tandem mass spectrometry method for simultaneous quantification of propranolol and 4-hydroxypropranolol in pig plasma and dried blood spots and its application to a pharmacokinetic study”  
Bardhi A.; Ventrella D.; Elmi A.; Gehring R.; Martelli D.; **Troisio I.**; Bacci M.L.; Barbarossa A. «Veterinary World», (2026) DOI: <https://doi.org/10.14202/vetworld.2026.15-28>

“Quantification of steroid hormones in free-ranging Apennine wolf *Canis lupus italicus* hair samples collected post-mortem” **Troisio I.**; Musto C.; Acquisti Casi N.; Govoni N.; Meriardi G.; Ventrella D.; Elmi A.; Delogu M.; Bacci M.L.; «WILDLIFE BIOLOGY», (2025) DOI: <https://doi.org/10.1002/wlb3.01507>

“Protective effects of mesenchymal stem cells-derived extracellular vesicles against ischemia-reperfusion injury of hearts donated after circulatory death: Preliminary study in a pig model”, Tolomeo A.M.; Malvicini R.; Ventrella D.; Elmi A.; Lombardi V.; Zanella F.; Andreis M.; Lazzari G.D.; Todeschini G.; Caicci F.; Aniballi C.; **Troisio I.**; Santovito G.; Bacci M.L.; Muraca M.; Fabozzo A.; Gerosa G., «BIOMÉDECINE & PHARMACOTHÉRAPIE», (2024) DOI: <https://dx.doi.org/10.1016/j.biopha.2024.117256>

“Short- and long-term effects of essential oils on swine spermatozoa during liquid phase refrigeration”; **Troisio I.**; Bertocchi M.; Ventrella D.; Scozzoli M.; Di Vito M.; Truzzi E.; Benvenuti S.; Mattarelli P.; Bacci M. L.; Elmi A.; «SCIENTIFIC REPORTS», (2024) DOI: <https://doi.org/10.1038/s41598-023-51030-2>

“Impairment of Cell Metabolism by Cardiovascular Toxicity of Doxorubicin Is Reversed by Bergamot Polyphenolic Fraction Treatment in Endothelial Cell”;  
Algieri C.; Bernardini C.; Oppedisano F.; La Mantia D.; Trombetti F.; Palma E.; Forni M.; Mollace V.; Romeo G.; **Troisio I.**; Nesci S.; INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES (2022) DOI: [10.3390/ijms23168977](https://doi.org/10.3390/ijms23168977)

## FOREIGN LANGUAGE SKILLS

Academic English Skills - AcES - course at level Advanced, CLA - University of Bologna Language Centre, 30 May 2023, level **C1**

English IELTS, British Council & Cambridge Assessment, 22 Feb 2020, Europass level **B2**

## COMPUTER SKILLS

- Microsoft Office Suite (Excel, Word, PowerPoint, Outlook)
- Bio-Rad Image Lab Software
- GraphPad Prism (Statistical analysis and data visualization)