



Federica Frigieri

Nationality : Italian | (+39) 342-0128815 | federica.frigieri@unimore.it

Date of birth: 20/02/1997

EDUCATION AND TRAINING

January 2023 - Ongoing

PHD IN "MODELS AND METHODS FOR MATERIAL AND ENVIRONMENTAL SCIENCES", GRANTED BY PNRR

Dipartimento di Scienze Chimiche e Geologiche, Università degli Studi di Modena e Reggio Emilia, Modena, Italy

- Thesis: "Biodiversity and evolution of italian tardigrades in terrestrial and freshwater environments integrating morphological and molecular studies".
- Tutor: Prof. Roberto Guidetti

November 2022

ADMITTED TO THE PROFESSION OF BIOLOGIST SEZ. A

Università degli Studi di Modena e Reggio Emilia, Modena, Italy

December 2019 – February 2022

MASTER'S DEGREE IN "BIOLOGIA SPERIMENTALE E APPLICATA" (EXPERIMENTAL AND APPLIED

Università degli Studi di Modena e Reggio Emilia, Modena, Italy

- Thesis: "Innovazione e plasticità comportamentale nei micromammiferi"
- Advisor: Prof. Roberto Guidetti
- Co-advisor: Dott. ssa Valeria Mazza
- Graduation date: 16/02/2022
- Final mark: 110/110 *cum Laude*
- Weighted average of marks: 28,881

Fundamental knowledge of:

- Conservation and management of biodiversity, biological evolution, applied ecology and ecotoxicology, animal biodiversity and phylogeny, applied zoology, applied botany and palynology, biology communication.
- Methods for biomolecular and genomic analysis, applied microbiology.
- Experimental design and data analysis in Biology, thematic cartography and GIS.

October 2016 – December 2019

BACHELOR'S DEGREE IN "SCIENZE BIOLOGICHE" (BIOLOGICAL SCIENCE AND STUDIES)

Università degli Studi di Modena e Reggio Emilia, Modena, Italy

- Thesis: "Identificazione morfologica e molecolare di una specie di tardigrado del genere *Mesocrista* rinvenuta nella Foresta Nera in Germania"
- Advisor: Prof. Roberto Guidetti
- Co-advisor: Prof. ssa Lorena Rebecchi, Dott. Michele Cesari
- Graduation date: 18/12/2019
- Final mark: 97/110

Fundamental knowledge of:

- Invertebrates biology, mammalian biology, marine ecology, ecology, animal cytology and histology, general genetics, developmental biology, comparative anatomy, immunology, pharmacology.
- Molecular and cellular biology, methodologies of molecular and genomic analysis.
- Plant and animal physiology, microbiology and parasitology.
- Organic chemistry, general chemistry and biochemistry, fundamentals of R studio.

September 2011 – June 2016

HIGH SCHOOL'S DEGREE IN "LICEO SCIENTIFICO"

Liceo Scientifico "A. F. Formigini" (Via Bologna 1, 41049, Sassuolo (MO), Italy)
High school oriented to scientific topics, particularly: Mathematics, Physics and Natural Sciences.
Final mark: 76/100

WORK EXPERIENCE

June 2022 – October 2022

SCHOLARSHIP FOR ENTOMOLOGICAL INVESTIGATION OF *Aedes albopictus*

Arpae - Agenzia Prevenzione Ambiente Energia Emilia-Romagna (via Achille Fontanelli 23, Modena)

- Assessment of the population density of the mosquito species *Aedes albopictus* via eggs morphological identification and counting on samples collected in fields.

RESEARCH EXPERIENCE

July 2021 – September 2021

MASTER'S THESIS INTERNSHIP – GRANTED BY "ERASMUS+ FOR TRAINEESHIP" (750 HOURS)

Laboratory of Animal Ecology (Maulberallee 1, 14469, Potsdam) - University of Potsdam

- Behavioural study of small mammals.
- Tutor: Prof. Roberto Guidetti, Dott.ssa Valeria Mazza

February 2019 – September 2019

BACHELOR'S THESIS INTERNSHIP (350 HOURS)

Laboratory of Zoologia Evoluzionistica (via Giuseppe Campi 213/D, 41125, Modena), Dipartimento di Scienze della Vita - Università degli Studi di Modena e Reggio Emilia

- Morphological and molecular analysis of a tardigrade species.
- Tutor: Prof. Roberto Guidetti

PUBLICATIONS

Anna Maria Mercuri, Elena Bellini, Andrea Bonaffini, Elena Cenni, Valentina Ferrari, **Federica Frigieri**, Cristina Perico, Cristina Ricucci, Marco Scaramelli, Joel Vincenzi, Valentina Vitali, Giulio Zanni, Assunta Florenzano – Palynology as a field of Applied Botany: an interdisciplinary approach to interpret the past and address future conservation challenges. Atti della Società dei Naturalisti e Matematici di Modena, p. 97, 2021.

Master's thesis: Frigieri F. - "Innovazione e flessibilità comportamentale nei micromammiferi". 2022

Bachelor's thesis: Frigieri F. - "Identificazione morfologica e molecolare di una specie di tardigrado del genere *Mesocrista* rinvenuta nella Foresta Nera in Germania". 2019

AWARDS

- Scholarship in the field of entomological investigation of *Aedes albopictus*, granted by Arpae - Agenzia Prevenzione Ambiente Energia Emilia-Romagna (via Achille Fontanelli 23, Modena).
- Scholarship in the Erasmus+ for Traineeship 2021/2022, granted by Università degli Studi di Modena e Reggio Emilia.

PARTECIPATION AT

- Seminar: "Biotremology: a new discipline, a new opportunity: the vibrational communication in animals and implications in behavioural manipulation techniques". Mazzoni, V., 27th November 2020.
- Seminar: "From individuals to groups and back: interactions between individual variations in behavior and group performances in House Sparrow". Tuliozi, B., 25th November 2020.
- Workshop: "Drynet, setting an interdisciplinary, sectorial and international research network to explore dry storage as an alternative strategy for cells/germoplasm biobanking". 12th and 13th September 2019, Modena.

LANGUAGE SKILLS

Mother tongue: **Italian**

Other languages:

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B1	B1	B1	B1	B1
French	A1	A1	A1	A1	A1
Spanish	A1	A1	A1	A1	A1

COMMUNICATION SKILLS

Good communication skills acquired thanks to academic study, preparation of teamworks and thanks to active participation in lab meetings during the internship periods.

ORGANISATIONAL SKILLS

- Good abilities to organize the assigned works in order to complete them in the set time.
- Strong determination in the achievement of objectives.
- Good abilities to work and collaborate with others in order to identify better solutions by sharing different ideas.

JOB-RELATED SKILLS

Skills acquired during the **Master internship**:

- **Capture-mark-recapture** of small mammals using Ugglan Special Traps. In particular, placing, prebaiting and checking of traps. Animal handling and marking by non-invasive fur-cut.
- Installation of **camera-trap devices** ("spyboxes") to monitor marked free-living animals engaged in cognitive tests.
- **Personality tests** (dark-light test, open field test) and **cognitive tests** (novel food test, escape test and foraging extractive task).
- **Video analysis**.
- Use of Excel and **R studio** for the analysis of the data collected, use of ArcGIS 10.1 for the creation of maps.

Skills acquired during the **Bachelor internship**:

- Collection and storage of biological material.
- Techniques of preparation and extraction of micro-invertebrates from their habitats (specially mosses).
- **Molecular skills**: extraction of Genomic DNA from animals, PCR of nuclear and mitochondrial genes, Electrophoresis, Gel Purification with Wizard Gel and PCR cleaning kit, Sequencing Reaction for Genomic DNA.
- **Zoological specimen preservation skills**: preparation of animal mounted on microscope slide mounted specimens for morphological analysis with the Light Microscope (LM). Preparation of animals on stubs for morphological analysis with the Scanning Electron Microscope (SEM).
- **Microscopy skills**: use of stereomicroscope, Light Microscope (LM) and Scanning Electron Microscope (SEM) for morphological analysis.

● COMPUTER SKILLS

- Microsoft Office (Word, Excel, Power Point, Access).
- MegaX and statistical and processing software (R studio).
- ArcGIS 10.1.

● DRIVING LICENSE

B

● ADDITIONAL INFORMATION

- Study support in Math, waiter in a pub, red Cross volunteer.
- Ballet.

Autorizzo il trattamento dei miei dati personali ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 "Codice in materia di protezione dei dati personali".

Fiorano modenese, 29/01/2023

Federica Figliani