



# Chiara Maria Teresa Boggio

## QUALIFIED BIOLOGIST SECTION A

ORCID: 0000-0003-4625-3858

### PROFESSIONAL PROFILE

I am a Registered Biologist currently serving as a Research Fellow at the Center for Translational Research on Autoimmune and Allergic Diseases (CAAD), University of Eastern Piedmont (Novara, Italy).

I graduated in **Biology** in 2019 and obtained a I level Master in **clinical Microbiology and Parasitology** in 2025. My research focus lies at the intersection of clinical **microbiology** and **dermatology**, investigating the complex host-pathogen interactions in skin diseases. Currently, I am conducting the experimental analysis for the PRIN-PNRR-2022 (nr. CE411/2023) funded project entitled "Dissecting the role of ***Staphylococcus aureus*** in anti-IL-4/IL-13 and anti-JAK treated atopic dermatitis patients". My technical expertise includes bacterial profiling, molecular biology, and the use of in vitro 2D models to evaluate the impact of targeted therapies on skin microbiome dynamics and wound healing.

### WORK EXPERIENCE

#### RESEARCH FELLOW | 06/2024-current

*Università del Piemonte Orientale (Novara), Laboratory of applied Microbiology (Supervisor Dr. Barbara Azzimonti)*

- **Role:** management of the funded project PRIN\_PNRR\_2022 "Dissecting the role of *Staphylococcus aureus* in anti-IL-4/IL-13 and anti-JAK treated atopic dermatitis patients", PI: Prof. Paola Savoia, Co.PI: Dr. Barbara Azzimonti;
- **Skills:** isolation and culture of *Staphylococcus aureus* from skin swabs in generic, selective, and differential culture media (MSA, McA, CAS, Sabouraud, LB, HHD, Pseudomonas, CLED); performance of biochemical tests (API, catalase, coagulase) and evaluation of cytokine expression by ELISA; extraction of bacterial DNA and amplification of the 16S rRNA gene;
- **Management Skills:** accurate management of REDCap databases; drafting technical and scientific documentation; writing and publishing scientific articles; presentations at national and international conferences; organization and coordination skills, with a particular focus on accuracy and meeting deadlines.

#### CONTRACT TEACHER | 09/2020-09/2024 ; 10/2025-current

*Università del Piemonte Orientale - CdL Biotechnologies (Novara)*

- **Role:** coordination and organization of teaching activities, including planning and managing laboratory dates and classroom reservations; providing face-to-face assistance to students during practical exercises; managing email communications with students, addressing their needs and requests; preparing teaching materials and correcting theses; managing and maintaining the laboratory and equipment; liaising with administrative staff to manage purchasing and technical orders;
- **Skills:** cell biology and microbiology analyses: eukaryotic and prokaryotic cell cultures; bacterial transformation and production of competent bacteria; cell viability assays; susceptibility testing; histological staining; light microscopy. Molecular biology analyses: plasmid DNA extraction and cloning; PCR; DNA fingerprinting; electrophoresis; Western blot; immunoprecipitation. Biochemical and purification analyses: homogenization; column chromatography. Functional and diagnostic analyses: cell viability assays; Western blot; molecular fingerprinting; susceptibility testing;
- **Management Skills:** planning and coordinating teaching activities; efficient management of material and human resources; ability to organize calendars and communicate effectively with students, faculty, and administrative staff; management of administrative procedures, purchase orders, and official communications; problem-solving skills and precision in managing deadlines.

## **INTERN STUDENT | 12/2017-04/2019**

*Università degli Studi di Milano (Milano)*

- **Role:** active participation in laboratory analyses to study the phylogeny of phytophagous beetles;
- **Skills:** molecular biology analysis: DNA extraction, PCR, and DNA quantification.

## **EDUCATION**

### **MASTER II LEVEL**

**Ricerca Clinica e Medical Affairs. Farmaci e Medical Devices | 03/2026 - current**

*Università degli Studi Guglielmo Marconi*

### **MASTER I LEVEL**

**Clinical Microbiology and Parasitology: Diagnostic Techniques and Applications | 02/2025 - 11/2025**

*Università Telematica PEGASO*

### **MASTER'S DEGREE**

**Biology LM-6 | 09/2017 - 04/2019**

*Università degli Studi di Milano*

### **BACHELOR'S DEGREE**

**Natural Sciences L-32 | 09/2013 - 12/2016**

*Università degli Studi di Milano*

### **HIGH SCHOOL DEGREE**

**Agricultural Technical Institute | 09/2009 - 06/2013**

*ITAS G. Bonfantini*

## **OTHER TRAINING ACTIVITIES**

### **EDUCATIONAL ACTIVITIES**

**Tools for data management and statistics for beginners: focus on Excel and graphPad. | 5/2025**

*Università del Piemonte Orientale*

### **TRAINING**

**Flow cytometry training | 2/2025**

*Università del Piemonte Orientale*

Basic introduction to cytometry; overview of cytometry applications (immunophenotyping, cell cycle, etc.); description of the instruments: BD FACSCanto II, BD FACSymphony; A5 and FACSFusion (cell sorter).

### **TRAINING**

**Training tools for histology | 11/2024**

*Università del Piemonte Orientale*

Training on the Embedder (HistoCore Arcadia C+H model); training on the Cryostat (model: CD1950), Microtome (model: HistoCore BIOCUT RM), and Slide Dryer (model: HistoCore Slide Dryer + HistoCore Waterbath)

### **TEACHING CREDITS**

**24 CFU | 01/2021-06/2022**

*Università del Piemonte Orientale*

## PROFESSIONAL TITLES

### BIOLOGY STATE EXAM

Qualification to practice as a **BIOLOGIST** | 01/2025

Università del Piemonte Orientale

## PUBBLICATIONS

### JOURNAL ARTICLE

Veronese F., **Boggio C.M.T.**, Armari M., Airoidi C., Esposito E., Zavattaro E., Savoia P., Azzimonti B., **Therapy-Dependent Modulation of *Staphylococcus aureus* Colonization in Atopic Dermatitis: Insights from Anti-IL-4/IL-13 and JAK Inhibition**  
*JAAD* 2026 doi: 10.1016/j.jaad.2026.01.074

### JOURNAL ARTICLE

**Boggio CMT**, Veronese F, Armari M, Zavattaro E, Esposito E, Savoia P, Azzimonti B., **Skin microbiota in atopic dermatitis: victim or executioner?**  
*Clin Microbiol Rev.* 2025 doi.org/10.1128/cmr.00277-24

### JOURNAL ARTICLE

**Boggio CMT**, Veronese F, Armari M, Zavattaro E, Esposito E, Savoia P, Azzimonti B., **The Western Diet and Atopic Dermatitis: The Potential Role of Nutrients, Contaminants, and Additives in Dysbiosis and Epithelial Barrier Dysfunction**  
*Antioxidants* 2025 doi: 10.3390/antiox14040386

### JOURNAL ARTICLE

Gravina T, **Boggio CMT**, Gorla E, Racca L, Polidoro S, Centonze S, Ferrante D, Lunghi M, Graziani A, Corà D, Baldanzi G., **Role of Diacylglycerol Kinases in Acute Myeloid Leukemia**  
*BIOMEDICINES* 2023 doi: 10.3390/biomedicines11071877

### JOURNAL ARTICLE

Dioli P., **Boggio CMT**, Limonta L., **Heteroptera collected in Valsesia, Northern Italy**  
*Journal of Entomological and Acarological Research.* 2019 doi.org/10.4081/jeur.2019.8752

### CONGRESS POSTER

**Boggio CMT**, Armari M, Veronese F, Zavattaro E, Esposito E, Savoia P, Azzimonti B., ***Staphylococcus* spp. skin colonization in anti-IL-4/IL-13 and anti-JAKtreated atopic dermatitis patients: proposal of a standardized protocol for research and clinical applications.** 11th ISM Word Congress on Targeting Microbiota 2024, International Society of Microbiology, 14-14 Oct 2024, Malta. 10.60738/harz-d575

## LANGUAGE SKILLS

### ENGLISH

Level B2 | 05/2017 First Certification in English, Cambridge English

### ITALIAN

Native language

## TEACHING ACTIVITIES

### TUTOR SUMMER SCHOOL

**S.O.S. Summer of Science, Scuola di Medicina | 2025**

*Università del Piemonte Orientale*

Summer School for fourth-year high school students.

### TEACHER OPTIONAL TEACHING ACTIVITIES

**CdL Biotechnology | 2024-2025**

*Università del Piemonte Orientale*

ADO Medical Microbiology Laboratory

### TEACHER OPTIONAL TEACHING ACTIVITIES

**Educational laboratories for the Biotechnology degree course | 2020-2025**

*Università del Piemonte Orientale*

Laboratories of: Biochemistry, Genetics, Cell Culture, Microbiology, Recombinant Technologies

### WORKSHOP MANAGER

**CdL Biotechnology | 2024**

*Università del Piemonte Orientale*

Thesis Writing Workshop: Planning, Bibliographic Research, and Presentation

### TEACHER OPTIONAL TEACHING ACTIVITIES

**CdL Biotechnology | 2024**

*Università del Piemonte Orientale*

ADO first approach to the laboratory

## CONFERENCES/SEMINARS

### WORKSHOP

**Bring you research to next level | 22/10/2025**

Organized by QIAGEN

### SEMINAR

**Microbiota-Gut-Cancer-on-Chip: Drug-Microbiome Interactions in Breast Cancer | 16/04/2025**

### CONFERENCE

**IRCAD 2024 | 13/12/2024**

Conference dedicated to autoimmune diseases for the 14th IRCAD Day.

Personal contribution: collection and analysis of skin samples, data processing, drafting of the scientific content, and poster production. Presentation and discussion with the scientific committee during the poster session.

### SEMINAR

**Artificial intelligence for open science: resource or challenge? | 23/10/2024**

### CONGRESS

**Targeting microbiota, International Society of Microbiota, Malta | 14/10/2024**

Conference dedicated to the latest developments in microbiota modulation to improve human health.

Personal contribution: protocol development and validation, data collection and processing, scientific writing of the content, poster production, and presentation during the interactive virtual session.

## READING CYCLE

Digital Education week | 10/2023

## SEMINAR

University Day for Teaching, Vercelli | 20/02/2024

Virtual Reality for Science (with the contribution of SIMNOVA) and Humanities. Coordinators: Prof. Paolo Heritier, UPO - TLC and Dr. Antonio Scalogna, SIMNOVA

## SEMINAR

Career paths for environmental protection: environmental control, PoliS Lombardia | 27/09/2019

## SCIENTIFIC DISSEMINATION EVENT/EXHIBITIONS

### SCIENTIFIC DISSEMINATION EVENT

AIRC day | 6/2025

Active participation in an event organized by AIRC and CAAD, aimed at scientific dissemination

### SCIENTIFIC DISSEMINATION EVENT

Scienza sotto la cupola | 4/2025

Scientific dissemination event in the Novara area

### SCIENTIFIC DISSEMINATION EVENT

UPO Junior | 10/2023; 10/2024; 10/2025

### SCIENTIFIC DISSEMINATION EVENT

Notte dei Ricercatori | 10/2024

### EXHIBITION

Un mare di diversità | 10/2015

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*I authorize the processing of my personal data pursuant to the Legislative Decree 196/2003 and the GDPR (EU Regulation 2016/679).*

Chiara Maria Teresa Boggio, mar/2026

