



Alexandra Kokkali

EDUCATION AND TRAINING

PhD Student in Food Engineering and Biotechnology

Free University of Bolzano/Bozen, Faculty of Agricultural, Environmental and Food Sciences [11/2025 – Current]

City: Bolzano | **Country:** Italy | **Field(s) of study:** Food Engineering and Biotechnology | **Thesis:** Exploiting Autochthonous Lactic Acid Bacteria-Plant Interactions and Communication to Enhance Crop Resilience to Abiotic and Biotic Stresses

- Isolating and characterizing lactic acid bacteria (LAB) from rhizosphere, phyllosphere, and endosphere of key crop species
- Evaluating LAB capacity to promote plant growth, suppress phytopathogens, and enhance stress resilience
- Investigating quorum sensing mechanisms underlying LAB-plant interactions
- Developing synbiotic formulations combining selected LAB strains with waste-derived prebiotics
- Integrating microbiological, biochemical, and plant physiological approaches toward sustainable crop management

Integrated Master in Food Science and Human Nutrition

Agricultural University of Athens [10/2019 – 02/2025]

City: Athens | **Country:** Greece | **Field(s) of study:** Food Science and Human Nutrition | **Final grade:** Very Good (7.87/10) | **Level in EQF:** EQF level 7 | **Type of credits:** ECTS | **Number of credits:** 317 | **Thesis:** Molecular identification of yeasts and molds in olives of the 'Athinaiiki' variety from the Monemvasia region

Skills acquired:

Microbial Techniques and Fermentation · Food Safety · Food Engineering · Product Development · Nutritional Assessment · Data Analysis and Scientific Reporting

Relevant Coursework – Grade:

Nutrition in the Life Stages – 10.00/10.00

Nutrition and Exercise – 8.60/10.00

Nutritional Education – 9.80/10.00

Clinical Nutrition – 10.00/10.00

Nutritional Epidemiology and Public Health – 8.00/10.00

Food Physical Chemistry – 10.00/ 10.00

Thesis subject:

Grade: 10/10

- Investigated and identified yeast and mold species involved in the natural fermentation of olives and their surrounding environment
- Analyzed diverse sample types such as fermented olives, brine, leaves, fresh olives, soil, and olive pulp
- Applied molecular and microbiological techniques, including:
 - DNA extraction, PCR, and gel electrophoresis · Gram staining and microbial culturing
- Performed bioinformatic analysis
- The study offered new insights into the microbial ecology of fermented olives and set a foundation for further research in food microbiology and natural fermentation systems

WORK EXPERIENCE

 FrieslandCampina Innovation Centre - R&D Department – Wageningen, Netherlands

Research Intern

[01/07/2024 – 27/09/2024]

- Performed a wide range of experiments involving SDS-PAGE, HPLC, and Differential Scanning Calorimetry (DSC), while optimizing key parameters such as chelating agents, pH, and temperature
- Deepened expertise in dairy proteins, with special emphasis on the structure, behavior, and properties of caseins and whey proteins
- Acquired experience both in laboratory and pilot/industrial-scale operations, gaining insight into the full spectrum of food R&D
- Successfully led and managed the project independently, from experimental design to data analysis, while collaborating with senior scientists

- Completed the internship with satisfactory results that contributed meaningfully to the department's research objectives
- Gave a final presentation of my project
- Gained valuable skills in scientific reporting, critical thinking, and cross-functional teamwork in an international R&D environment

PUBLICATIONS

The Natural Fermentation of Greek Tsounati Olives: Microbiome and Metabolome Analysis Georgalaki, M., Ferrocino, I., Buzzanca, D., Anastasiou, R., Zoumpopoulou, G., Giabasakou, D., Ziova, D., Kokkali, A., Paraskevatos, G., & Tsakalidou, E. (2025). The natural fermentation of Greek Tsounati olives: Microbiome analysis. *Foods*, 14(15), 2568.

CONFERENCES AND SEMINARS

[23/06/2025 – 27/06/2025] Athens

Dairy Science and Technology Summer School 2025 The AEDIL Dairy CoVE Academy consisted of two different events:

- An in-person summer school at the Agricultural University of Athens
- An online symposium in the afternoons 23-26 of June 2025

Participated in a five-day international symposium and summer school focused on current advances in dairy science. The programme combined expert-led sessions, factory tours, and networking with industry leaders. Core topics included dairy production and processing, microbiological safety, nutritional and health aspects of dairy, digital innovation, and biotechnological developments. The symposium featured 12 keynote speakers and flash presentations by early-career researchers, with themes such as the role of dairy in sustainable food systems, biotechnology, and the production of safe, stable, and nutritious dairy products.

[18/02/2025 – 19/02/2025] French Institute of Greece, Athens

Addressing the Climate Crisis in the Mediterranean | CLIMPACT – National Network for Climate Change and Its Impacts Focused on climate change and its impacts in the Mediterranean region, with discussions on mitigation strategies, adaptation measures, and sustainable practices for addressing environmental challenges.

[01/11/2024 – 03/11/2024] Agricultural University of Athens

Biotechnology Under the Microscope: Current Applications and Future Prospects The conference covered a wide range of topics highlighting the contributions of biotechnology in fields such as health, environment, and agriculture.

[14/12/2023] Warsaw (Online)

Sensory Evaluation and its Role in Food Product Design Attended the online course focused on the principles of sensory analysis and its importance in food product development and consumer acceptance.

[30/10/2023] Agricultural University of Athens

Use of Yeasts and Fungi in Sea Bass Feed for External Coloration Improvement and Immune Enhancement - Brightfish The seminar focused on the effects of incorporating yeast and mushroom-based ingredients into sea bass feed to enhance growth, external coloration, immunity, histomorphology, gene expression, and microbiome. The event highlighted the collaboration between Greek universities, private sector entities, and the European Maritime and Fisheries Fund (EMFF) as part of the Fisheries and Sea Operational Programme 2014-2020.

[28/02/2023] Agricultural University of Athens

Cannabis Med Conference – Utilization of Industrial Hemp (*Cannabis sativa* L.) for the Development and Production of Innovative Pharmaceutical & Cosmetic Products The conference was focused on the scientific, pharmaceutical, and cosmetic applications of industrial hemp, including innovation in product development and research insights.

[20/02/2023] Agricultural University of Athens

Basic Principles of Cytometry and Cell Separation Scientific seminar presenting fundamental concepts and applications of cytometry and cell sorting, organized as part of infrastructure equipment updates at the Agricultural University of Athens.

PROJECTS

[10/2022 – 06/2023]

ECOTROPHELIA 2023-2nd Place Award Innovation in Food Product Development Competition (organized by SEVT)

- Collaborated as part of a multidisciplinary team to develop a probiotic beer fermented with the bacterium *Lactobacillus brevis* ACA-DC 1705, combining functional benefits with environmental sustainability

- Presented the product at a national competition under the supervision of Prof. Effie Tsakalidou and Dr. Georgia Zoumpopoulou
- Gained practical experience in:
 - Fermentation process optimization
 - Food safety and hygiene compliance
 - Team-based product development
 - Marketing strategy and communication
 - SWOT analysis and public presentation

[01/2022 – 01/2023]

Scientific Book Transaltion (EN→GR) Participated in the translation of selected chapters from two scientific textbooks in the fields of Clinical Nutrition and Human Nutrition from English to Greek:1. "*Manual of Dietetic Practice*" Joan Gandy, 6th Edition, John Wiley & Sons Ltd in collaboration with the British Dietetic Association, 2019-[Chapter 3.3]2. "*Clinical Paediatric Dietetics*" Vanessa Shaw, 5th Edition, John Wiley & Sons Ltd, 2020-[Chapter 10]

VOLUNTEERING

[2022 – Current] Athens

Member of Athens Agricultures’ University volunteering team · Participating in ecological and charity activities promoting community and environmental welfare.· Assisting in organizing events, fundraising initiatives, and awareness campaigns with volunteer teams.

[2020 – Current] Athens

Stray Animal Care Initiative · Collaborating with a team to rescue, care for, and rehabilitate stray animals in Athens· Supporting rehoming efforts, coordinating with shelters and veterinarians, and promoting responsible pet ownership

REFEREES

Academic Referees

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