

VINCENZO DISCA

CURRICULUM VITAE



Personal data:

Resident in Vercelli (VC), Italy

Tel: +39 0321 375 875

Email: vincenzo.disca@uniupo.it

Academic and professional experiences

2024 – ongoing	Postdoctoral Research Fellow (Food Chemistry, Biotechnology and Nutrition unit, Dipartimento di Scienze del Farmaco, Università del Piemonte Orientale)
2021 – 2024	PhD in Food, Health and Longevity (Università del Piemonte Orientale - Novara, Italia) <i>Research activity at the laboratories of the Food Chemistry, Biotechnology and Nutrition unit (CHIM/10) of the Dipartimento di Scienze del Farmaco of the Università del Piemonte Orientale (academic tutor: prof. Marco Arlorio).</i>
2023 – 2024	Tutor of mathematics (Università del Piemonte Orientale - Novara, Italia) <i>Tutoring grant holder for the mathematic course (MAT/04) of Biotechnology (Dipartimento di Scienze della Salute – Università del Piemonte Orientale) and the courses of Chemistry and Pharmaceutical Technology and Pharmacy (Dipartimento di Scienze del Farmaco – Università del Piemonte Orientale). Courses headed by prof. Maurizio Rinaldi.</i>
2022	PhD visiting researcher (Wageningen University and Research - The Netherlands)

	<i>Visting researcher at the Food, Quality and Desing group of Wageningen University and Research (academic tutor: dr. Edoardo Capuano).</i>
2020 - 2021	Research assistant (Instituto de Investigación y Formación Agraria, Alimentaria y de la Producción Ecológica – Cordoba, Spain) <i>Intern for MSc thesis with the title: The influence of processing steps and varieties on the volatile profile (HS-SPME/GC-MS) of cocoa (Theobroma cacao L.). Academic tutor: dr. José Manuel Moreno Rojas</i>
2021	Teacher IFTS (Centro di Formazione Professionale – Ceva, Italia) Teaching and didactic activity for the IFTS (Istruzione e Formazione Tecnica Superiore) - "Tecniche di Monitoraggio e gestione del Territorio e dell'Ambiente"
2020 - 2021	Part-time Campus Jobs Teaching and student services for biology courses (DISIT – Università del Piemonte Orientale).
2018	Research assistant (University of Patra – Patra, Greece) Intern for BSc thesis: Evaluation of biosorption effects of synthetic polymer PVA (polyvinyl alcohol) and organic by-products as bio-carrier in wastewater treatment. Academic tutor: prof. Hirissi Karapanagioti.

Education and training

2021 - 2024	PhD in Food, Health and Environment (Università del Piemonte Orientale - Novara, Italia)
2021	Esame di Stato di abilitazione all'esercizio della professione di Biologo (Università del Piemonte Orientale - Novara, Italia)
2019 - 2021	MSc Degree in Food, Health and Environment (Università del Piemonte Orientale - Novara, Italia). Field of study: Biology (LM – 6); final grade: 110/110 cum laude; thesis: The influence of processing steps and varieties on the volatile profile (HS-SPME/GC-MS) of cocoa. Tutor: prof. Marco Arlorio.
2020 – 2021	Erasmus + (Universidad de Cordoba, Spain) Erasmus exchange period at the Universidad de Cordoba attending the Máster universitario en nutrición humana. Courses: Dietoterapia (prof. Guillermo Molino Recio, final grade: 10/10); Spanish language. Activities: Trabajo de Fin Master (Intern for MSc thesis at the Instituto de Investigación y Formación Agraria, Alimentaria y de la Producción Ecológica in Cordoba), academic tutor: prof. Rafael Moreno Rojas and dr. José Manuel Moreno Rojas.

2015 - 2019	BSc in Biotechnology (Università del Piemonte Orientale - Novara, Italia). Field of study: Biotechnology (L – 2); final grade: 93/110; thesis: Evaluation of biosorption effects of synthetic polymer PVA (polyvinyl alcohol) and organic by-products as bio-carrier in wastewater treatment. Tutor: prof. Enrico Boccaleri.
2018	Erasmus + (University of Patra, Greece). Erasmus exchange period at the University of Patra, Greece. Courses: Greek language. Activities: Intern for BSc thesis at the Department of Organic Chemistry: Academic tutor: prof. Hirissi Karapanagioti.

Teaching and didactic activity

- (2023) Third mission seminar lecturer for high-school students with the title: Noi ‘superorganismo’: uno sguardo al microbiota intestinale e l’interazione con la dieta. February 2023 – Dipartimento di Scienze del Farmaco
- (2024) 6 hours in support of the official teaching of ‘Statistics, data analysis and epidemiology’ (SSD MAT/04 - Teacher: Prof. Maurizio Rinaldi) within the I level master’s degree course ‘EMOTION’ at the Department of Pharmaceutical Sciences (Università del Piemonte Orientale) for the academic year 2024/2025

Other activities

- **Reviewer** for international scientific journals: 9 reviews for Food Chemistry, Elsevier; 1 review for Wine Studies.
- **Guest Editor** for the Special Issue “Antioxidants from Food and Food Wastes for Nutraceutical, Pharmaceutical and Cosmetic fields”, Antioxidants, Q1: IF-6 (Submission deadline: 30 April 2025).
- **Co-tutor** of 7 MSc Theses (Biology, CTF, Pharmacy).

Awards

(2023) Best Poster Award – Società Chimica Italiana (Divisione Chimica degli Alimenti) - II PhD School in Food Chemistry (Pavia, Italia)

Courses and Schools

(2023) 27° Corso di Spettrometria di Massa, Società Chimica Italiana (Divisione di Spettrometria di Massa). Certosa di Pontignano, Siena, 13 – 17 Marzo 2023.

(2024) Advanced English Course – Project writing

Language skills

English: Speaking, C1; Writing, C1; Listening, C1.

Spanish: Speaking, B1; Writing, B1; Listening, B1

Hard skills

Food chemistry, food analysis, spectrophotometric analysis, chromatography, HPLC-DAD, LC-MS/MS, GC-FID, GC-MS, HS-SPME-GC-MS, dietary fibers assays (AOAC 991.43, 2011.25), antioxidant activities assays (DPPH°, ABTS, FRAP, ORAC), solid-phase extraction (SPE),

bioactive molecules extraction, polyphenols detection and quantification, Folin-Ciocalteu, Aluminum chloride assay, BL-DMAC assay, pH differential method for anthocyanins, protein and peptides extraction, SDS-PAGE, Bradford assays, simulated gastrointestinal digestion, INFOGEST 2.0, simulated intestinal microbiota fecal fermentation, SHIME®, bioreactor, batch fermentation, fed-batch fermentation, continuous fermentation, enzymatic treatments, enzymatic activity assays, PCR, design of experiment DoE, statistical analysis (R software, GraphPad, MATLAB), scientific writing, co-tutoring thesis, design of a project, laboratory maintenance and laboratory equipment maintenance.

Soft skills

Autonomy; adaptability; resistance to stress; plan and organize; precision and attention to details; study and updates; set goals; optimal information management; resourcefulness; be a good communicator; problem solving; teamwork; leadership; knowing how to negotiate; interpersonal relationship skills; creativity; knowing how to listen.

Membership and network

Società Chimica Italiana – Divisione Chimica degli Alimenti

Associazione Italiana Sommelier

ADI – Associazione Dottorandi e Dottori di Ricerca in Italia

MENSA Italia

Publication in international peer reviewed journals

Erazo Solorzano, C. Y., **Disca, V.**, Muñoz-Redondo, J. M., Tuárez García, D. A., Sánchez-Parra, M., Carrilo Zenteno, M. D., ... & Rodríguez-Solana, R. (2023). Effect of Drying Technique on the Volatile Content of Ecuadorian Bulk and Fine-Flavor Cocoa. *Foods*, *12*(5), 1065.

Disca, V.*, Capuano, E., & Arlorio, M. (2024). Colonic fermentation of enzymatically treated cocoa bean shells (CBSs) and short chain fatty acids (SCFAs) production. *LWT*, 116311.

Jaouhari, Y., Ferreira-Santos, P., **Disca, V.**, Oliveira, H., Martoccia, M., Travaglia, F., ... & Bordiga, M. (2024). Carbohydrases treatment on blueberry pomace: Influence on chemical composition and bioactive potential. *LWT*, 116573.

Disca, V., Jaouhari, Y., Carrà, F., Martoccia, M., Travaglia, F., Locatelli, M., ... & Arlorio, M. (2024). Effect of Carbohydrase Treatment on the Dietary Fibers and Bioactive Compounds of Cocoa Bean Shells (CBSs). *Foods*, *13*(16), 2545.

Disca V, Travaglia F, Carini C, Coïsson JD, Cravotto G, Arlorio M, Locatelli M. (2024). Improving the Extraction of Polyphenols from Cocoa Bean Shells by Ultrasound and Microwaves: A Comparative Study. *Antioxidants*, *13*(9),1097.

Jaouhari, Y., **Disca, V.**, Ferreira-Santos, P., Alvaredo-López-Vizcaíno, A., Travaglia, F., Bordiga, M., & Locatelli, M. (2024). Valorization of Date Fruit (*Phoenix dactylifera L.*) as a Potential Functional Food and Ingredient: Characterization of Fiber, Oligosaccharides, and Antioxidant Polyphenols. *Molecules*, *29*(19), 4606.

Colasanto, A., **Disca, V.**, Travaglia, F., Bordiga, M., Coïsson, J. D., Arlorio, M., & Locatelli, M. (2025). Bioaccessibility of phenolic compounds during simulated gastrointestinal digestion of black rice (*Oryza sativa* L., cv. Artemide). *Food Chemistry*, 142889.

According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV.