



VINCENZO DISCA

CURRICULUM VITAE

Personal data:

Resident in Vercelli (VC), Italy

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Academic and professional experiences

(2024-) Postdoctoral Research Fellow (assegno di ricerca) - Food Chemistry, Biotechnology and Nutrition unit, Dipartimento di Scienze del Farmaco, Università del Piemonte Orientale

(2025-) Co-founder and Chief Research Officer at nutractiva S.r.l (academic spin-off of the Università del Piemonte Orientale)

(2021 – 2024) PhD in Food, Health and Longevity (Università del Piemonte Orientale - Novara, Italia).

(2022) PhD visiting researcher at the Food, Quality and Design group of Wageningen University and Research (academic tutor: dr. Edoardo Capuano). Research activities on simulated digestion and intestinal microbiota fermentation through in-batch and dynamic (SHIME) techniques.

(2020 – 2021) Research assistant (Instituto de Investigación y Formación Agraria, Alimentaria y de la Producción Ecológica – Cordoba, Spain). 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

(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-carriers in wastewater treatment. Academic tutor: prof. Hirissi Karapanagioti.

Education and training

(2021 – 2024) PhD in Food, Health and Longevity, curriculum Food and Università del Piemonte Orientale - Novara, Italia). Research activity at the laboratories of the Food Chemistry, Biotechnology and Nutrition unit (CHEM-07/B) of the Dipartimento di Scienze del Farmaco of the Università del Piemonte Orientale (academic tutor: prof. Marco Arlorio). PhD thesis title: *Functional ingredients from food wastes: the case-study of cocoa bean shells*. Doctor Europaeus label awarded

(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.

Other Academic Role

(2026-) “Cultore della materia” at the Dipartimento per lo sviluppo sostenibile e la transizione ecologica (Università del Piemonte Orientale, Vercelli)

(2026-) Representative of the postdoctoral researcher at the Department of Pharmaceutical Science (Università del Piemonte Orientale, Novara)

(2026-) Working Group Member of the COST Action ENFiber (CA24111-WG4; WG6)

(2026-) Working Group Member of the COST Action FoodWaStop (CA22134-WG4)

Teaching and didactic activity

(2025) 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

(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

(2023 – 2024) Tutor of mathematics (Università del Piemonte Orientale - Novara, Italia). 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). Total hours: 400. Courses headed by prof. Maurizio Rinaldi.

(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

(2021) Teaching and didactic activity for the IFTS (Istruzione e Formazione Tecnica Superiore) - "Tecniche di Monitoraggio e gestione del Territorio e dell'Ambiente"

Project Participation and Role

- Collaborator for AGRIHEALTH. Funded by Interreg program.
- Collaborator for GRIP (RM 2). Fundend by NextGenerationEU - MUR – NODES.
- Collaborator for GREEN.VAL. - Sviluppo di un processo pilota “bio-based “e “green” per la valorizzazione di matrici agro-alimentari e materiali organici di recupero. Funded by NextGenerationEU - MUR – NODES.

Academic editor activities

- **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 November 2025).
- **Guest Editor** for the collection “Biotechnological Approaches for Food and Food By-Products Valorization”, in Jove peer-reviewed video journal.
- **Guest Editor** for the Special Issue “Antioxidants from Food and Food Wastes for Nutraceutical, Pharmaceutical and Cosmetic fields, 2nd Edition”, Antioxidants, Q1: IF-6 (Submission deadline: 31 December 2026).
- **Reviewer** for international scientific journals (Elsevier; Springer Nature; *Oxford Press*, *MDPI*, *Wiley*)

Other academic activities

Co-tutor of 16 Master Degree Thesis (CTF, Farmacy, Biology, Pharmaceutical Biotechnology).

Awards

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

Courses and Schools

(2026) Sparke School (UPO)

(2024) Advanced English Course – Project writing (ABE School)

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

Language skills

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

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

Membership and network

Società Chimica Italiana – Divisione Chimica degli Alimenti

ADI – Associazione Dottorandi e Dottori di Ricerca in Italia

MENSA Italia

Publication in international peer reviewed journals (H-index: 7)

1. 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.
2. **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.
3. 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.
4. **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.
5. **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.
6. Jaouhari, Y., **Disca, V.**, Ferreira-Santos, P., Alvaredo-López-Vizcaino, 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.
7. 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.
8. Carrà, F., Jaouhari, Y., **Disca, V.**, Cecchi, L., Mulinacci, N., Giovannelli, L., ... & Arlorio, M. (2025). A comparative study of bioactive and volatile components in cold-pressed apricot and peach kernel oils: implications for nutritional, nutraceuticals and cosmetics functional properties. *Food Bioscience*, 68, 106585.

9. **Disca, V. @**, Carrà, F., Stampini, M., Arlorio, M., & Locatelli, M. (2025). Treatments of food and food by-products to enhance gut microbiota short-chain fatty acids production. *Food Bioscience*, 72, 107435. <https://doi.org/10.1016/j.fbio.2025.107435>
10. Jaouhari, Y., Tao, W., **Disca, V.**, Fernandes, A., Mateus, N., de Freitas, V., ... & Bordiga, M. (2025). Encapsulation of anthocyanins: A key for improvement of the gut-metabolism health axis?. *Food Research International*, 117380.
11. Martoccia, M., Oliveira, H., Mateus, N., Wieczorek, M. N., Jaouhari, Y., **Disca, V.**, ... & Coisson, J. D. (2025). Evaluation of quality and chemical composition of selenium enriched *Vaccinium corymbosum* L. and related phytochemical extracts. *Journal of Food Composition and Analysis*, 108084.
12. Bordiga, M., **Disca, V.**, Manfredi, M., Barberis, E., Carrà, F., Navarini, L., ... & Arlorio, M. (2025). Fingerprinting of Green Arabica Coffee Volatile Organic Compounds (VOCs): HS-GC-IMS Versus GC×GC-MS. *International Journal of Food Science*, 2025(1), 1302823.
13. **Disca, V.**, Carrà, F., Jaouhari, Y., Stampini, M., Martakos, I. C., Tzavellas, I., ... & Travaglia, F. (2025). Lipid Recovery and Bioactive Compounds Profiling from Cocoa Bean Shells. *International Journal of Food Science and Technology*, vvaf169.
14. Ceresa, C., Delsignore, M., Maly, M., Carrà, F., Beneš, F., Sansotera, A.C., Camola, A., Arlorio, M., Porta, C., Fracchia, L., **Disca, V. @**, Pollastro, F., 2025. Targeting the antioxidant, antimicrobial and anti-inflammatory activity of non-psychotropic *Cannabis sativa* L.: a comparison with chemotype V. *J Cannabis Res* 7, 79. <https://doi.org/10.1186/s42238-025-00336-1>
15. Martoccia M., **Disca V.**, Jaouhari Y., Bordiga M., Coisson J.D. (2025) Recent approaches for bioactive peptides production from pulses and pseudocereals. *Molecules* 30 (21), 4304.
16. Candiani, A., Diana, G., **Disca, V.**, Jaouhari, Y., Stampini, M., Salamone, S., Pollastro, F., Baima, J., Prodam, F., Tini, S., Bertolino, M., Giovannelli, L., Segale, L., Coisson, J. D., & Arlorio, M. (2026). Alginate-Based Beads Containing *Artemisia absinthium* L. Extract as Innovative Ingredients for Baked Products. *Gels*, 12(1), 43. <https://doi.org/10.3390/gels12010043>
17. Jaouhari, Y., **Disca, V.**, Carrà, F., Ferreira-Santos, P., Cecchi, L., Martakos, I. C., ... & Coisson, J. D. (2026). In-depth study of the chemical composition and volatile profile of oils extracted from blueberry and raspberry pomace. *Food and Humanity*, 101004.
18. Stampini, M., **Disca, V. @**, Carrà, F., Scardino, S., Piana, G., Travaglia, F., Coisson, J. D., Locatelli, M., & Arlorio, M. (2026). Cocoa bean shells as a source of functional fiber in a muffin model. *Food Chemistry*, 505, 148073. <https://doi.org/10.1016/j.foodchem.2026.148073>
19. **Disca, V. @**, & Locatelli, M. (2026). Editorial: Antioxidants from Food and Food Wastes for Nutraceutical, Pharmaceutical and Cosmetic Fields. *Antioxidants*, 15(2), 226. <https://doi.org/10.3390/antiox15020226>

@ corresponding author; #co-first author

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.