

CV Marilena Marino

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Current position	Assistant Professor Department of Agricultural Food Environmental and Animal Sciences, Uni-versity of Udine (UniUD), Italy
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Education and training	1991: MSc in Food Science and Technology, UniUD 1992-2000: Research Fellow at UniUD 2001: PhD in Food Biotechnology at UniUD 2002-2007: Post-Doc at UniUD
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Attività didattica	2009: General Microbiology, MSc in Biotechnology, UniUD 2008-today: Dairy Microbiology, MSc in Food Science and Technology, UniUD 2010-today: Probiotic Microorganisms in Functional Foods, BSc in Food Science and Technology, UniUD 2020-today: Risk Analysis in Food Production, MSc in Techniques of Prevention in the Environment and in the Workplace UniTS-UniUD 2022-today: Cleaning and Disinfection in Food Plants, BSc in Food Science and Technology, UniUD Ha svolto/svolge attività come relatore/correlatore per studenti di Laurea/Laurea Magistrale di corsi di studi (Scienze e Tecnologie Alimentari/Biotecnologie/Scienze per l'Ambiente e la Natura) dell'Università degli Studi di Udine Ha svolto/svolge attività di supervisor/co-supervisor di studenti di dottorato di ricerca in Biotecnologie degli Alimenti/Alimenti e Salute Umana presso l'Università degli Studi di Udine 2010-oggi: Microrganismi Probiotici e di Alimenti Funzionali (4 CFU) per Laurea Magistrale in Scienze e Tecnologie Alimentari, Università degli Studi di Udine Scientific supervisor for MSc and BSc students (Food Science and Technology/Biotechnology/Science for the Environment and Nature) at UniUD Ssupervisor/co-supervisor for PhD students in Food Biotechnology/Food and Human Health at UniUD
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Attività di ricerca	Selection and exploitation of dairy microflora Characterization of biofilm-forming ability of foodborne microorganisms Study of the antimicrobial activity of natural compounds (essential oils, bioactive peptides of animal/vegetable/microbial origin) Functional microorganisms: selection of new probiotic candidates; study of the phenotypic response to cultivation in sub-optimal conditions in lactic acid bacteria and probiotic bacteria; development of strategies to protect the viability of probiotics during production, storage, and <i>in vitro</i> digestion Study and characterization of new postbiotics Effect of functional foods/ingredients on the intestinal microbiota and its metabolites
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Partecipazione scientifica a progetti di ricerca	Active participation in drafting and scientific activities related to funded research projects 2022-2024: CibiAMO (UniUD) 2021-2022: TEAM - Il Tempo della Mela, funding from the Fondazione Friuli 2018-2020: POR FESR "Biofilm Sensing and Analysis for Health" BIOSAFE 2018-2019: PSR Misura 16.1.1, "Study of the activity of Lactobacillus casei in order to replace the lisozyme in PDO Montasio cheese" 2003-2004: Regione Friuli-Venezia Giulia, "Characterization of craft beers produced in the microbreweries of Friuli-Venezia Giulia" 2002-2003: MIUR-PRIN, "Study of the biological and technological param-eters that regulate the production of biogenic amines in fermented foods" 2000-2001: MIUR-PRIN, "Interaction between bacteria and fungi in food sys-tems"
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1999-2006: MiPAF, "Valorization and protection of the autochthonous microflora characteristic of Italian dairy products"

1998-1999: Regione Friuli-Venezia Giulia, "Study, characterization and technological valorization of agro-food production typical of Friuli-Venezia Giulia"

Prodotti della ricerca

She is co-author of over 100 scientific publications (<https://air.uniud.it/>) including articles in international/national journals, posters and presentations at international/national conferences, book chapters.

Most relevant publications of the last 5 years:

- Innocente, N., Renoldi, N., Moret, E., Maifreni, M., & Marino, M. Volatilome of brine-related microorganisms in a curd-based medium. *J Dairy Sci*, in press.
- Maifreni, M., Di Bonaventura, G., Marino, M., Guarnieri, S., Frigo, F., & Pompilio, A. Biofilm formation under food-relevant conditions and sanitizers' tolerance of a *Pseudomonas fluorescens* group strain. *J Appl Microbiol*, in press.
- Innocente, N., Renoldi, N., Moret, E., Maifreni, M., Marino, M. Volatilome of brine-related microorganisms in a curd-based medium. *J Dairy Sci*, in press.
- Innocente, N., Calligaris, S., Di Filippo, G., Melchior, S., Marino, M., & Nicoli, M. C. (2023). Process design for the production of peptides from whey protein isolate with targeted antimicrobial functionality. *Int J Food Sci Technol* 58, 2505-2517.
- Bisson, G., Comuzzi, C., Giordani, E., Poletti, D., Boaro, M., & Marino, M. (2023). An exopolysaccharide from *Leuconostoc mesenteroides* showing interesting bioactivities versus foodborne microbial targets. *Carbohydr Polym* 301, 120363.
- Bisson, G., Maifreni, M., Innocente, N., & Marino, M. (2023). Application of pre-adaptation strategies to improve the growth of probiotic lactobacilli under food-relevant stressful conditions. *Food Funct* 14, 2128-2137.
- Baggio, A., Marino, M., & Maifreni, M. (2022). Effect of negative air ionization technology on microbial reduction of food-related microorganisms. *LWT* 169, 113998.
- Melchior, S., Calligaris, S., Marino, M., D'Este, F., Honsell, G., Nicoli, M. C., & Innocente, N. (2022). Digestive protection of probiotic *Lactocaseibacillus rhamnosus* in Ricotta cheese by monoglyceride structured emulsions. *Int J Food Sci Technol* 57, 3106-3115.
- Bisson, G., Marino, M., Poletti, D., Innocente, N., & Maifreni, M. (2021). Turbidimetric definition of growth limits in probiotic *Lactobacillus* strains from the perspective of an adaptation strategy. *J Dairy Sci* 104, 12236-12248.
- Melchior, S., Marino, M., D'Este, F., Innocente, N., Nicoli, M.C., Calligaris, S. (2021) Effect of the formulation and structure of monoglyceride-based gels on the viability of probiotic: *Lactobacillus rhamnosus* upon in vitro digestion. *Food Funct*. 12, 351-361.
- Melchior, S., Marino, M., Innocente, N., Calligaris, S., Nicoli, M.C. (2020) Effect of different biopolymer-based structured systems on the survival of probiotic strains during storage and in vitro digestion. *J Sci Food Agric* 100, 3902-3909.
- Comuzzi, C., Fiorot, A., Baggio, A., Maifreni, M., Strazzolini, P., Marino, M., Susmel, S. (2020) Imprinting pentaphyrin on conductive electropolymerized dipyrromethane films: a new strategy towards the synthesis of photokilling materials. *ChemPlusChem* 85, 776-782.
- Marino, M., Dubsky de Wittenau, G., Saccà, E., Cattonaro, F., Spadotto, A., Innocente, N., Radovic, S., Piasentier, E., Marroni, F. (2019) Metagenomic profiles of different types of Italian high-moisture Mozzarella cheese. *Food Microbiol* 79, 123-131.
- Calligaris, S., Marino, M., Maifreni, M., Innocente, N. (2018) Potential application of monoglyceride structured emulsions as delivery systems of probiotic bacteria in reduced saturated fat ice cream. *LWT* 96, 329-334.

Other scientific activities

Scientific tutor for Research Grants at UniUD

Member of the Editorial Board of *Food Science & Nutrition* (Wiley)

Referee for *International Journal of Food Microbiology*, *Journal of Applied Microbiology*, *Letters in Applied Microbiology*, *Journal of Dairy Science*, *Journal of Food Science and Technology*, *Flavour and Fragrance Journal*, *Bioresource*

Technology, International Journal of Microbiology, African Journal of Biotechnology, Environmental Toxicology and Pharmacology.
Registered in the MIUR Auditors Register, evaluator of FIRB Projects.
Reviewer for research projects of the University of Padua.
External thesis reviewer for the achievement of the title of PhD (Faculty of Food Science & Technology, University Putra Malaysia).

Institutional roles and boards membership

2011/12: member of Commissione Interna di Tutorato e Orientamento (CITO), UniUD
2018-today: member of Commission for Quality Assurance, Food Science and Technology courses, UniUD
2018-2021: member of Teaching Committee, Food Science and Technology courses, UniUD
2021-today: Chair of Teaching Committee, Food Science and Technology courses, UniUD

Member of the scientific society SIMTREA
