



MILENA BRASCA

Curriculum Vitae

Family name: Brasca

Name: Milena

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Position: Researcher responsible for the Milano Unit - Institute of Sciences of Food Production

EDUCATION

1985 College Degree. Liceo Scientifico Albert Einstein, Milan, Italy

1992 Degree in Agricultural Science (107/110), 'Università degli Studi di Milano

PROFESSIONAL EXPERIENCE

1992 Associazione Italiana Allevatori, Roma – Research theme: “Quality of Zootechnical products”

1993-1995 Centro Studi Latte CNR, Milano - National Research Council (CNR) grant. Title: “Improvement of the hygienic-sanitary quality of dairy products”.

1995–1996 Centro Studi Latte CNR, Milano - CNR grant RAISA. Title “Models of evaluation of biological quality of foods and research of quality indicators and parameters”.

1997 Centro Studi Latte CNR, Milano - CNR grant. Title: “Research and development of molecular and biological marker of food processing: characterization of microorganisms employed in food productions”.

1998 Institut Agricole Régional, Aosta – Reserch theme “Influence of livestock techniques on the natural microflora of raw milk for the production of alpine typical cheeses”.

1998 - 2000 Centro Studi Latte CNR, Milano - CNR grant. Title: “Research and development of molecular and biological marker of food processing: characterization of microorganisms employed in food productions”.

2000-2001 Consorzio Tutela Taleggio, Milano – Technical assistant for auto-control and products certification.

2001 Centro Studi Latte CNR, Milano – CNR grant. Title “Methabolic characteristics of authoctonous microorganisms of italian cheese”.

2001 - Researcher at the Institute of Sciences of Food Production, Milan, Italy

2010 - Researcher responsible for the Milano Unit - Institute of Sciences of Food Production

SKILLS AND COMPETENCES

The primary research activity is focused on food microbiology, molecular biology and bio-molecules characterization. The main research topics are related to:

- 1) characterization of pro-technological, spoilage and pathogenic microbial populations involved in food products in order to improve quality and safety and shelf-life;
- 2) production, isolation, and characterization of bio-molecules produced by bacteria of agro-food interest and their application to improve food safety and quality;
- 3) selection and molecular characterization of lactic acid bacterial strains and their application in traditional and functional foods

OTHER SKILLS

Reviewer for: African Journal of Biotechnology, African Journal of Microbiology Research, Annals of Microbiology Applied and Environmental Microbiology, Current Microbiology Dairy Science & Technology, International Dairy Journal, International Journal Food Microbiology, International Journal of Systematic Evolutionary, Journal of Dairy Research, Journal of Dairy Sciences, Microbial Cell Factories, Trends in Food Science and Technology.

Reviewer per Evaluation Committee of the ALID 2013 program of the French National Research Agency.

Member of the Scientific Committee of Italian Association of Dairy Technologists, of the Committee for the Certification of Taleggio, Formai de Mut, Quartirolo Lombardo.

She is Author of more than 90 publications on national and international scientific journals, 35 papers on peer-reviewed, international journals, 2 book chapter; 40 invited lectures and over 50 oral or poster communications to international congresses.

MAIN PUBLICATIONS

1. Manini F, Casiraghi M.C., Poutanenb K., **Brasca M.**, Erba D., Plumed-Ferrer C. (2015). Characterization of lactic acid bacteria isolated from wheat bran sourdough. LWT - Food Science & Technology
2. Zucali M; Bava L.; Colombini S.; **Brasca M.**; Decimo M.; Morandi S.; Tamburini A.; Crovetto G. M. (2015) Management practices and forage quality affecting the contamination of milk with anaerobic spore-forming bacteria. J. Sci Food Agric 95: 1294–1302, DOI: 10.1002/jsfa.6822
3. Soggiu A., Piras C., Emøke Bendixen G., Panitz F., Bendixen C., Sassera D., **Brasca M.**, Bonizzi L., Roncada P. Draft Genome Sequence of *Clostridium tyrobutyricum* Strain DIVETGP, Isolated from Cow's Milk for Grana Padano Production. Genome Announcements 3.2 (2015): e00213-15.
4. Morandi, S., Cremonesi, P., Silveti, T., Castiglioni, B., & **Brasca, M.** (2015). Development of a triplex real-time PCR assay for the simultaneous detection of *Clostridium beijerinckii*, *Clostridium sporogenes* and *Clostridium tyrobutyricum* in milk. Anaerobe, 34, 44-49.
5. Decimo M, Morandi S, Silveti T, **Brasca M.** (2014) Characterization of Gram-Negative Psychrotrophic Bacteria isolated from Italian Bulk Tank Milk. Journal of Food Sciences. doi: 10.1111/1750-3841.12645

6. Morandi S, Silveti T, Miranda Lopez JM, **Brasca M** (2014) Antimicrobial activity, antibiotic resistance, and the safety of lactic acid bacteria in raw milk Valtellina Casera cheese. *Journal of Food Safety* doi: 10.1111/jfs.12171
7. Manini F., **Brasca M.**, Plumed-Ferrer C., Morandi S., Erba D., Casiraghi M.C. (2014) Study of the chemical changes and evolution of microbiota during sourdough like fermentation of wheat bran. *Cereal Chemistry Journal*, <http://dx.doi.org/10.1094/CCHEM-09-13-0190-CESI> (4): 342-349.
8. Morandi S., Silveti T., **Brasca M.*** (2013) Biotecnological and safety characterization of *Enterococcus lactis*, a recently describe species of dairy origin. *Antonie van Leeuwenhoek*, 103:239–249
9. **Brasca M.***, Morandi S., Silveti T., Rosi V., Cattaneo S., Pellegrino L. (2013) Assessment of antibacterial activity and purity of commercial lysozyme preparations for dairy application by different analytical approaches. *Molecules*, 18, 6008-6020.
10. Masotti, F., De noni I., Cattaneo S., **Brasca M.**, Rosi V., Stuknite M., Morandi S., Pellegrino L. (2013) Occurrence, origin and fate of pyroglutamyl-gamma3-casein in cheese. *Int. Dairy J.* 33, 90-96. DOI.10.1016/j.idairyj.2013.06.002
11. Bava L., Zucali M, Sandrucci A., Guerci M., Battelli G., Brasca M., Povolo M. (2013) How different farming systems can affect nutraceutical and traceable components of cow milk?. *Ital. J. Animal Science* 12 (15), 103-103. ISSN:1594-4077
12. Morandi S., Cremonesi P., Silveti T., and Brasca* M. (2013) Technological characterisation, antibiotic susceptibility and antimicrobial activity of wild-type *Leuconostoc* strains isolated from north Italian traditional cheeses. *J. Dairy Res.*, doi:10.1017/S0022029913000447.
13. Silveti T., Morandi S., **Brasca M.** (2013) Biopreservation potential of *Enterococcus faecalis* isolated from Italian traditional raw milk cheeses. *CyTA – J. Food.* <http://dx.doi.org/10.1080/19476337.2013.825327>
14. Cremonesi P., Vanoni L., Silveti T., Morandi S., **Brasca M.*** (2012) Identification of *Clostridium beijerinckii*, *Cl. butyricum*, *Cl. sporogens*, *Cl. tyrobutyricum* isolated from silage, raw milk and hard cheese by a multiplex PCR assay. *J. Dairy Res.* 79, 318-323.
15. Böhme K., Morandi S., Cremonesi P., Fernández NO I.C., Barros-Velázquez J., Castiglioni B., **Brasca M.**, Cañas B. and Calo-Mata P. (2012) Characterization of *Staphylococcus aureus* strains isolated from Italian dairy products by MALDI-TOF mass fingerprinting. *Electrophoresis*. 33, 2355-2364
16. Morandi S., Cremonesi P., Povolo M., Brasca M.* (2012). *Enterococcus lactis* sp. nov. from Italian raw milk cheeses. *Int. J. Syst. Evol. Microbiol.* 62, 1992-1996. doi:10.1099/ijs.0.030825-0
17. Morandi S., Brasca M.* (2012) Safety aspects, genetic diversity and technological characterization of wild type *Streptococcus thermophilus* strains isolated from north Italina traditional chesses. *Food Control*, 23, (1), 203-209. doi 10.1016/J.foodcont.2011.07.011
18. Bava* L., Zucali M., Sandrucci A., **Brasca M.**, Vanoni L., Zanini L., Tamburini A. (2011). Effect of cleaning procedure and hygienic condition of milking equipment on bacterial count of bulk tank milk. *J. Dairy Res.* 78, 211-219. doi: 10.1007/s13594-011-0016-7
19. Zucali* M., Bava, L., Tamburini A., **Brasca M.**, Vanoni L., Sandrucci A., (2011). Effect of cleaning procedure and hygienic condition of milking equipment on bacterial count of bulk tank milk. *J. Dairy Res.* 78, 436-441 doi: 10.1017/S0022029911000598
20. Cremonesi P, Vanoni L, Morandi S, Silveti T, Castiglioni B, **Brasca M.** (2011) Development of a pentaplex PCR assay for the simultaneous detection of *Streptococcus thermophilus*, *Lactobacillus delbrueckii* subsp. *bulgaricus*, *L. delbrueckii* subsp. *lactis*, *L. helveticus*, *L. fermentum* in whey starter for Grana Padano cheese. *Int. J. Food Microbiol.* 146, 207-211

21. Morandi S, **Brasca M**, Lodi R, Brusetti L, Andrighetto C, Lombardi A (2010) Biochemical profiles, restriction fragment length polymorphism (RFLP), random amplified polymorphic DNA (RAPD) and multilocus variable number tandem repeat analysis (MLVA) for typing *Staphylococcus aureus* isolated from dairy products and human samples. *Res. Vet. Sci.* **88**, 427-435.
22. Morandi S, **Brasca M**, Andrighetto C, Lombardi L, Lodi R. (2009) Phenotypic and genotypic characterization of *Staphylococcus aureus* strains from Italian dairy products. *Int. J. Microbiol.* Article ID 501362 doi:10.1155/2009/501362.
23. Cristoni S, Zingaro L, Canton C, Cremonesi P, Castiglioni B, Morandi S, **Brasca M**, Luzzana M, Battaglia C (2009) An innovative approach based on Cation Exchange Chromatography - Surface Activated Chemical Ionization for the analysis of enterotoxin A. *J. Mass Spectrom.* **44**, 1482-1488.
24. Morandi S, **Brasca M**, Lodi R, Brusetti L (2008) Molecular typing of *Staphylococcus aureus* isolated from Italian dairy products on the basis of coagulase gene polymorphism, multiple-locus variable-number tandem-repeat and toxin genes. *J. Dairy Res.* **75**, 444-449.
25. Cremonesi P, Perez G, Pisoni G, Vimercati C, Moroni P, Morandi S, Luzzana M, **Brasca M**, Lodi R, Castiglioni B. (2007) Detection of enterotoxigenic *Staphylococcus aureus* isolates in raw milk cheese. *Lett. Appl. Microbiol.* **45**, 586-591.
26. Morandi S, **Brasca M**, Lodi R, Cremonesi P, Castiglioni B (2007) Detection of classical and identification of enterotoxins genes in *Staphylococcus aureus* from milk and dairy products. *Vet. Microbiol.* **124**, 66-72.
27. **Brasca M**, Morandi S, Lodi R, Tamburini A (2007) Redox potential to discriminate among species of lactic acid bacteria. *J. Appl. Microbiol.* **103**, 1516-1524.
28. Morandi S, **Brasca M**, Andrighetto C, Lombardi A, Lodi R (2006) Technological and molecular characterisation of enterococci isolated from north-west Italian dairy products. *Int. Dairy J.* **16**, 867-875.
29. Cremonesi P, Luzzana M, Brasca M, **Morandi S**, Lodi R, Vimercati C, Agnellini D, Caramenti G, Moroni P, Castiglioni B (2005) Development of multiplex PCR assay for the identification of *Staphylococcus aureus* enterotoxigenic strains isolated from milk and dairy products. *Mol. Cell. Prob.* **19**, 299-305.
30. Morandi S, **Brasca M**, Alfieri P, Lodi R, Tamburini A (2005) Influence of pH and temperature on metabolism and growth of *Enterococcus faecium* and *Enterococcus faecalis*. *Le Lait* **85**, 181-192