

CURRICULUM VITAE ET STUDIORUM

Personal information:

Name	Pasquale
Last name	Filannino
Place and date of birth	Barletta (BT), April 9 th , 1986
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Current position:

From March 2018 to date, tenure track researcher at the Department of Soil, Plant and Food Sciences, University of Bari Aldo Moro (Italy).

Work experience (starting from the most recent):

- (2018 to date) – Lecturing Professor of “Food microbiology” at the University of Bari Aldo Moro (Italy) for the bachelor's degree (first cycle degree) “Industrial and Agri-Food Biotechnologies” (L-2).
- (2017 to date) – Lecturing Professor of “Starter selection and predictive microbiology” at the University of Bari Aldo Moro (Italy) for the master's degree (second cycle degree) “Food Science and Technology” (LM70).
- (December 2017 – February 2018) – Specialist at the Department of Soil, Plant and Food Sciences, University of Bari Aldo Moro (Italy) for set-up of fermentation processes with the use of selected starters.
- (November 2017) – Specialist at the Department of Soil, Plant and Food Sciences, University of Bari Aldo Moro (Italy) for lactic acid bacteria and yeasts isolation, identification and selection.
- (May 2014 – May 2017) – Post doctoral researcher at the Department of Soil, Plant and Food Sciences, University of Bari Aldo Moro (Italy).
- (March – April 2017) – Visiting researcher at the Institute of Food Chemistry – University of Hamburg, Hamburg (Germany).
- (2014) – Contract Professor of “Case studies in quantification of bioactive compounds” at the University of Bari Aldo Moro (Italy).

Education (starting from the most recent):

- (2011 – 2014) – Ph.D. degree in Food Microbiology, Technology, Safety, and Chemistry - University of Bari (Italy).
- (May – October 2013) – Visiting PhD student at the Department of Agricultural, Food and Nutritional Science – University of Alberta, Edmonton (Canada).
- (2008 – 2010) – Master degree with honors in Food Science and Technology. University of Bari (Italy).

Research activity:

His main research work is focused on microbial system biotechnology, fermented and functional foods, and physiology of lactic acid bacteria. He is co-author of 20 publications published on international journals reviewed by ISI (Institute for Scientific Information of Philadelphia, USA), and 4 chapters in international texts. He partnered with national and international universities and research institutes such as University of Alberta (Canada), University of Hamburg (Germany), INRA–Technologie et Analyses Laitières (France); Istituto Superiore di Sanità (Italy), Mediterranean Agronomic Institute (CIHEAM-MAIB) (Italy), Federal University of Santa Catarina (Florianópolis, Brazil), University of San Raffaele (Rome, Italy), University of Parma,

(Italy), Free University of Bozen (Italy), and University of Bologna (Italy). He worked on technology transfer to agro-food and pharmaceutical industries such as Giuliani S.p.A. (Milano, Italy) and Puratos NV (Groot-Bijgaarden, Belgium).

Awards and Grants (starting from the most recent):

- (2018) – Research grant from the Italian Society of Agro-Food and Environmental Microbiology for the project “Selection of complementary commercial enzymes and fructophilic lactic acid bacteria (FLAB) strains capable of fully degrading FODMAPs in wheat-derived products”.
- (2017) – Research grant from the Federation of European Microbiological Societies for the project “Metabolism of phenolics by lactic acid bacteria: a comprehensive snapshot”.
- (2016) – Best publication award for the year 2016 in the field of Food Microbiology from the Italian Society of Agro-Food and Environmental Microbiology for the paper “Filannino et al., 2016, Scientific reports, 6:27392”.

Editorship:

- 2018-2019: Guest editor for the special issue on “Exopolysaccharides from Lactic Acid Bacteria and Bifidobacteria: Biosynthesis, Techno-Functional Role, and Novel Applications in Beverages” for the journal *Beverages*.

Peer review contributions:

He is regularly invited as referee by international journals of food microbiology and food biotechnology (e.g., *American Journal of Enology and Viticulture*, *Food Microbiology*, *Frontiers in Microbiology*, *Journal of Functional Foods*, *International Journal of Molecular Sciences*, *Archives of Microbiology*, *Annals of Microbiology*, *Process Biochemistry*, *AMB Express*, *Foods*, *Nutrients*, *Microorganism*, *Molecules*, *Fermentation*, *Food Technology and Biotechnology*, *Applied Sciences*, *Food Science and Biotechnology*, *Beverages*, *Anti-Inflammatory & Anti-Allergy Agents in Medicinal Chemistry*).

Scientific Societies:

- Member of the Italian Society of Agro-Food and Environmental Microbiology since 2015.

Institutional responsibilities and commissions of trust:

- 2018 to date: member of the Orientation Committee for student orientation programs at the Department of Soil, Plant and Food Sciences, University of Bari Aldo Moro.

Scientific papers on international journals (starting from the most recent):

1. L.A.A. Menezes, F. Minervini, **P. Filannino**, M.L.S. Sardaro, M. Gatti, J. De Dea Lindner. (2018). Effects of Sourdough on FODMAPs in Bread and Potential Outcomes on Irritable Bowel Syndrome Patients and Healthy Subjects. *Frontiers in Microbiology*, 9:1972. *(Q1)*
2. **Filannino, P.**, De Angelis, M., Di Cagno, R., Gozzi, G., Riciputi, Y., Gobbetti, M. (2018). How *Lactobacillus plantarum* shapes its transcriptome in response to contrasting habitats. *Environmental Microbiology*. *(Q1)*
3. Pontonio, E., Di Cagno, R., Tarraf, W., **Filannino, P.**, De Mastro, G., & Gobbetti, M. (2018). Dynamic and assembly of epiphyte and endophyte lactic acid bacteria during the life cycle of *Origanum vulgare* L. *Frontiers in Microbiology*, 9, 1372. doi: 10.3389/fmicb.2018.01372. *(Q1)*

4. **Filannino, P.**, Di Cagno, R., Gobbetti, M. (2018). Metabolic and functional paths of lactic acid bacteria in plant foods: get out of the labyrinth. *Current Opinion in Biotechnology*, 49:64–72. (Q1)
5. Gobbetti, M., Pontonio, E., **Filannino, P.**, Rizzello, C. G., De Angelis, M., & Di Cagno, R. (2018). How to improve the gluten-free diet: The state of the art from a food science perspective. *Food Research International*, 110:22–32. (Q1)
6. **Filannino, P.**, Di Cagno, R., Trani' A., Cantatore, V., Gambacorta, G., Gobbetti, M. (2017). Lactic acid fermentation enriches the profile of biogenic compounds and enhances the functional features of *Portulaca oleracea* L. *Journal of Functional Foods*, 39:175–185. (IF 3.470 – Q1)
7. R. Di Cagno, **P. Filannino***, M. Gobbetti. (2017). Lactic acid fermentation drives the optimal volatile flavor-aroma profile of pomegranate juice. *International Journal of Food Microbiology*, 248:56–62. (IF 3.451 – Q1)*Corresponding author
8. Di Cagno, R., **Filannino, P.***, Cavoski, I., Lanera, A., Mohamed Hassanin, B.M., Gobbetti, M. (2017). Bioprocessing technology to exploit organic palm date (*Phoenix dactylifera* L. cultivar Siwi) fruit as a functional dietary supplement. *Journal of Functional Foods*, 31:9-19. (IF 3.470 – Q1) *Corresponding author
9. **Filannino, P.**, Di Cagno, R., Addante, R., Pontonio, E., & Gobbetti, M. (2016). Metabolism of fructophilic lactic acid bacteria isolated from *Apis mellifera* L. bee-gut: a focus on the phenolic acids as external electron acceptors. *Applied and Environmental Microbiology*, 82(23):6899-6911. (IF 3,807 – Q1)
10. Pontonio, E., Rizzello, C. G., Di Cagno, R., Dousset, X., Clément, H., **Filannino, P.**, Bernard Onno, Gobbetti, M. 2016. How organic farming of wheat may affect the sourdough and the nutritional and technological features of leavened baked goods. *International Journal of Food Microbiology*, 239:44-53. (IF 3,339 – Q1)
11. R. Di Cagno, **P. Filannino***, O.Vincentini, A. Lanera, I. Cavoski, M. Gobbetti. 2016. Exploitation of *Leuconostoc mesenteroides* strains to improve shelf life, rheological, sensory and functional features of prickly pear (*Opuntia ficus-indica* L.) fruit puree. *Food Microbiology*, 59:176-189. (IF 3,759 – Q1) *Corresponding author
12. **P. Filannino**, R. Di Cagno, C. Crecchio, C. De Virgilio, M. De Angelis, M. Gobbetti 2016. Transcriptional reprogramming and phenotypic switching associated with the adaptation of *Lactobacillus plantarum* C2 to plant niches. *Scientific reports*, 6:27392. (IF 4,259 – Q1)
13. **P. Filannino**, I. Cavoski, N. Thligene, O. Vincentini, M. De Angelis, M. Silano, M. Gobbetti, R. Di Cagno. 2016. Lactic acid fermentation of cactus cladodes (*Opuntia ficus-indica* L.) generates flavonoid derivatives with antioxidant and anti-inflammatory properties. *PloS one*, 11(3), e0152575. (IF 2,806 – Q1)
14. J. A. Curiel, D. Pinto, B. Marzani, **P. Filannino**, G. A. Farris, M. Gobbetti, C. G. Rizzello. 2015. Lactic acid fermentation as a tool to enhance the antioxidant properties of *Myrtus communis* berries. *Microbial Cell Factories*, 14:67. (IF 3,744 – Q1)
15. **P. Filannino**, Y. Bai, R. Di Cagno, M. Gobbetti, M. G. Gänzle. 2015. Metabolism of phenolic compounds by *Lactobacillus* spp. during fermentation of cherry juice and broccoli puree. *Food Microbiology*, 46:272–279. (IF 3,682 – Q1)
16. **P. Filannino**, M. Gobbetti, M. De Angelis, R. Di Cagno. 2014. Hydroxycinnamic acids used as external acceptors of electrons: an energetic advantage for strictly hetero-fermentative lactic acid bacteria. *Applied and Environmental Microbiology*, 80:7574-7582. (IF 3,668 – Q1)
17. **P. Filannino**, G. Cardinali, C. G. Rizzello, S. Buchin, M. De Angelis, M. Gobbetti, R. Di Cagno. 2014. Metabolic responses of *Lactobacillus plantarum* strains during fermentation and

storage of vegetable and fruit juices. *Applied and Environmental Microbiology*, 80:2206–2215. (IF 3,668 – Q1)

18. C.G. Rizzello, **P. Filannino**, R. Di Cagno, M. Calasso, M. Gobbetti. 2014. Quorum-sensing regulation of constitutive plantaricin by *Lactobacillus plantarum* strains under a model system for vegetables and fruits. *Applied and Environmental Microbiology*, 80:777–787. (IF 3,668 – Q1)
19. C.G. Rizzello, R. Coda, D. Sánchez Macías, D. Pinto, B. Marzani, **P. Filannino**, G. Giuliani, V. M. Paradiso, R. Di Cagno, and M. Gobbetti. 2013. Lactic acid fermentation as a tool to enhance the functional features of *Echinacea* spp. *Microbial Cell Factories*, 12:44. (IF 4,25 - Q1)
20. **P. Filannino**, L. Azzi, I. Cavoski, O. Vincentini, C.G. Rizzello, M. Gobbetti, R. Di Cagno. 2013. Exploitation of the health-promoting and sensory properties of organic pomegranate (*Punica granatum* L.) juice through lactic acid fermentation. *International Journal of Food Microbiology*, 163:184–192. (IF 3,155 - Q1)

Book chapters (starting from the most recent):

1. R. Di Cagno, **P. Filannino**, M. Gobbetti. 2016. *Fermented Foods: Fermented Vegetables and Other Products*. In: *The Encyclopedia of Food and Health*, vol. 2, pp. 668-674, 3rd edition (Eds. Benjamin Caballero, Paul Finglas, Fidel Toldrá). Oxford, Academic Press. ISBN: 978-0-12-384953-3. DOI: 10.1016/B978-0-12-384947-2.00284-1.
2. R. Di Cagno, **P. Filannino**, M. Gobbetti. 2016. *Lactic acid fermentation of smoothies and juices*. In: S. Paramithiotis (Ed.) *Lactic Acid Fermentation of Fruits and Vegetables*, pp. 269-284. CRC Press, ISBN 9781498726900.
3. R. Di Cagno, **P. Filannino**, M. Gobbetti. 2016. *Novel fermented fruit and vegetable based products*. In: K. S. Ojha, B. K. Tiwari (Eds.). *Novel Food Fermentation Technologies*, pp. 279-291. Springer International Publishing, ISBN: 9783319424552.
4. R. Di Cagno, **P. Filannino**, M. Gobbetti. 2015. *Vegetable and Fruit Fermentation by Lactic Acid Bacteria*. In: *Biotechnology of Lactic Acid Bacteria: Novel applications*, pp. 216-230, 2nd edition (Eds. F. Mozzi, R. R. Raya, G. M. Vignolo). John Wiley & Sons, Ltd, Chichester, UK. ISBN: 978-1-118-86840-9. DOI: 10.1002/9781118868386.ch14.

Attendance at conferences as invited or selected speaker (starting from the most recent):

1. **P. Filannino**. Metabolism of fructophilic lactic acid bacteria isolated from the *Apis mellifera* L. bee-gut: zooming on the phenolic acids. 4th International Conference on Microbial Diversity 2017 – Drivers of microbial diversity (MD2017), pp. 244–245. Bari, Italy, 24–26 October 2017. ISBN 978-88-943010-0-7.
2. **P. Filannino**. A comprehensive snapshot of plant niche environments sensing and adaptive regulation models for *Lactobacillus plantarum* C2 through whole transcriptome and phenotypic microarray. 3rd International Conference on Microbial Diversity 2015 – The Challenge of Complexity (MD2015), pp. 160–161. Perugia, Italy, 27-29 October 2015. ISBN 979-12-200-0499-2.

Conferences proceedings (starting from the most recent):

1. V. Cantatore, **P. Filannino**, I. De Pasquale, R. Di Cagno, M. Gobbetti. Apple by-products as functional dietary fiber to enhance the technological and nutritional quality of baked goods. 7th International Symposium on Sourdough, p. 99. Cork, Ireland, 6-8 June 2018.
2. R. Di Cagno, **P. Filannino**, V. Cantatore, I. De Pasquale, M. Gobbetti. Complementary commercial enzymes and fructophilic lactic acid bacteria strains capable of fully reducing FODMAPs in wheat-derived products. 7th International Symposium on Sourdough, p. 75. Cork, Ireland, 6-8 June 2018.

3. **P. Filannino**, K. Rantsiou, A. Zein Al-Abiden Tlais, I. Cavoski, L. S. Cocolin, R. Di Cagno, M. Gobbetti. The different histological localization of phenolics in *Annona squamosa* (L.) fruits likely drives the structure and stability of the dominant microbes. 4th International Conference on Microbial Diversity 2017 – Drivers of microbial diversity (MD2017), pp. 403–404. Bari, Italy, 24–26 October 2017. ISBN 978-88-943010-0-7.
4. **P. Filannino**, V. Cantatore, R. Di Cagno, M. Gobbetti. Solid-state fermentation of bee-collected pollen as a novel biotechnology emulating the natural fermentation of bee-bread. 4th International Conference on Microbial Diversity 2017 – Drivers of microbial diversity (MD2017), p. 293. Bari, Italy, 24–26 October 2017. ISBN 978-88-943010-0-7.
5. I. De Pasquale, **P. Filannino**, R. Di Cagno, M. Gobbetti. *Enterococcus* spp. isolated from plant matrices of Mediterranean area possess distinctive patterns of virulence factors and resistance to antibiotics. 4th International Conference on Microbial Diversity 2017 – Drivers of microbial diversity (MD2017), p. 409. Bari, Italy, 24–26 October 2017. ISBN 978-88-943010-0-7.
6. **P. Filannino**, R. Di Cagno, R. Addante, E. Pontonio, M. Gobbetti. Metabolism of fructophilic lactic acid bacteria isolated from the *Apis mellifera* L. bee-gut: zooming on the phenolic acids. 4th International Conference on Microbial Diversity 2017 – Drivers of microbial diversity (MD2017), pp. 244–245. Bari, Italy, 24–26 October 2017. ISBN 978-88-943010-0-7.
7. **P. Filannino**, R. Di Cagno, M. Gobbetti. A comprehensive snapshot of plant niche environments sensing and adaptive regulation models for *Lactobacillus plantarum* C2 through whole transcriptome and phenotypic microarray. Proceedings of the 3rd International Conference on Microbial Diversity 2015 – The Challenge of Complexity (MD2015), pp. 160–161. Perugia, Italy, 27-29 October 2015. ISBN 979-12-200-0499-2.
8. R. Di Cagno, **P. Filannino**, G. Cardinali, I. Cavoski, N. Thligene, A. Lanera, L. Corte, C. Colabella, M. Gobbetti. Bacterial and fungal communities associated with fresh fruits and cladodes of Mediterranean *Opuntia ficus-indica* (L.) cultivars. Proceedings of the 3rd International Conference on Microbial Diversity 2015 – The Challenge of Complexity (MD2015), pp. 224-225. Perugia, Italy, 27-29 October 2015. ISBN 979-12-200-0499-2.
9. N. Thligene, **P. Filannino**, I. Cavoski, A. Lanera, M. Gobbetti, R. Di Cagno. Taxonomic structure of the microbiota of Tunisian Organic Prickly Pear (*Opuntia ficus indica* Mill) cladodes and fruits and their exploitation through lactic acid fermentation. 12th European Nutrition Conference (FENS), p. 552. Berlin, Germany, 20-23 October 2015. Ann Nutr Metab 2015; 67(suppl 1). DOI: 10.1159/000440895.
10. R. Di Cagno, **P. Filannino**, M. Gobbetti. Bacterial transcriptional adaptation to niches: molecular and metabolic responses of *Lactobacillus plantarum* C2 in plant substrates. 6th Congress of European Microbiologist (FEMS). Maastricht, The Netherlands, 7-11 June 2015.
11. **P. Filannino**, G. Cardinali, C. G. Rizzello, S. Bouchin, M. De Angelis, M. Gobbetti, R. Di Cagno. Understanding the adaptive growth and survival strategies of *Lactobacillus plantarum* during plant fermentation and storage. Proceedings of the 2nd International Conference on Microbial Diversity 2013 – Microbial Interactions in Complex Ecosystems (MD2013), pp. 236-237. Torino, Italy, 23-25 October 2013. ISBN 978-88-908636-5-3.