

PERSONAL INFORMATION

Family name, First name: **Ercolini Danilo**

Date of birth: **28/09/1975**

RCLDNL75P28F839M

Researcher ID: B-2431-2009 **ORCID:** <http://orcid.org/0000-0003-3061-9560>

GoogleScholar: <http://scholar.google.com/citations?user=SL5qGTQAAAAJ>

Bibliometric record (source Scopus)

Number of publications since 2001: **163**

Number of citations: **ca. 9,400**

H index: **55**

Bibliometric record (source GoogleScholar)

Number of citations: **ca. 14,000**

H index: **65**

EDUCATION

2003 – PhD in Food Sciences, University of Naples Federico II – Italy.

1999 – MSc in Food Science and Technology

CURRENT POSITION

2015 – to date **Full Professor of Microbiology**

Department of Agricultural Sciences, University of Naples Federico II – Italy.

PREVIOUS POSITION

2002 – 2011 - **Lecturer in Microbiology**

Faculty of Biotechnological Sciences, University of Naples Federico II – Italy.

2011 – 2015 – **Associate Professor of Microbiology**

Department of Agricultural Sciences, University of Naples Federico II – Italy.

FELLOWSHIPS AND AWARDS

2001 – 2002 - Marie Curie Fellowship grant - Division of Food Science, School of Biosciences, the University of Nottingham, UK. Supervisor: Prof. Christine E.R. Dodd.

2004 - Mobility grant - Laboratory of Microbiology, University of Wageningen, The Netherlands. Supervisor: Prof. Willem M. De Vos.

2010 – Montana Award (€ 75,000), received from Montana Alimentari, Italy. Awarded project title: “Obesity and sensory perception: role of the composition of saliva in aroma release and perception”.

FUNDING ID

Scientific Responsibility (local Principal Investigator) of research grants

2019 (ongoing). H2020-SFS-2018-2020- LC-SFS-03-2018 – MASTER: Microbiome Applications for Sustainable food systems through Technologies and EnteRprise. Funded by the European Commission under the H2020 program. Grant agreement No. 818368 .

€ 470.000,00.

2019 (ongoing). Microbiome-tailored food products based on typical Mediterranean Diet components. Funded by the Italian Ministry of University and Research.

€ 142.000,00.

2019 (ongoing). JPI – Healthy diet for a healthy life (HDHL)-Intestinal Microbiomics (INTIMIC) Knowledge Platform on Food, Diet, Intestinal Microbiomics and Human Health. Funded by the Italian Ministry of Ministry of Agricultural, Food and Forestry Policies.

€ 24.000,00.

2016 (ongoing). JPI – Healthy diet for a healthy life. JPI – Microbiomics 2016. EU-project: Diet-induced Arrangement of the gut Microbiome for Improvement of Cardiometabolic health – **DINAMIC** (2016-2019). Funded by the Italian Ministry of University and Research. Mediterranean diet intervention in overweight and obesese subjects.

€ 200.000,00.

2016 (ongoing). Scientific Study Protocol SPES “Campania Trasparente – Integrated monitoring of Campania Region” – Evaluation of gut microbiota in individuals living in different areas of exposure to environmental contamination – **MICRO-SPES**. Funded by Campania Region.

€ 186.000,00.

-2012-2015. Microorganisms in food and in humans: study of microbiota and metabolome in individuals with omnivore, vegetarian and vegan diets - **DIET4MICROGUT.** Funded by the Italian Ministry of University and Research. € 135.000,00.

-2008-2011. Scientific sYnergisM of nano-Bio-Info-cOgni Science for an Integrated system to monitor meat quality and Safety during production, storage, and distribution in EU - **SYMBIOSIS-EU** (FP7-KBBE-2007-1). € 390.500.

Passed but not funded

ERC 2010: "Microbial gene expression of spoilage-related activities in food: the molecular basis of food spoilage - MicroGeneExFood" - ERC (European Research Council) Starting Grant. The project went through all phases including grant defense. It took an A grade, judged fundable but not funded because of budget limitations.

Grants from other Institutions and Companies

Altogether worth ca. € 400.000.

- 2019. Design of frozen pre-leavened croissants and muffins for improved gut microbiota diversity. Fresystem S.p.a, Naples , Italy.
- 2019. Microbiota mapping of the food processing environment in icecream lines. Unilever-IT, Caivano, Italy.
- 2018. Optimization of gluten-free croissants using alternative flours. Aquaviva S.p.A., Gricignano, Italy.
- 2016. Optimization of natural leavening of croissants using alternative flours with increased fiber content. Aquaviva S.p.A., Gricignano, Italy.
- 2015. Amplicon sequencing of 16S rRNA genes from fecal metagenomic DNA. Istituto Zooprofilattico Sperimentale del Mezzogiorno, Italy.
- 2013-2014: Application of metagenomics and MLVA for the epidemiological studies of animal vectors in Q fever. Istituto Zooprofilattico Sperimentale del Mezzogiorno, Italy.
- 2014. Evaluation of the microbiota of grapes and must for wine production. University of Turin, Italy.
- 2014. Evaluation of the microbiota of dairy samples during pasta-filata cheese production. University of Basilicata, Italy.
- 2014. Evaluation of the microbiota in sourdough for bread production from different types of flour. Mediterranean Agronomic Institute, Bari, Italy.
- 2013. Molecular characterization of natural sourdough for the production of frozen pre-leavened croissants. Fresystem S.p.a., Naples , Italy.
- 2013. Evaluation of the gut microbiota in women affected by breast cancer - study DIANA5. University of Basilicata, Italy.
- 2013. Evaluation of the gut microbiota in children affected by cystic fibrosis. Ospedale Pediatrico bambino Gesù, Roma, Italy.
- 2012. Development of antimicrobial packaging for fresh meat storage. Macello Abagnale S.p.a.

- 2012. Technological characterization of strains of *Streptococcus thermophilus* and *Lactobacillus helveticus* to be used as starter cultures for dairy products. Mediterranea Biotecnologie S.r.l. Termoli, Italy.
- 2010. Molecular typing and characterization of lactic acid bacteria from milk cultures for the production of Italico cheese. Mediterranea Biotecnologie S.r.l. Termoli, Italy.
- 2010. Evaluation of antimicrobial activity of microfiber cloths for surface cleaning. Eudorex S.r.l., Acerra, Italy.
- 2007-to date. Evaluation of microbial diversity in natural whey cultures for the evaluation of the authenticity of Caciocavallo Silano cheese. ISMECERT -Istituto Mediterraneo di Certificazione Alimentare. Naples, Italy.
- 2000. National Council of Research (CNR) Young investigator grant: Application of denaturing electrophoresis for the evaluation of microbial diversity in natural whey cultures for the production of traditional cheeses. CNR, Rome, Italy.

SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

to date: Supervised more than 10 Postdocs 14 PhD and 35 MSc Students.

International students and Postdocs were hosted in my Department for research stays under my supervisions: (i) Dr. Pilar Martinez-Viedma, Department of Health Science, University of Jaen, Spain; (ii) Dr. Agapi Doulgeraki, Agricultural University of Athens, Greece; (iii) Dr. A. Handan Baysal, Izmir Institute of Technology, Department of Food Engineering, Izmir, Turkey; (iv) Sarahi del Carmen Rangel Ortega Centro de Investigacion en Alimentacion y Desarrollo A.C. (CIAD A.C.), Hermosillo, Mexico; (v) Vasileios Pothakos University of Gent Belgium; (vi) Julia Toled de Arbol, University of Jaen, Spain; (vii) Narciso Martin University of Burgos, Spain; (viii) Bruna Kamimura, University of Campinas, Brazil, (ix) Beatriz Belero Gil, University of Burgos, Spain; (x) Beatriz Severino da Silva, University of Campinas, Brazil.

PATENTS

IT1405272-B. Long-life packaged food product and the related preparation method. 2011.

INVITATION TO INTERNATIONAL CONFERENCES AND EVENTS

Invited speaker

- 2020** – FoodMicro2020 – Next-generation challenges in food microbiology. Athens (Gr) 7-10 September.
- 2020** - 13th International Symposium on Lactic Acid Bacteria, Egmond aan Zee, the Netherlands, 23-27 August.
- 2019** - FEMS conference 2019 - Glasgow (UK) 8-12 July 2019. Bridging food and gut health: prevalence and functional traits of lactic acid bacteria and probiotics in the gut microbiome.
- 2019** – 10th Probiotics, prebiotics and new foods - Rome (Italy) 9-11 September Healthy food/Junk food, Mediterranean Diet and Microbiome.
- 2017** – 9th Probiotics, prebiotics and new foods - Rome (Italy) 10-12 September Mediterranean Diet and Microbiome.
- 2017** - MikroBioKosmos Society conference 2017 – Athens (Greece) 7-9 April Diet and Gut Microbiome.
- 2017** – Ancel Keys seminar on Mediterranean diet - Ascea (Italy) 9-13 October Mediterranean Diet and Microbiome.
- 2017** - FEMS conference 2017 - Valencia (Spain) 9-13 July 2017. The origin of the food microbiome: processing environment as source of contamination.
- 2015** – ICoMST (International congress of meat science and technology). Clermont-Ferrand (France) 23-28 August 2015. The microbiota associated to meat spoilage: succession, activities and possible contamination sources.
- 2015** - Society for Applied Microbiology (SfAM) 2015 Summer Conference. Dublin 29 June – 2 July 2015. Study of food fermentations by metagenomics sequencing-based approaches.
- 2014** - Convenor and Invited Speaker at ISME 15 Seoul - South Korea, 24-29 August 2015. Title of contribution to be defined.
- 2013** - Spoilers 2013, Quimper, France, 1-3 July. Changes in structure and metabolic activities of spoilage-related microbiota of foods according to different storage conditions.
- 2006** - II International Symposium on Lactic Acid Bacteria. Tucumán, Argentina,

11-13 Oct. 2006 - Food quality and authenticity: the traces left by bacteria.

2004 - Food Safety under Extreme Conditions, Jaén, Spain, 6-8 Sept. 2004.
Molecular tracing of microbiological quality of fermented foods: what can we get from PCR-DGGE fingerprinting?

Invitation for Seminar at international advanced schools

2012 –Finnish Centre of Excellence in Microbial Food Safety Research (CoE-MiFoSa), University of Helsinki.

INSTITUTIONAL RESPONSIBILITIES

2017 –Coordinator – Task Force on Microbiome Studies – University of Naples Federico II.

2016 – Coordinator – PhD school in Food Science - University of Naples Federico II.

2016 – Member of the National committee for the Scientific Evaluation of candidates qualified for Associate and Full Professor positions in Microbiology – Ministry of University and Research, Italy.

2016 – Member of the Evaluation Panel for Research Funding - University of Naples Federico II.

2015 – Member of the managing board of Evaluation of Research Quality – Department of Agricultural Sciences - University of Naples Federico II.

2012 – Scientist in Charge of the High-throughput sequencing facility at the Department of Agricultural Sciences, University of Naples Federico II – Naples, Italy.

2002-2012 - Faculty member, University of Naples Federico II, Italy, School of Biotechnological Sciences.

2003-2010 – Member of Internationalization Board - University of Naples Federico II, Italy.

2010 – to date: National delegate (Italy) within the International Committee on Food Microbiology and Hygiene (ICFMH).

2010-2012 – Member - Council of the Life Sciences, University of Naples Federico II, Italy.

PhD EVALUATIONS AT INTERNATIONAL INSTITUTIONS

2008 – PhD Scientific Evaluator and Jury member – University of Jaen, Spain
2010 – PhD Scientific Evaluator and Jury member – University of Jaen, Spain
2010 - PhD Scientific Evaluator and Jury member – University of Nottingham, UK
2013 - PhD Scientific Evaluator and Jury member – University of Nottingham, UK
2014 - PhD Scientific Evaluator and Jury member – University of Gent, Belgium
2015 - PhD Scientific Evaluator and Jury member – University of Jaen, Spain
2015 - PhD Scientific Evaluator and Jury member – University of Burgos, Spain
2015 - PhD Scientific Evaluator and Jury member – University College Cork, Ireland

INTERNATIONAL BOARDS

2016-to date: Member of the **Scientific Advisory Board** – Metaprogramme MEM – Meta-omics and microbial Ecosystems – **INRA**, France.

EDITORIAL BOARDS

2019 – to date: **Editor** - Applied and Environmental Microbiology.
2011 – to date: **Associate Editor** – Frontiers in Microbiology.
2014 – to date: **Academic Editor** – PLOS ONE.
2016 – to date: **Associate Editor** – mSystems.
2007 – 2019: **Editorial Board Member** – Applied and Environmental Microbiology (Q1 ranking – category Biotechnology and Applied Microbiology).
2008 – to date: **Editorial Board Member** – International Journal of Food Microbiology (Q1 ranking – category Food Science).
2010 – to date: **Editorial Board Member** – Food Microbiology (Q1 ranking – category Biotechnology and Applied Microbiology).
2012 – 2014: **Editorial Board Member** – Journal of Food Protection.
2014 – to date: **Editorial Board Member** – Current Opinion in Food Science.
2015 – to date: **Editorial Board Member** – Microbial Biotechnology.
2012 – **Member of the Scientific Advisory Board** - the Encyclopedia of Food Microbiology 3rd Edition published by Elsevier in April 2014.
2012 – **Section Editor** “Molecular Biology” and “Identification Methods” - the Encyclopedia of Food Microbiology 3rd Edition published by Elsevier in April

2014.

PROJECT PROPOSAL EVALUATOR

International funding

2011 - Project evaluator - EU under the 7th Frame programme - collaborative project call "Food, Agriculture and Fisheries, and Biotechnology".

2012 - Project evaluator - ISF – International Science Foundation.

2012 - Project evaluator - General Secretariat for Research and Technology (G.S.R.T.) of Greece

2013 - Project evaluator - Teagasc, Agriculture and food development authority in Ireland.

2013 - Project evaluator - Walsh Fellowship application - Ireland.

2013 - Project evaluator - WWTF - Vienna Science and Technology Fund, Austria.

2014-to date. FWO Research grants, Belgium.

2015 - Marie Curie fellowship – University of Liege, Belgium.

2015 - Food for Tomorrow - INRA, France.

2015-to date. AgreenSkills National Institute for Agricultural Research, France.

Italian funding

2008 - Project evaluator - Piedmont Region, Italy.

2010 – to date. Project evaluator - Italian Ministry of University and Research.

2012 – to date. Project evaluator - Italian Ministry of Development.

2012 - Project evaluator - Lombardy Region, Italy.

2013 - to date. Project evaluator - Sardinia Region, Italy.

2014 - to date. Project evaluator – Emilia-Romagna Region, Italy.

List of Publications

1. Blaiotta, G., **Ercolini, D.**, Simeoli, E., Moschetti, G., and Villani, F. (2000) Conditions for conjugative transposon transfer in *Lactococcus lactis*. *Letters in Applied Microbiology* 31: 343-348.
2. Coppola, S., Blaiotta, G., **Ercolini, D.** and Moschetti, G. (2001) Molecular evaluation of microbial diversity occurring in different types of Mozzarella cheese. *Journal of Applied Microbiology* 90: 414-420.
3. **Ercolini, D.**, Moschetti, G., Blaiotta, G. and Coppola, S. (2001) Behavior of variable V3 region from 16S rDNA of important lactic acid bacteria in denaturing gradient gel electrophoresis. *Current Microbiology* 42: 199-202.
4. **Ercolini, D.**, Moschetti, G., Blaiotta, G. and Coppola, S. (2001) The potential of a polyphasic PCR-DGGE approach in evaluating microbial diversity of Natural Whey Cultures for water-buffalo Mozzarella cheese production: bias of "culture dependent" and "culture independent" approaches. *Systematic and Applied Microbiology* 24: 610-617.
5. **Ercolini, D.**, Blaiotta, G., Moschetti, G. and Coppola, S. (2002) Molecular typing of cheeses on the basis of their microflora as detected by PCR-DGGE analysis. *Annals of Microbiology* 52: 81-87.
6. **Ercolini, D.**, Hill, P. J. and Dodd, C. E. R. (2003) Development of a fluorescence in situ hybridization method in cheese using a 16S rRNA probe. *Journal of Microbiological Methods* 52: 267-271.
7. **Ercolini, D.**, Hill, P. J. and Dodd, C. E. R. (2003) Bacterial community structure and location in Stilton cheese. *Applied and Environmental Microbiology* 69: 3540-3548.
8. Mauriello, G., Moio, L., Genovese, A. and **Ercolini, D.** (2003) Relationships between flavouring capabilities, bacterial composition and geographical origin of Natural Whey Cultures (NWCs) used for traditional water-buffalo Mozzarella cheese manufacture. *Journal of Dairy Science* 86: 486-497.
9. Blaiotta, G., Pennacchia, C., **Ercolini, D.**, Moschetti, G. and Villani, F. (2003) Combining denaturing gradient gel electrophoresis of 16S rDNA V3 region and 16S-23S rDNA spacer region polymorphism analyses for the

- identification of staphylococci from Italian fermented sausages. *Systematic and Applied Microbiology* 26: 423-433.
10. Pennacchia, C., **Ercolini, D.**, Blaiotta, G., Pepe, O., Mauriello, G. and Villani F. (2004) Selection of *Lactobacillus* strains from fermented sausages for their potential use as probiotics. *Meat Science* 67: 309-317.
 11. **Ercolini, D.**, Mauriello, G., Blaiotta, G., Moschetti, G. and Coppola, S. (2004) PCR-DGGE fingerprints of microbial succession during a manufacture of traditional water buffalo Mozzarella cheese. *Journal of Applied Microbiology* 96: 263-270.
 12. **Ercolini, D.** (2004) PCR-DGGE fingerprinting: novel strategies for detection of microbes in food. Review article. *Journal of Microbiological Methods* 56: 297-314.
 13. **Ercolini, D.**, Blaiotta, G., Fusco, V. and Coppola, S. (2004) PCR-based detection of enterotoxigenic *Staphylococcus aureus* in the early stages of raw milk cheese making. *Journal of Applied Microbiology* 96: 1090-1096.
 14. Pepe, O., Blaiotta, G., Anastasio, M., Moschetti, G., **Ercolini, D.** and Villani, F. (2004) Technological and molecular diversity of *Lactobacillus plantarum* strains isolated from naturally fermented sourdoughs. *Systematic and Applied Microbiology* 27: 443-453.
 15. Mauriello G., **Ercolini, D.**, La Storia, A., Casaburi, A. and Villani, F. (2004) Development of polyethylene films for food packaging activated with an antilisterial bacteriocin from *Lactobacillus curvatus* 32Y. *Journal of Applied Microbiology* 97: 314-322.
 16. Mariniello, L., Sommella, M.G., Cozzolino, A., Di Pierro, P., **Ercolini, D.**, and Porta, R. (2004) Identification of Campania *Citrus limon* L. by Random Amplified Polymorphic DNA markers. *Food Biotechnology* 18: 289-297.
 17. Blaiotta, G., **Ercolini, D.**, Pennacchia, C., Fusco, V., Casaburi, A., Pepe, O. and Villani, F. (2004) PCR detection of staphylococcal enterotoxin genes in *Staphylococcus* spp. strains isolated from meat and dairy products. Evidence of new variants of *seG* and *sel* in *S. aureus* AB-8802. *Journal of Applied Microbiology* 97: 719-730.
 18. Blaiotta, G., **Ercolini, D.**, Mauriello, G., Salzano, G. and Villani, F. (2004) Rapid and reliable identification of *Staphylococcus equorum* strains by a

- PCR assay targeting on *sodA* gene. *Systematic and Applied Microbiology* 27: 696-702.
19. Villani, F., Russo, F., Blaiotta, G., Moschetti, G. and **Ercolini, D.** (2005) Presence and characterisation of verotoxin producing *E. coli* in fresh Italian pork sausages, and preparation and use of an antibiotic-resistant strain for challenge studies. *Meat Science* 70: 181-188.
20. Mauriello, G., De Luca, E., La Storia, A., Villani, F. and **Ercolini D.** (2005) Antimicrobial activity of a nisin-activated plastic film for food packaging. *Letters in Applied Microbiology* 41: 464-469.
21. **Ercolini, D.**, Fusco, V., Blaiotta, G. and Coppola, S. (2005) Sequence heterogeneity in the *lacSZ* operon of *Streptococcus thermophilus* and its use in PCR systems for strain differentiation. *Research in Microbiology* 156: 161-172.
22. **Ercolini, D.**, Fusco, V., Blaiotta, G., Sarghini, F. and Coppola, S. (2005) Response of *Escherichia coli* O157:H7, *Listeria monocytogenes*, *Salmonella typhimurium* and *Staphylococcus aureus* to the thermal stress occurring during the manufacture of Grana Padano cheese. *Journal of Dairy Science* 88: 3818-3825.
23. **Ercolini, D.**, La Storia, A., Villani, F. and Mauriello, G. (2006) Effect of a bacteriocin-activated polyethylene film on *Listeria monocytogenes* as evaluated by viable staining and epifluorescence microscopy. *Journal of Applied Microbiology* 100: 765-772.
24. Coppola, S., Fusco, V., Andolfi, R., Aponte, M., Blaiotta, G., **Ercolini, D.** and Moschetti, G. (2006). Evaluation of microbial diversity during the manufacture of "Fior di Latte di Agerola", a traditional raw milk pasta-filata cheese of Naples area. *Journal of Dairy Research* 73: 264-272.
25. Borriello, G., Capparelli, R., Bianco, M., Fenizia, D., Alfano, F., Capuano, F., **Ercolini, D.**, Parisi, A., Roperto, S. and Iannelli D. (2006). Genetic Resistance to *Brucella abortus* in Water Buffalo (*Bubalus bubalis*). *Infection and Immunity* 74: 2115-2120.
26. **Ercolini, D.**, Russo, F., Torrieri, E., Masi, P. and Villani, F. (2006) Changes in the spoilage-related microbiota of beef during refrigerated storage

- under different packaging conditions. *Applied and Environmental Microbiology* 72: 4663-4671.
27. Russo, F., **Ercolini, D.**, Mauriello, G. and Villani, F. (2006). Behaviour of *Brochothrix thermosphacta* in presence of other meat spoilage microbial groups. *Food Microbiology* 23: 797-802.
28. **Ercolini, D.**, Villani, F., Aponte, M. and Mauriello, G. (2006). Fluorescence *in situ* hybridization detection of *Lactobacillus plantarum* group on olives to be used in natural fermentations. *International Journal of Food Microbiology* 112: 291-296.
29. Bottari, B., **Ercolini, D.**, Gatti, M. and Neviani, E. (2006) Application of FISH technology for microbiological analysis: current state and prospects. *Applied Microbiology and Biotechnology* 73: 485-494.
30. Casaburi, A., Aristoy, M.-C., Cavella, S., Di Monaco, R., **Ercolini, D.**, Toldrá, F., and Villani, F. (2007) Biochemical and sensory characteristics of traditional fermented sausages of Vallo di Diano (Southern Italy) as affected by use of starter cultures. *Meat Science* 76: 295-307.
31. **Ercolini, D.**, Russo, F., Blaiotta, G., Pepe, O., Mauriello, G., and Villani, F. (2007) Simultaneous detection of *Pseudomonas fragi*, *P. lundensis* and *P. putida* from meat by a multiplex PCR assay targeting the *carA* gene. *Applied and Environmental Microbiology* 73: 2354-2359.
32. Di Pasqua, R., Betts, G., Hoskins, N., Edwards, M., **Ercolini D.**, and Mauriello, G. (2007). Membrane toxicity of natural antimicrobial compounds from essential oils. *Journal of Agriculture and Food Chemistry* 55: 4863-4870.
33. Di Maro, E., **Ercolini, D.**, and Coppola, S. (2007). Yeast dynamics during spontaneous wine fermentation of the Catalanesca grape. *International Journal of Food Microbiology* 117:201-210.
34. Villani, F., Casaburi, A., Pennacchia, C., Filosa, L., Russo, F., and **Ercolini, D.** (2007) Study of the microbial ecology of the "Soppressata of Vallo di Diano", a traditional dry fermented sausage from Southern Italy, and *in vitro* and *in situ* selection of autochthonous starter cultures. *Applied and Environmental Microbiology* 73:5453-5463.

35. Casaburi, A., Di Monaco, R., Cavella, S., Toldrá, F., **Ercolini, D.**, and Villani, F. (2008) Proteolytic and lipolytic starter cultures and their effect on traditional fermented sausages ripening and sensory traits. *Food Microbiology* 25:335-347.
36. Blaiotta, G., Fusco, V., **Ercolini, D.**, Aponte, M., Pepe, O. and Villani, F. (2008). *Lactobacillus* strain diversity based on partial *hsp60* gene sequences and design of PCR-restriction fragment length polymorphism assays for species identification and differentiation. *Applied and Environmental Microbiology* 74:208-215.
37. La Storia, A., **Ercolini, D.**, Marinello, F. and Mauriello, G. (2008) Characterization of bacteriocin activated antimicrobial polyethylene films by Atomic Force Microscopy. *Journal of Food Science* 73:T48-T54.
38. **Ercolini, D.**, Frisso, G., Mauriello, G., Salvatore F. and Coppola, S. (2008) Microbial diversity in Natural Whey Cultures for the production of Caciocavallo Silano PDO cheese. *International Journal of Food Microbiology* 124:164-170.
39. **Ercolini, D.**, Russo, F., Nasi, A., Ferranti, P., and Villani, F. (2009) Mesophilic and psychrotrophic bacteria from meat and their spoilage potential *in vitro* and in beef. *Applied and Environmental Microbiology* 75:1990-2001.
40. **Ercolini, D.**, Russo, F., Ferrocino, I., and Villani, F. (2009) Molecular identification of mesophilic and psychrotrophic bacteria from raw cow's milk. *Food Microbiology* 26:228-231.
41. Siragusa, S., Di Cagno, R., **Ercolini, D.**, Minervini, F., Gobbetti, M., and De Angelis, M. (2009) Taxonomic structure and monitoring of the dominant lactic acid bacteria population in wheat flour type I sourdough propagation by using *Lactobacillus sanfranciscensis* starters. *Applied and Environmental Microbiology* 75:1099-1109.
42. Pennacchia, C., **Ercolini, D.**, and Villani, F. (2009) Development of a specific Real-Time PCR assay for the detection of *Brochothrix thermosphacta* in fresh and spoiled raw meat. *International Journal of Food Microbiology* 134:230-236.

43. Ferrocino, I., **Ercolini, D.**, Villani, F., Moorhead, S.M., and Griffiths, M.W. (2009) *Pseudomonas fragi* strains isolated from meat do not produce N-acyl homoserine lactones as signal molecules. *Journal of Food Protection* 72:2597-2601.
44. **Ercolini, D.**, Ferrocino, I., La Storia, A., Mauriello, G., Gigli, S., Masi, P. and Villani, F. (2010) Development of spoilage microbiota in beef stored in nisin-activated packaging. *Food Microbiology* 27:137-143.
45. Martinez Viedma, P., **Ercolini, D.**, Ferrocino, I., Abriouel, H., Ben Omar, N., Lucas López, R., and Gálvez, A. (2010) Effect of polythene film activated with enterocin EJ97 in combination with EDTA against *Bacillus coagulans*. *LWT - Food Science and Technology* 43:514-518.
46. Capparelli, R., Nocerino, N., Iannaccone, M., **Ercolini, D.**, Parlato, M., Medaglia, C. and Iannelli D. (2010) Phage therapy of *Salmonella enterica*: a fresh appraisal of phage therapy. *Journal of Infectious Diseases* 201:52-61.
47. Di Pasqua, R., Mamone, G., Ferranti, P., **Ercolini, D.** and Mauriello G. (2010) Changes in the proteome of *Salmonella enterica* serovar Thompson as stress adaptation to sublethal concentrations of thymol. *Proteomics* 10:1040-1046.
48. Blaiotta, G., Fusco, V., **Ercolini, D.**, Pepe, O. and Coppola, S. (2010) Diversity of *Staphylococcus* spp. strains based on partial *kat* (catalase) gene sequences and design of a PCR-RFLP assay for identification and differentiation of coagulase-positive species (*S.aureus*, *S. delphini*, *S. hyicus*, *S. intermedius*, *S. pseudintermedius*, and *S. schleiferi* subsp. *coagulans*). *Journal of Clinical Microbiology* 48:192-201.
49. Zinno, P., Janzen, T., Bennedsen, M., **Ercolini, D.** and Mauriello, G. (2010) Characterization of *Streptococcus thermophilus* lytic bacteriophages from Mozzarella cheese plants. *International Journal of Food Microbiology*. 138:137-144.
50. Lo Piccolo, S., Ferraro, V., Alfonzo, A., Settanni, L., **Ercolini, D.**, Burruano, S., and Moschetti, G. (2010) Presence of endophytic bacteria in *Vitis vinifera* leaves as detected by Fluorescence *in situ* hybridization. *Annals of Microbiology* 60:161-167.

51. **Ercolini, D.**, Casaburi, A., Nasi, A., Ferrocino, I., Di Monaco, R., Ferranti, P., Mauriello, G. and Villani, F. (2010) Different molecular types of *Pseudomonas fragi* have the same overall behaviour as meat spoilers. *International Journal of Food Microbiology* 142:120-131.
52. Pennacchia, C., **Ercolini, D.**, and Villani, F. (2011) Spoilage-related microbiota associated with chilled beef stored in air or vacuum pack. *Food Microbiology* 28:84-93.
53. La Storia, A., **Ercolini, D.**, Marinello, F., Di Pasqua, R., Villani, F. and Mauriello, G. (2011). Atomic force microscopy analysis shows surface structure changes in carvacrol-treated bacterial cells *Research in Microbiology*. 162:164-172.
54. Casaburi, A., Nasi, A., Ferrocino, I., Di Monaco, R., Mauriello, G., Villani, F. and **Ercolini, D.** (2011) Spoilage-related activity of *Carnobacterium maltaromaticum* strains in air-stored and vacuum-packed meat. *Applied and Environmental Microbiology* 77:7382-7393.
55. **Ercolini, D.**, Ferrocino, I., Nasi, A., Ndagijimana, M., Vernocchi, P., La Storia, A., Laghi, L., Mauriello, G., Guerzoni, M.E. and Villani, F. (2011) Monitoring of microbial metabolites and bacterial diversity in beef stored in different packaging conditions. *Applied and Environmental Microbiology* 77:7372-7381.
56. Doulgeraki, A.I., **Ercolini, D.**, Villani, F. and Nychas, G.J. (2012) Spoilage microbiota associated to the storage of raw meat in different conditions. *International Journal of Food Microbiology* 157:130-141.
57. La Storia, A., Ferrocino, I., Torrieri, E., Di Monaco, R., Mauriello, G., Villani, F. and **Ercolini, D.** (2012) A combination of modified atmosphere and antimicrobial packaging to extend the shelf-life of beefsteaks stored at chill temperature. *International Journal of Food Microbiology* 158:186-194.
58. **Ercolini, D.**, De Filippis, F., La Storia, A. and Iacono, M. (2012) "Remake" by high throughput sequencing of the microbiota involved in the production of water buffalo mozzarella cheese. *Applied and Environmental Microbiology* 78:8142-8145.

59. La Storia, A., Mauriello, G., Villani, F. and **Ercolini, D.** (2013) Coating-activation and antimicrobial efficacy of different polyethylene films with a nisin-based solution. *Food and Bioprocess Technology* 6:2770-2779.
60. Ferrocino, I., La Storia, A., Torrieri, E., Spagna Musso, S., Mauriello, G., Villani, F. and **Ercolini, D.** (2013) Antimicrobial Packaging To Retard the Growth of Spoilage Bacteria and To Reduce the Release of Volatile Metabolites in Meat Stored under Vacuum at 1°C. *Journal of Food Protection* 76:52-58.
61. Borriello, G., Lucibelli, M.G., Pesciaroli, G., Carullo, M.R., Graziani, C., Ammendola, S., Battistoni, A., **Ercolini, D.**, Pasquali, P. and Galiero, G. (2012) Diversity of *Salmonella* Typhimurium strains isolated from intestine of water buffalo calves affected by lethal gastroenteritis. *BMC Veterinary Research* 8:201.
62. Borriello, G., Peletto, S. Lucibelli, M.G., Acutis, P.L., **Ercolini, D.**, Galiero, G. (2013) Link between geographical origin and occurrence of *Brucella abortus* biovars in cattle and water buffalo herds *Applied and Environmental Microbiology* 79:1039-1043.
63. Giaouris, E., Samoilis, G., Chorianopoulos, N., **Ercolini, D.**, Nychas, G.J. (2013) Differential protein expression patterns between planktonic and biofilm cells of *Salmonella enterica* serovar Enteritidis PT4 on stainless steel surface. *International Journal of Food Microbiology* 162:105-113.
64. **Ercolini, D.** (2013) High-throughput sequencing and metagenomics: moving forward in the culture-independent analysis of food microbial ecology. *Applied and Environmental Microbiology* 79:3148-3155.
65. Di Pasqua, R., Mamone, G., Mauriello, G., **Ercolini, D.** (2013) Expression of DnaK, HtpG, GroEL and Tf chaperones and the corresponding encoding genes during growth of *Salmonella* Thompson in presence of thymol alone or in combination with salt and cold stress. *Food Research International* 52:153-159.
66. De Filippis, F., Pennacchia, C., Di Pasqua, R., Fiore, A., Fogliano, V., Villani, F., **Ercolini, D.** (2013) Decarboxylase gene expression and cadaverine and putrescine production by *Serratia proteamaculans* *in vitro* and in beef. *International Journal of Food Microbiology* 165: 332-338.

67. Cocolin, L., Alessandria, V., Botta, C., Gorra, R., De Filippis, F., **Ercolini, D.**, Rantsiou, K. (2013) NaOH-debittering induces changes in bacterial ecology during table olives fermentation. PLoS ONE. 8:e69074.
68. De Filippis, F., La Storia, A., Villani, F. and **Ercolini, D.** (2013) Exploring the sources of beefsteaks contamination by culture-independent high-throughput sequencing. PLoS ONE. 8:e70222.
69. **Ercolini, D.**, Pontonio, E., De Filippis, F., Minervini, F., La Storia A., Gobbetti, M. and Di Cagno R. (2013) Microbial ecology dynamics during rye and wheat sourdough preparation. *Applied and Environmental Microbiology* 79:7827-7836.
70. Piombino, P., Genevose, A., Esposito, S., Moio, L., Cutolo, P.P., Chambery, A., Severino, V., Moneta, E., Smith, D.P., Owens, S.M., Gilbert, J.A. and **Ercolini, D.** (2014) Saliva from obese individuals suppresses the release of aroma compounds from wine. PLoS ONE 9: e85611.
71. De Filippis, F., La Storia, A., Stellato, G., Gatti, M. and **Ercolini, D.** (2014) A selected core microbiome drives the early stages of three popular Italian cheese manufactures. PLoS ONE 9: e89680.
72. Cruciata, M., Sannino, C., **Ercolini, D.**, Scatassa, M.L., De Filippis, F., Mancuso, I., La Storia, A., Moschetti, G. and Settanni, L. (2014) Animal rennets as sources of dairy lactic acid bacteria. *Applied and Environmental Microbiology* 80: 2050-2061.
73. Casaburi, A., De Filippis, F., Villani, F. and **Ercolini, D.** (2014) Activities of strains of *Brochothrix thermosphacta* in vitro and in meat. *Food Research International* 62:366-374.
74. Dolci, P., De Filippis, F., La Storia, A., **Ercolini, D.**, Cocolin ,L. (2014) rRNA-based monitoring of the microbiota involved in Fontina PDO cheese production in relation to different stages of cow lactation. *International Journal of Food Microbiology* 185:127-135.
75. De Pasquale, I., Calasso, M., Mancini, L., **Ercolini, D.**, La Storia, A., De Angelis, M., Di Cagno, R. and Gobbetti M. (2014) Causal Relationship between Microbial Ecology Dynamics and Proteolysis during Manufacture and Ripening of Protected Designation of Origin (PDO) Cheese Canestrato Pugliese. *Applied and Environmental Microbiology* 80:4085-4094.

76. Francavilla, R., **Ercolini, D.**, Piccolo, M., Vannini, L., Siragusa, S., De Filippis, F., De Pasquale, I., Di Cagno, R., Di Toma, M., Gozzi, G., Serrazanetti, D.I., De Angelis, M. and Gobbetti, M. (2014) Salivary microbiota and metabolome associated with celiac disease. *Applied and Environmental Microbiology* 80:3416-25.
77. De Filippis, F., Vannini, L., La Storia, A., Laghi, L., Piombino, P., Stellato, G., Serrazanetti, D.I., Gozzi, G., Turroni, S., Ferrocino, I., Lazzi, C., Di Cagno, R., Gobbetti, M. and **Ercolini, D.** (2014) The same microbiota and a potentially discriminant metabolome in the saliva of omnivore, ovo-lacto-vegetarian and vegan individuals. *PLoS ONE* 9(11): e112373.
78. Zinno, P., Devirgiliis, C., **Ercolini, D.**, Ongeng, D. and Mauriello, G. (2014) Bacteriophage P22 to challenge *Salmonella* in foods. *International Journal of Food Microbiology* 191:69-74.
79. Casaburi, A., Piombino, P., Nychas, G.J., Villani, F. and **Ercolini, D.** (2015) Bacterial populations and the volatileome associated to meat spoilage. *Food Microbiology* 45:83-102.
80. Casaburi, A., Di Martino, V., **Ercolini, D.**, Parente, E., and Villani, F. (2015) Antimicrobial activity of *Myrtus communis* L. water-ethanol extract against meat spoilage strains of *Brochothrix thermosphacta* and *Pseudomonas fragi* in vitro and in meat. *Annals of Microbiology* 65:841-850.
81. Stellato, G., La Storia, A., Cirillo, T. and **Ercolini, D.** (2015) Bacterial biogeographical patterns in a cooking center for a hospital foodservice. *International Journal of Food Microbiology* 193:99-108.
82. Vitaglione, P., Mennella, I., Ferracane, R., Rivellese, A.A., Giacco, R., **Ercolini, D.**, Gibbons, S.R., La Storia, A., Gilbert, G.A., Jonnalagadda, S., Thielecke, F., Gallo, M.A., Scalfi, L. and Fogliano, V. (2015) Wholegrain wheat consumption reduces inflammation in a randomized controlled trial on overweight and obese subjects with unhealthy dietary and lifestyle behaviors: role of polyphenols bound to cereal dietary fiber. *American Journal of Clinical Nutrition* 101:251-261.
83. Ventorino, V., Aliberti, A., Faraco, V., Robertiello, A., Giacobbe, S., **Ercolini, D.**, Amore, A., Fagnano, M. and Pepe, O. (2015) Exploring the microbiota dynamics related to vegetable biomasses degradation and study of

- lignocellulose-degrading bacteria for industrial biotechnological application. *Scientific Reports* 5:8161.
84. Cocolin, L. and **Ercolini, D.** (2015) Zooming into food-associated microbial consortia: a 'cultural' evolution. *Current Opinion in Food Science* 2:43–50.
85. Garofalo, D., Osimani, A., Milanovic, V., Aquilanti, L., De Filippis, F., Stellato, G., Di Mauro, S., Turchetti, B., Buzzini, P., **Ercolini, D.** and Clementi, F. (2015) Bacteria and yeast microbiota in milk kefir grains from different Italian regions. *Food Microbiology* 49:123-133.
86. Rizzello, C. G., Cavoski, I., Turk, J., **Ercolini, D.**, Nionelli, L., Pontonio, E., De Angelis, M., De Filippis, F., Gobbetti, M. and Di Cagno, R. (2015) Organic cultivation of *Triticum turgidum* subsp. *durum* is reflected in the flour-sourdough fermentation-bread axis. *Applied and Environmental Microbiology* 81:3192-3204.
87. Pothakos, V., Stellato, G., **Ercolini, D.** and Devlieghere, F. (2015) Processing environment and ingredients are both sources of *Leuconostoc gelidum*, which emerges as a major spoiler in ready-to-eat meals. *Applied and Environmental Microbiology* 81:3529-3541.
88. Pothakos, V., Devlieghere, F., Villani, F., Bjorkroth, J. and **Ercolini, D.** (2015) Lactic acid bacteria and their controversial role in fresh meat spoilage. *Meat Science* 109:66-74.
89. Stellato, G., De Filippis, F., La Storia, A. and **Ercolini D.** (2015) Coexistence of lactic acid bacteria and potential spoilage microbiota in a dairy processing environment. *Applied and Environmental Microbiology* 81:3529-3541.
90. Greppi, A., Ferrocino, I., La Storia, A., Rantsiou, K., **Ercolini, D.** and Cocolin L. (2015) Monitoring of the microbiota of fermented sausages by culture independent rRNA-based approaches. *International Journal of Food Microbiology* 212:67-75.
91. **Ercolini, D.**, Francavilla, R., Vannini, L., De Filippis, F., Capriati, T., Di Cagno, R., Iacono, G., De Angelis, M. and Gobbetti, M. (2015) From an imbalance to a new imbalance: Italian-style gluten-free diet alters the salivary microbiota and metabolome of African celiac children. *Scientific Reports* 5:18571.

92. Ferrocino, I., Greppi, A., La Storia, A., Rantsiou, K., **Ercolini, D.** and Cocolin L. (2015) Impact of nisin-activated packaging on microbiota of beef burgers during storage. *Applied and Environmental Microbiology* 82:549-559.
93. Alessandria, V., Ferrocino, I., De Filippis, F., Fontana, M., Rantsiou, K., **Ercolini, D.** and Cocolin, L. (2016) Microbiota of an Italian Grana-like cheese during manufacture and ripening, unraveled by 16S rRNA-based approaches. *Applied and Environmental Microbiology* 82:3988-3995.
94. Guidone, A., Zotta, T., Matera, A., Ricciardi, A., De Filippis, F., **Ercolini, D.** and Parente, E. (2016) The microbiota of high-moisture mozzarella cheese produced with different acidification methods. *International Journal of Food Microbiology* 216:9-17.
95. Ricciardi, A., De Filippis, F., Zotta, T., Facchiano, A., **Ercolini, D.** and Parente, E. (2016) Polymorphism of the phosphoserine phosphatase gene in *Streptococcus thermophilus* and its potential use for typing and monitoring of population diversity. *International Journal of Food Microbiology* 236: 138-147.
96. Toledo Del Árbol, J., Pérez Pulido, R., La Storia, A., Grande Burgos, M.J., Lucas, R., **Ercolini, D.** and Gálvez, A. (2016) Changes in microbial diversity of brined green asparagus upon treatment with high hydrostatic pressure. *International Journal of Food Microbiology* 216:1-8.
97. Toledo Del Árbol, J., Pérez Pulido, R., La Storia, A., Grande Burgos, M.J., Lucas, R., **Ercolini, D.** and Gálvez, A. (2016) Microbial diversity in pitted sweet cherries (*Prunus avium* L.) as affected by High-Hydrostatic Pressure treatment. *Food Research International* 89:790-796.
98. Parente, E., Cocolin, L., De Filippis, F., Zotta, T., Ferrocino, I., O'Sullivan, O., Neviani, E., De Angelis, M., Cotter P.D. and **Ercolini, D.** (2016) FoodMicrobionet: a database for the visualization and exploration of food bacterial communities based on network analysis. *International Journal of Food Microbiology* 219:28-37.
99. Calasso, M., **Ercolini, D.**, Mancini, L., Stellato, G., Minervini, F., Di Cagno, R., De Angelis, M. and Gobbetti, M. (2016) Relationships among house, rind

and core microbiotas during manufacture of traditional Italian cheeses at the same dairy plant. *Food Microbiology* 54:115-126.

100. Bonanomi, G., De Filippis, F., Cesarano, G., La Storia, A., **Ercolini, D.**, and Scala, F. (2016) Organic farming induces changes in soil microbiota that affect agro-ecosystem functions. *Soil Biology and Biochemistry* 103:327-336.
101. Caccia, S., Di Lelio, I., La Storia, A., Marinelli, A., Varricchio, P., Franzetti, E., Banyuls, N., Tettamanti, G., Casartelli, M., Giordana, B., Ferré, J., Gigliotti, S., Ercolini, D. and Pennacchio, F. (2016) Midgut microbiota and host immunocompetence underlie *Bacillus thuringiensis* killing mechanism. *Proc Natl Acad Sci USA*. 113:9486-91.
102. Stellato, G., La Storia, A., De Filippis, F., Borriello, G., Villani, F. and Ercolini, D. (2016) Overlap of Spoilage-Associated Microbiota between Meat and the Meat Processing Environment in Small-Scale and Large-Scale Retail Distributions. *Applied and Environmental Microbiology* 82:4045-54.
103. De Angelis, M., Vannini, L., Di Cagno, R., Cavallo, N., Minervini, F., Francavilla, R., **Ercolini, D.**, and Gobbetti, M. (2016) Salivary and fecal microbiota and metabolome of celiac children under gluten-free diet. *International Journal of Food Microbiology* 239:125-132.
104. De Filippis, F., Genovese, A., Ferranti, P., Gilbert, J.A. and Ercolini, D. (2016) Metatranscriptomics reveals temperature-driven functional changes in microbiome impacting cheese maturation rate. *Scientific Reports* 6:21871.
105. De Filippis, F., Pellegrini, N., Vannini, L., Jeffery, I., Laghi, L., La Storia, A., Serrazanetti, D.I., Gozzi, G., Turroni, S., Ferrocino, I., Lazzi, C., Di Cagno, R., Cocolin, L., Neviani, E., Brigidi, P., Gobbetti, M., O'Toole, P.W. and **Ercolini, D.** (2016) High-level adherence to a Mediterranean diet beneficially impacts gut microbiota and associated metabolome. *Gut* 65:1812-1821.
106. De Filippis, F., Pellegrini, N., Laghi, L., Gobbetti, M. and **Ercolini, D.** (2016) Unusual sub-genus association of *Prevotella* and *Bacteroides* with specific dietary patterns. *Microbiome* 4:57.

107. Levante, A., De Filippis, F., La Storia, A., Gatti, M., Neviani, E., **Ercolini, D.** and Lazzi, C. (2017) Metabolic gene-targeted monitoring of non-starter lactic acid bacteria during cheese ripening. *International Journal of Food Microbiology* 257:276-284.
108. Giello, M., La Storia, A., Masucci, F., Di Francia, A., **Ercolini, D.**, and Villani, F. (2017) Dynamics of bacterial communities during manufacture and ripening of traditional Caciocavallo of Castelfranco cheese in relation to cows' feeding. *Food Microbiology* 63:170-177.
109. Stellato, G., Utter, D.R., Voorhis, A., De Angelis, M., Murat, E.A., and **Ercolini, D.** (2017) A few Pseudomonas oligotypes dominate in the meat and dairy processing environment. *Frontiers in Microbiology* 8:264.
110. **Ercolini, D.** (2017) Exciting strain-level resolution studies of the food microbiome. *Microbial Biotechnology* 10:54-56.
111. De Filippis, F., Parente, E., and **Ercolini, D.** (2017) Metagenomics insights into food fermentations. *Microbial Biotechnology* 10:91-102.
112. De Filippis, F., Laiola, M., Blaiotta, G., and **Ercolini, D.** (2017) Different amplicon targets for sequencing-based studies of fungal diversity. *Applied and Environmental Microbiology* 83: pii: e0095-17.
113. Aitoro, R., Paparo, L., Amoroso, A., Di Costanzo, M., Cosenza, L., Granata, V., Di Scala, C., Nocerino, R., Trinchese, G., Montella, M., **Ercolini, D.** and Berni Canani R. (2017) Gut microbiota as a target for preventive and therapeutic intervention against food allergy. *Nutrients* 9(7). pii: E672.
114. Berni Canani, R., De Filippis, F., Nocerino, R., Laiola, M., Paparo, L., Calignano, A., De Caro, C., Coretti, L., Chiariotti, L., Gilbert, J.A. and **Ercolini, D.** (2017) Specific signatures of the gut microbiota and increased levels of butyrate in children treated with fermented cow's milk containing heat-killed *Lactobacillus paracasei* CBA L74. *Applied and Environmental Microbiology* 83: pii: e01206-17.
115. Guida, F., Turco, F., Iannotta, M., De Gregorio, D., Palumbo, I., Sarnelli, G., Furiano, A., Napolitano, F., Boccella, S., Luongo, L., Mazzitelli, M., Usiello, A., De Filippis, F., Iannotti, F.A., Piscitelli, F., **Ercolini, D.**, de Novellis, V., Di Marzo, V., Cuomo, R. and Maione S. (2018). Antibiotic-induced microbiota perturbation causes gut endocannabinoidome

- changes, hippocampal neuroglial reorganization and depression in mice. *Brain, Behaviour and Immunity* pii: S0889-1591(17)30417-8.
116. De Filippis, F., Parente, E., and **Ercolini, D.** (2018) Past, present and future of the food microbiome. *Annual Review of Food Science and Technology*. 9: 589-608.
117. Quijada, N.A., De Filippis, F., Sanz, J.J., Garcia-Fernandez, M.C., Rodriguez-Lazaro, D., **Ercolini, D.** and Hernandez M. (2018) Different Lactobacillus populations dominate in "Chorizo de León" manufacturing performed in different production plants. *Food Microbiology* 70:94-102.
118. De Filippis, F., Parente, E., Zotta, T. and **Ercolini, D.** (2018) A comparison of bioinformatic approaches for 16S rRNA gene profiling of food bacterial microbiota. *International Journal of Food Microbiology* 265:9-17.
119. De Filippis, F., Troise, A.D., Vitaglione, P. and **Ercolini, D.** (2018) Different temperatures select distinctive acetic acid bacteria species and promotes organic acids production during Kombucha tea fermentation. *Food Microbiology* 73:11-16.
120. Giello, M., La Storia, A., De Filippis, F., **Ercolini, D.**, and Villani, F. (2018) Impact of Lactobacillus curvatus 54M16 on microbiota composition and growth of Listeria monocytogenes in fermented sausages. *Food Microbiology* 72:1-15.
121. Vernocchi, P., Del Chierico, F., Quagliariello, A., **Ercolini, D.**, Lucidi, V. and Putignani, L. (2018) A metagenomic and in silico functional prediction of gut microbiota profiles may concur in discovering new cystic fibrosis patient-targeted probiotics. *Nutrients* 9:1342.
122. Milanović, V., Osimani, A., Garofalo, C., De Filippis, F., **Ercolini, D.**, Cardinali, F., Taccari, M., Aquilanti, L., Clementi, F. 2018. Profiling white wine seed vinegar bacterial diversity through viable counting, metagenomic sequencing and PCR-DGGE. *International Journal of Food Microbiology* 286:66-74.
123. Osimani, A., Milanović, A., Garofalo, C., Cardinali, F., Roncolini, A., Sabbatini, R., De Filippis, F., **Ercolini, D.**, Gabucci, C., Petruzzelli, A., Tonucci, F., Clementi, F., Aquilanti, L. 2018. Revealing the microbiota of

- marketed edible insects through PCR-DGGE, metagenomic sequencing and real-time PCR. *International Journal of Food Microbiology* 276:54-62.
124. Polese, B., Nicolai, E., Genovese, D., Verlezza, V., La Sala, C.N., Aiello, M., Inglese, M., Incoronato, M., Sarnelli, G., De Rosa, T., Schiatti, A., Mondelli, F., **Ercolini, D.**, and Cuomo, R. (2018) Postprandial Gastrointestinal Function Differs after Acute Administration of Sourdough Compared with Brewer's Yeast Bakery Products in Healthy Adults. *Journal of Nutrition* 148:202-208.
125. Parente, E., Zotta, T., Faust, K., De Filippis, F. and **Ercolini, D.** (2018) Structure of association networks in food bacterial communities. *Food Microbiology* 73:49-60.
126. **Ercolini, D.**, and Fogliano, V. (2018) Food design to feed the human gut microbiota. *Journal of Agricultural and Food Chemistry* 66:3754-3758.
127. De Filippis, F., Vitaglione, P., Cuomo, R., Berni Canani, R., and **Ercolini, D.** (2018) Dietary interventions to modulate the gut microbiome – how far are we from precision medicine. *Inflammatory Bowel Diseases* 24: 2142-2154.
128. Berni Canani, R., De Filippis, F., Nocerino, R., Paparo, L., Di Scala, C., Cosenza, L., Della Gatta, G., Calignano, A., De Caro, C., Laiola, M., Gilbert, J.A. and **Ercolini D.** (2018) Gut microbiota composition and butyrate production in children affected by non-IgE-mediated cow's milk allergy. *Scientific Reports* 21:12500.
129. Vernocchi, P., Del Chierico, F., Russo, A., Majo, F., Rossitto, M., Valerio, M., Casadei, L., La Storia, A., De Filippis, F., Rizzo, C., Manetti, C., Paci, P., **Ercolini, D.**, Marini, F., Ficarelli, E.V., Dallapiccola, B., Lucidi, V., Miccrheli, A., Putignani, L. 2018. Gut microbiota signatures in cystic fibrosis: Loss of host CFTR function drives the microbiota enterophenotype. *PLoS One* 13(12):e0208171.
130. Berni Canani, R., Paparo, L., Nocerino, R., Di Scala, C., Della Gatta, G., Maddalena, Y., Buono, A., Bruno, C., Voto, L. and **Ercolini D.** (2019) Gut Microbiome as target for innovative strategies against food allergy. *Frontiers in Immunology* 10: 191.

131. De Filippis, F., Aponte, M., Piombino, P., Lisanti, M.T., Moio, L., **Ercolini, D.**, Blaiotta, G. (2019) Influence of microbial communities on the chemical and sensory features of Falanghina sweet passito wines. *Food Research International* 120:740-747.
132. Kamimura, B.A., De Filippis, F., Sant'Ana, A.S., **Ercolini, D.** (2019) Large-scale mapping of microbial diversity in artisanal Brazilian cheeses. *Food Microbiology* 80:40-49.
133. Bruno, D., Bonelli, M., De Filippis, F., Di Lelio, I., Tettamanti, G., Casartelli, M., **Ercolini, D.**, Caccia, S. (2019) The Intestinal Microbiota of *Hermetia illucens* Larvae Is Affected by Diet and Shows a Diverse Composition in the Different Midgut Regions. *Applied and Environmental Microbiology* 85:e01864-18.
134. Pavlidis, D.E., Mallouchos, A., **Ercolini, D.**, Panagou, E.Z. and Nychas, G. E. (2019) A volatileomics approach for off-line discrimination of minced beef and pork meat and their admixture using HS-SPME GC/MS in tandem with multivariate data analysis. *Meat Science* 151:43-53.
135. Bautista-Gallego, J., Ferrocino, I., Botta, C., **Ercolini, D.**, Cocolin, L., Rantsiou, K. (2019) Probiotic potential of a *Lactobacillus rhamnosus* cheese isolate and its effect on the fecal microbiota of healthy volunteers. *Food Research International* 119:305-314.
136. De Filippis, F., La Storia, A., Villani, F., **Ercolini, D.** (2019) Strain-level diversity analysis of *Pseudomonas fragi* after *in situ* pangenome reconstruction shows distinctive spoilage-associated metabolic traits clearly selected by different storage conditions. *Applied and Environmental Microbiology* 85:e02212-18.
137. Parente, E., De Filippis, F., **Ercolini, D.**, Ricciardi A. and Zotta, T. (2019) Advancing integration of data on food microbiome studies: FoodMicrobionet 3.1, a major upgrade of the FoodMicrobionet database. *International Journal of Food Microbiology* 305:108249.
138. Vitaglione, P., Mazzone, G., Lembo, V., D'Argenio, G., Rossi, A., Guido, M., Savoia, M., Salomone, F., Mennella, I., De Filippis, F., **Ercolini, D.**, Caporaso, N. and Morisco, F. (2019) Coffee prevents fatty liver disease

- induced by a high-fat diet by modulating pathways of the gut-liver axis. *Journal of Nutritional Sciences* 8:e15.
139. Guida, F., Boccella, S., Belardo, C., Iannotta, M., Piscitelli, F., De Filippis, F., Paino, S., Ricciardi, F., Siniscalco, D., Marabese, I., Luongo, L., **Ercolini, D.**, Di Marzo, V., and Maione S. (2019) Altered gut microbiota and endocannabinoid system tone in vitamin D deficiency-mediated chronic pain. *Brain, Behaviour and Immunity* pii: S0889-1591(18)31247-9.
140. De Filippis, F., Pasolli, E., Tett, A., Tarallo, S., Naccarati, A., De Angelis, M., Neviani, E., Cocolin, L., Gobbetti, M., Segata, N. and **Ercolini, D.** (2019) Distinct genetic and functional traits of human intestinal *Prevotella copri* strains are associated with different habitual diets. *Cell Host & Microbe* 25:444-453.
141. Tett, A., Huang, K.D., Asnicar, F., Fehlner-Peach, H., Pasolli, E., Karcher, N., Armanini, F., Manghi, P., Bonham, K., Zolfo, M., De Filippis, F., Magnabosco, C., Bonneau, R., Lusingu, J., Amuasi, J., Reinhard, K., Rattei, T., Boulund, F., Engstrand, L., Zink, A., Collado, M.C., Littman, D.R., Eibach D., **Ercolini, D.**, Rota-Stabelli, O., Huttenhower, C., Maixner, F., and Segata, N. (2019) The Prevotella copri Complex Comprises Four Distinct Clades Underrepresented in Westernized Populations. *Cell Host & Microbe* pii: S1931-3128(19)30427-5.
142. Lombardo, B., Izzo, V., Terracciano, D., Ranieri, A., Mazzaccara, C., Fimiani, F., Cesaro, A., Gentile, L., Leggiero, E., Pero, R., Izzo, B., D'Alicandro, A.C., **Ercolini, D.**, D'Alicandro, G., Frisso, G., Pastore, L., Calabro, P. and Scudiero, O. (2020) Laboratory medicine: health evaluation in elite athletes. *Clinical Chemistry and Laboratory Medicine* 57(10):1450-1473.
143. Nocerino, R., De Filippis, F., Cecere, G., Marino, A., Micillo, M., Di Scala, C., de Caro, C., Calignano, A., Bruno, C., Paparo, L., Iannicelli, A.M., Cosenza, L., Maddalena, Y., della Gatta, G., Coppola, S., Carucci, L., **Ercolini, D.**, Berni Canani, R. (2020) The therapeutic efficacy of *Bifidobacterium animalis* subsp. *lactis* BB-12® in infant colic: A randomised, double blind,

- placebo-controlled trial. *Alimentary Pharmacology and Therapeutics* 51:110-120.
144. Calasso, M., Minervini, F., De Filippis, F., **Ercolini, D.**, De Angelis, M., Gobbetti, M. (2020). Attenuated Lactococcus lactis and Surface Bacteria as Tools for Conditioning the Microbiota and Driving the Ripening of Semisoft Caciotta Cheese. *Applied and Environmental Microbiology*, 86: pii: e02165-19.
145. Bonanomi G., Maisto G., De Marco A., Cesaroni G., Zotti M., Mazzei P., Libralato G., Staropoli A., Siciliano A., De Filippis F., La Storia A., Piccolo A., Vinale F., Crasto A., Guida M., **Ercolini D.**, Incerti G. (2020). The fate of cigarette butts in different environments: Decay rate, chemical changes and ecotoxicity revealed by a 5-years decomposition experiment. *Environmental Pollution*, 261: 114108.
146. De Angelis M., Ferrocino I., Calabrese F. M., De Filippis F., Cavallo N., Siragusa S., Rampelli S., Di Cagno R., Rantsiou K., Vannini L., Pellegrini N., Lazzi C., Turroni S., Lorusso N., Ventura M., Chieppa M., Neviani E., Brigidi P., O'Toole P. W., **Ercolini D.**, Gobbetti M., Cocolin L. (2020). Diet influences the functions of the human intestinal microbiome. *Scientific Reports*, 10:4247.
147. Zotti, M., De Filippis, F., Cesaroni, G., **Ercolini, D.**, Tesei, G., Allegrezza, M., Giannino, F., Mazzoleni, S., Bonanomi G. (2020) One ring to rule them all: an ecosystem engineer fungus fosters plant and microbial diversity in a Mediterranean grassland. *New Phytologist*. doi: 10.1111/nph.16583.
148. Laiola M, De Filippis F, Vitaglione P, **Ercolini D.** (2020) A Mediterranean diet intervention reduces the levels of salivary periodontopathogenic bacteria in overweight and obese subjects. *Applied and Environmental Microbiology*, doi: 10.1128/AEM.00777-20.
149. Milanović, V., Aquilanti, L., Tavoletti, S., Garofalo, C., Osimani, A., De Filippis, F., **Ercolini, D.**, Ferrocino, I., Di Cagno, R., Turroni, S., Lazzi, C., Pellegrini, N., Clementi, F. (2020) Distribution of antibiotic resistance genes in the saliva of healthy omnivores, ovo-lacto-vegetarians, and vegans. *Genes* 11:1-18.

150. De Angelis, M., Ferrocino, I., Calabrese, F.M., De Filippis, F., Cavallo, N., Siragusa, S., Rampelli, S., Di Cagno, R., Rantsiou, K., Vannini, L., Pellegrini, N., Lazzi, C., Turroni, S., Lorusso, N., Ventura, M., Chieppa, M., Neviani, E., Brigidi, P., O'Toole, P.W., **Ercolini, D.**, Gobbetti, M., Cocolin, L. (2020) Diet influences the functions of the human intestinal microbiome. *Scientific Reports* 10:4247.
151. De Filippis, F., Pasolli, E., **Ercolini, D.** (2020) The food-gut axis: lactic acid bacteria and their link to food, the gut microbiome and human health. *FEMS Microbiology Reviews* 44:454-489.
152. Vitale, M., Giacco, R., Laiola, M., Della Pepa, G., Luongo, D., Mangione, A., Salamone, D., Vitaglione, P., **Ercolini, D.**, Rivellesse, A.A. (2020) Acute and chronic improvement in postprandial glucose metabolism by a diet resembling the traditional Mediterranean dietary pattern: Can SCFAs play a role? *Clinical Nutrition* DOI: 10.1016/j.clnu.2020.05.025.
153. Meslier, V., Laiola, M., Roager, H.M., De Filippis, F., Roume, H., Quinquis, B., Giacco, R., Mennella, I., Ferracane, R., Pons, N., Pasolli, E., Rivellesse, A.A., Dragsted, L.O., Vitaglione, P., Ehrlich, D.S., **Ercolini, D.** (2020). Mediterranean diet intervention in overweight and obese subjects lowers plasma cholesterol and causes changes in the gut microbiome and metabolome independently of energy intake. *Gut* 69:1258-1268.
154. Pasolli, E., De Filippis, F., Mauriello, I.E., Cumbo, F., Walsh, A.M., Leech, J., Cotter, P.D., Segata, N., **Ercolini, D.** Large-scale genome-wide analysis links lactic acid bacteria from food with the gut microbiome. *Nature Communications* 11:2610.
155. **Ercolini, D.** Secrets of the cheese Microbiome (2020) *Nature Food* 1: 466–467.

Book Editor

Cocolin, L. and **Ercolini, D.** (Editors) (2008) Molecular Techniques in the Microbial Ecology of Fermented Foods. Springer, New York. ISBN: 978-0-387-74519-0.

Book Chapters

1. Coppola, S., Blaiotta, G. and **Ercolini, D.** (2008) Dairy products. In: Cocolin, L. and Ercolini, D. (Eds), Molecular Techniques in the Microbial Ecology of Fermented Foods. Springer, New York. ISBN: 978-0-387-74519-0. pp. 31-90.
2. 44. Bottari, B., **Ercolini, D.**, Gatti, M. and Neviani, E. (2006) FISH in food microbiology. In: Liehr, T. (Ed), Fluorescence In Situ Hybridization (FISH) - Application Guide. Springer, Berlin. ISBN: 978-3-540-70580-2. pp. 395-408.
3. **Ercolini, D.** and Coppola, S. (2011) Cheese | Use of Microbial DNA Fingerprinting, In: Editor-in-Chief: John W. Fuquay, Editor(s), Encyclopedia of Dairy Sciences (Second Edition), Academic Press, San Diego, 2011, Pages 632-638, ISBN 9780123744074, 10.1016/B978-0-12-374407-4.00533-1.
4. **Ercolini, D.** (2014) Identification Methods: Introduction. In: Batt, C.A., Tortorello, M.L. (Eds.), Encyclopedia of Food Microbiology, vol 2. Elsevier Ltd, Academic Press, pp. 241-247. ISBN: 9780123847300.
5. **Ercolini, D.** and Cocolin L. (2014) Identification Methods: Culture-independent techniques. In: Batt, C.A., Tortorello, M.L. (Eds.), Encyclopedia of Food Microbiology, vol 2. Elsevier Ltd, Academic Press, pp. 259-266. ISBN: 9780123847300.
6. De Filippis F., and **Ercolini, D.** (2018) Microbiome and Diet. The Gut Microbiome in Health and Disease. D. Haller (Ed) Springer book.