

Curriculum vitae**PERSONAL INFORMATION****De Filippis, Francesca**

H-index 46; Total citations: 6,729; Pubblicazioni: 104 [Scopus, Dec. 2023]. ORCID: 0000-0002-3474-2884 • ResearcherID: K-3816-2016 • Scopus ID: 55457699500 • Personal website: <https://sites.google.com/view/francescadefilippis>

EDUCATION

- 2012-15** PhD in Sciences and Technologies of the Agro-food Productions. University of Naples Federico II, Italy. Thesis: *“The microbiome in dairy products assessed by metagenomics and metatranscriptomics”*. Supervisor prof. D. Ercolini.
- 2009-11** MSc in Food Sciences and Technologies (Final mark: 110/110 cum laude). University of Naples Federico II, Italy. Supervisor prof. D. Ercolini.
- 2006-09** BSc in Food Technologies (Final mark: 110/110 cum laude). University of Naples Federico II, Italy. Supervisor prof. A. Ritieni.

CURRENT POSITIONS

- Since Nov. 2022** Associate Professor of Microbiology (SSD AGR16), Univ. of Naples Federico II, Naples, Italy
- Since March 2018** Affiliated Scientist, Italian Experimental Zooprophyllactic Institute, Portici, Italy

PREVIOUS POSITIONS

- Nov. 2019-Nov. 2022** Tenure-Track Assistant Professor of Microbiology (SSD AGR16), Univ. of Naples Federico II, Naples, Italy
- Jan. 2017-Nov. 2019** Junior Lecturer of Microbiology (SSD AGR16), Univ. of Naples Federico II, Italy
- June 2015-Dec. 2016** Post-Doc Researcher within the EU project DINAMIC. Univ. of Naples Federico II, Italy. Supervisor: Prof. D. Ercolini
- Jan.-Dec 2014** Visiting Researcher. APC Microbiome, University College of Cork, Ireland. Supervisor: Prof. P.W. O'Toole
- May-Dec. 2013** Visiting Researcher. Argonne National Laboratory, USA. Supervisor: prof. J.A. Gilbert

AWARDS AND ACHIEVEMENTS

- From 2020 to 2023** Nominated among the top 2% world's scientists across all fields of year 2019, 2020, 2021, 2022 in the list published by Stanford University (doi:10.1371/journal.pbio.3000918, 10.17632/btchxktzyw.3 & 10.17632/btchxktzyw.4)
- 2020** Nominated among the top 0.1% world experts in Food Microbiology by Expertscape (<https://expertscape.com/ex/food+microbiology>).
- 2020** Best publication on a high-impact journal (IF>8) of 2019, by the Italian Society of Agro-Food Microbiology (SIMTREA) for De Filippis et al. Cell Host Microbe 25:444-53.
- 2019** Best publication on a high-impact journal (IF>8) of 2018, by the Italian Society of Agro-Food Microbiology (SIMTREA) for De Filippis et al. Annu Rev Food Sci Technol 9:589.
- 2016** Best publication award by National Union of the Academies for the Sciences Applied to the Development of Agriculture, to Food Security and to Environmental Protection (UNASA) for De Filippis et al. Sci Rep 6:21871.
- 2013** Best poster award at the 2nd International Conference on Microbial Diversity 2013, by the International Committee on Food Microbiology and Hygiene (ICFMH).
- 2013** Short mobility grant by Campania Region, spent at Argonne Nat. Laboratory, USA.
- 2013-17** Several meeting attendance grants by FEMS (3), SfAM (1), EMBL (1).
- 2012-15** 3-years PhD fellowship granted by Campania Region (POR CAMPANIA FSE).

SUPERVISION OF STUDENTS AND POST-DOCS**Supervision of Post-Doctoral researcher:**

- 2022** Dr Vincenzo Valentino, Post-Doc researcher within the project H2020-DiTECT-“Digital TEchnologies as an enabler for a conTinuuous transformation of food safety system”. Activity: Microbiome mapping along the food chains.

2022 Dr Rosalia Ferracane, Post-Doc researcher within the project MEDFOOD-“Microbiome-tailored food products based on typical Mediterranean diet components”. Activity: Influence of diet on gut microbiome and metabolome.

Supervision of PhD students:

2023 - on-going Supervisor of the PhD student Martina Parziale, PhD in Food Science, Univ. of Naples Federico II, Naples, Italy. Research project: Development of novel pre- and probiotics for skin microbiome modulation. PhD fellowship granted by Arterra Bioscience SpA

2023 - on-going Supervisor of the PhD student Asim-ur-Rahman, PhD in Food Science, Univ. of Naples Federico II, Naples, Italy. Research project: Microbiome mapping along meat chain from farm to fork. PhD fellowship granted by EU-H2020 Marie Skłodowska-Curie project CRESCENDO

2023 - on-going Supervisor of the PhD student Raffaele Magliulo, PhD in Food Science, Univ. of Naples Federico II, Naples, Italy. Research project: Fermented foods microbial biodiversity preservation and characterization using multi-omics approaches. PhD fellowship granted by the project PNRR - CN5: National Biodiversity Future Center

2023 - on-going Supervisor of the PhD student Chiara M. Calvanese, PhD in Food Science, Univ. of Naples Federico II, Naples, Italy. Research project: Genomic characterization of LAB strains for probiotics and postbiotics development. PhD fellowship granted by Probiotal SpA.

2023 - on-going Co-Supervisor of the PhD student Raffaella Ofano, PhD in Food Science, Univ. of Naples Federico II, Naples, Italy. Research project: Multidisciplinary approach for the traceability of geographical origin and the authentication of agri-food products. PhD fellowship granted by the project PNRR - IR: METROFOOD-IT

2022 - on-going Supervisor of the PhD student Alessia Esposito, PhD in Food Science, Univ. of Naples Federico II, Naples, Italy. Research project: Selection of Next-Generation probiotics from the gut microbiome of subjects with different dietary patterns. PhD fellowship granted by Sacco System.

2021- on-going Supervisor of the PhD student Giuseppina Sequino, PhD in Food Science, Univ. of Naples Federico II, Naples, Italy. Research project: Metagenomics and Big Data to improve food safety and quality. PhD fellowship granted by EU-H2020 project DiTECT.

2018-2021 Supervisor of the PhD student Silvia Castellano, PhD in Food Science, Univ. of Naples Federico II, Naples, Italy. Research project: Isolation and genomic characterization of *Campylobacter* spp. in meat products

Supervision of post-graduate students:

2023 Alessandra De Vivo, research fellowship within the project Meta-Olive-“Meta-omic approaches for traditional table olive fermentation”. Activity: Microbiome mapping of fermented olives across different EU countries.

2022 Chiara M. Calvanese, research fellowship within the project FOODMICROHERITAGE-“Quality of Italian and Vietnamese artisanal fermented foods through the characterization and conservation of their microbial and genetic heritage”. Activity: Isolation and characterization of lactic acid bacteria from traditional fermented foods.

2021 Sara Cavaliere, research fellowship within the project FOODMICROHERITAGE-“Quality of Italian and Vietnamese artisanal fermented foods through the characterization and conservation of their microbial and genetic heritage”. Activity: Analysis of fermented food microbiome.

2021 Alessia Esposito, research fellowship within an industrial project granted by Lactalis Recherche et Développement. Activity: Evaluation of gut microbiome in people with gastrointestinal discomfort upon milk ingestion.

2019-2020 Giuseppina Sequino, research fellowship within the project POLLGUT-“Linking environmental pollution and gut microbiota in individuals living in contaminated settlements”. Activity: Influence of environmental pollution on the human gut microbiome.

Supervision of MSc students:

Since 2016 Supervision of > 35 MSc students in Food Science and Technologies and Agro-Food and Environmental Biotechnologies during the preparation of their experimental theses

TEACHING ACTIVITIES

Since AA2016/17 *Biology of Microorganisms*, Univ. of Naples Federico II, Italy. BSc in Food Technology, 6 CFU, 54 hours/year.

Since AA2021/22 *Metagenomics and microbiome studies*, Univ. of Naples Federico II, Italy. MSc in Agri-food Biotechnologies, 8 CFU, 56 hours/year

2023 *Microbial ecology and omics*, Univ. of Naples Federico II, Italy. PhD course in Food Science, 6 CFU, 30 hours

2022 *Metagenomics data analysis*, Industrial University of Ho-Chi-Minh (Vietnam). Course for PhD students and lecturers, 12 hours

2022 *Metagenomics in food microbial ecology*, Univ. of Leon, Spain. Course for PhD students, 10 hours

2019 *Bioinformatic analysis of Whole-Genome Shotgun data*, Univ. of Burgos, Spain. Course for PhD students and lecturers, 12 hours

2016-18 *Bioinformatic analysis of HTS data*, Univ. of Florence, Italy. Course for PhD students, 15 hours

ORGANISATION OF SCIENTIFIC MEETING

2020 Member of the Scientific Committee of the 3rd *International Symposium on Fruit and Vegetable Processing*, Avignon, France (on-line due to COVID-19).

INSTITUTIONAL RESPONSIBILITIES

Since 2022 Member of the COST Action PIMENTO - Promoting Innovation of ferMENTed fOods (CA20128)

Since 2021 Member of the Board of Professors of the PhD School in Food Science, Univ. of Naples Federico II, Italy

Since 2021 Member of the Managing Board of the Task Force on Microbiome Studies, Univ. of Naples Federico II, Italy

Since 2020 Responsible for the University of Naples Federico II of the International Agreement with the Industrial University of Ho Chi Minh City (Vietnam)

Since 2017 Member of the Theses Committee for the BSc in Food Technologies, Univ. of Naples Federico II, Italy

Since 2017 Member of the Public Engagement Committee, Univ. of Naples Federico II, Italy

Since 2017 Faculty member, Dept. Agricultural Sciences, Univ. of Naples Federico II, Italy

Since 2016 Member of the international consortium MetaSUB (*Metagenomics & Metadesign of Subway & Urban Biomes*)

COMMISSIONS OF TRUST AND REVIEWING ACTIVITIES

Since 2023 Reviewer of research grants for the for the European Research Council, ERC Starting Grant 2022

Since 2023 Member of commissions for the procedures to hire Junior Lecturers and Tenure-Track Researchers for the sector "Agri-Food Microbiology" (SSD AGR16) at the Free University of Bolzano, University of Bari Aldo Moro, University of Roma La Sapienza.

Since 2022 Associate Editor of the journal *Frontiers in Microbiology*

Since 2020 Reviewer of research grants for the Swiss National Science Foundation, Switzerland

Since 2019 Reviewer of research grants for the National Science Centre, Poland

Since 2018 Member of PhD final examination committees for Dr P. Fernandez, University of Leon, Spain (2022); Dr J. Rodriguez Lopez, University of Jaen, Spain (2022); Dr A. Zarovska, Univ. of Turin, Italy (2020); J. Mota Gutierrez, Univ. of Turin, Italy (2019); N.M. Quijada, Univ. of Burgos, Spain (2019); G. Bertani, Univ. of Parma, Italy (2018); L. García Sánchez, Univ. of Burgos, Spain (2018)

Since 2017 Associate Editor of *Food Research International* for the section "Microbiome"

Since 2015 Ad-hoc reviewer for several international journals in the field of Microbiome Science

MEMBERSHIP OF SCIENTIFIC SOCIETIES

Since 2017 Member of the Society for Applied Microbiology (SfAM)

Since 2012 Member of the Italian Society for Agro-Food Microbiology (SIMTREA)

MAJOR ON-GOING COLLABORATIONS

Since 2020	Prof. S.M. Dam, Industrial University of Ho Chi Minh City, Vietnam. Microbiome of fermented foods
Since 2019	Prof. G.J. Nychas, Agricultural University of Athens, Greece. Meat-spoiling microbiome
Since 2019	Prof. P.D. Cotter, Teagasc Food Research Centre, Ireland. Food-handling environment microbiome
Since 2018	Prof. N. Segata, Univ. of Trento, Italy. Strain-resolution metagenomics
Since 2018	Prof. J. Rovira Carballido, Univ. of Burgos, Spain. Genomics of food-borne pathogens
Since 2014	Prof. P.W. O'Toole, APC Microbiome Institute, Ireland. Gut microbiome and diet
Since 2013	Prof. J.A. Gilbert, Univ. of Chicago, USA. Food and gut microbiome

RESEARCH GRANTS

2023-25	HOLOGRAM: <i>Exploiting autochthonous microbial resources from traditional Italian fermented foods for gut-brain axis modulation</i> , granted by the Italian Ministry of research (MUR). Role: National coordinator. (€235,000).
2023-25	MetaOlive: <i>Meta-omic approaches for traditional table olive fermentation</i> , granted by the Italian Ministry of research (MUR). Role: Responsible of RU. (€115,000 to UNINA).
2023-28	DOMINO: <i>Harnessing the microbial potential of fermented foods for healthy and sustainable food systems</i> , granted by EU within the Horizon Europe programme. Role: co-leader of RU. (€800,000).
2022-26	National Biodiversity Future Center (NBFC) granted by the National Recovery and Resilience Plan (NRRP), Mission 4 Component 2 Investment 1.4 and funded by the European Union - NextGenerationEU. Responsible of the activity within the Spoke 6: <i>Microbiome characterization and preservation in traditional fermented foods</i> . (€100,000 to the activity).
2022-26	METROFOOD-IT: <i>Strengthening of the Italian RI for Metrology and Open Access Data in support to the Agrifood</i> , granted by the National Recovery and Resilience Plan (NRRP), Mission 4, Component 2, Investment 1.4 and funded by the European Union - NextGenerationEU. Reference person for the microbial ecology laboratory and responsible of the activity: <i>Use of microbiome profiles for food traceability</i> . (€250,000 to the activity).
2022-26	CRESCENDO: <i>Transdisciplinary Doctoral Program in Microbiome Science at the University of Naples Federico II</i> , co-funded by EU within the call H2020 Marie Skłodowska-Curie COFUND. Role: co-PI and supervisor of one PhD project. (€813,600 to co-finance 10 PhD positions on microbiome-related research).
2021-23	FOODMICROHERITAGE: <i>Quality of Italian and Vietnamese artisanal fermented foods through the characterization and conservation of their microbial and genetic heritage</i> , funded by the Italian Ministry of International Cooperation – Bilateral project Italy-Vietnam. Role: PI and Co-coordinator. (€250,000).
2020-23	DiTECT: <i>Digital TEchnologies as an enabler for a conTinuuous transformation of food safety system</i> , funded by EU within the H2020 Programme. Role: co-leader of RU. (€200,500).
2019-23	POLLGUT: <i>Linking environmental pollution and gut microbiota in individuals living in contaminated settlements</i> , funded by the Italian Ministry of Health. Role: PI and National Coordinator. (€338,225).
2019-22	SHEALTHY: <i>Non-thermal physical technologies to preServe HEALTHiness of fresh and minimally processed fruit and vegetables</i> , funded by EU within the H2020 Programme. Role: RU member and task 5.3 leader – Metagenomic-based monitoring of antibiotic resistance genes in fruit and vegetables; PI: Prof. E. Torrieri. (€80,000 to the task).

RESEARCH GRANTS FROM PRIVATE COMPANIES

2023	CAISIAL – Center for Food Industry Innovation. Topic: Study of fresh fish shelf life during distribution. Role: Scientific Coordinator. (€13,000).
2023	Marino srl. Topic: Characterization of Natural Whey Cultures for PDO Buffalo Mozzarella cheese. Role: Scientific Coordinator. (€8,000).
2022-23	Probiotical S.p.A. Topic: Isolation and genomic characterization of probiotic lactobacilli from the vaginal microbiota. Role: Scientific Coordinator. (€18,000).

- 2021-22** Marino srl. Topic: Isolation and characterization of lactic acid bacteria to be used as starters in dairy industry. Role: Scientific Coordinator. (€8,000).
- PARTICIPATION IN NATIONAL AND INTERNATIONAL PROJECTS AS TEAM MEMBER**
- 2019-23** **H2020-MASTER:** *Microbiome Applications for Sustainable food systems through Technologies and EnterPrise* granted by EU within the Horizon2020 Programme.
- 2019-22** **KP-MCB:** *Exploring strain-level diversity in the gut microbiome across different age, geography, dietary habits and lifestyle*, granted by EU within the call HDHL INTIMIC - Knowledge Platform on food, diet, intestinal microbiomics and human health.
- 2019-22** **MEDFOOD:** *Microbiome-tailored food products based on typical Mediterranean diet components*, granted by the Italian Ministry of University and Research (MIUR).
- 2016-19** **DINAMIC:** *Diet-induced Arrangement of the gut Microbiome for improvement of Cardiometabolic health*", granted by the EU within the Joint Transnational Call "Intestinal Microbiomics".
- 2013-16** **Diet4MicroGut:** *Study of human microbiome and metabolome as function of omnivore, vegetarian and vegan diet*, granted by the Italian Ministry of University and Research (MIUR).
- ORAL PRESENTATION AT NATIONAL AND INTERNATIONAL CONFERENCES**
- 2023:** Invited Speaker at the international Workshop "*What do we know about the fermented foods we eat every day?*", organized by the Italian Embassy in Vietnam, Hanoi (Vietnam), 14 November 2023. Presentation: Microbiome of Italian fermented foods: role in flavor development and beneficial health effects.
- 2023:** Invited Speaker at the international conference "*Trends in Microbiome and Digital One Health*", KAUST University, Jeddah (Saudi Arabia), 30 October - 1 November 2023. Presentation: Mapping the microbiome in food industries to improve food safety and quality
- 2023:** Selected oral presentation at the international conference "*4th International World of Microbiome - WOM2023*", Sofia (Bulgaria), 26-28 October 2023. Presentation: Environmental pollution shapes the gut microbiome and drives the enrichment in xenobiotics-degrading activities
- 2023:** Selected oral presentation at the international conference "*7th International Conference on Microbial Diversity - MD2023*", Parma (IT), 26-28 September 2023. Presentation: Environmental pollution drives adaptation in gut microbiome functions of highly exposed individuals
- 2023:** Selected oral presentation at the international conference "*13th International Gut Microbiology Symposium 2023*", Aberdeen (UK), 12-15 June 2023. Presentation: Linking environmental pollution and gut microbiome in individuals living in highly contaminated settlements
- 2022:** Keynote Speaker at the *Metagenomics and Fermented Foods Symposium* organized within the "*International Conference "Food & Agriculture Advanced Technology for Sustainable Development 2022 - FAATSD2022"*", Ho-Chi-Minh City (Vietnam), 24 November 2022. Presentation: Exploiting the microbiome of traditional fermented foods to improve food quality and human health
- 2022:** Keynote Speaker at the "*2nd International Conference on Advanced Technology and Sustainable Development 2022 - ICATSD 2022*", Ho-Chi-Minh City (Vietnam), 25 November 2022. Presentation: Sustainable diets and gut microbiome interactions for a healthy living
- 2022:** Selected oral presentation at the international conference "*27th International ICFMH Symposium - FoodMicro2022*", Athens (Greece), 28-31 August 2022. Presentation: Metagenomics unravel the microbial heritage of Italian typical fermented foods
- 2022:** Selected oral presentation at the international conference "*International Union of Microbiological Societies (IUMS) Congress 2022*", Rotterdam (The Netherlands), 20-22 July 2022. Presentation: Metagenomics highlights strain-level selection occurring in Italian typical fermented foods
- 2022:** Keynote Speaker at the international conference "*5th Austrian Microbiome Initiative (AMICI) Symposium*", Wien (Austria), 13 June 2022. Presentation: Exploiting the microbiome of traditional fermented foods to improve food quality and human health

- 2022:** Invited Speaker at the international conference “56th European Society for Clinical Investigation (ESCI) Scientific Meeting”, Bari (Italy), 8-10 June 2022. Presentation: Gut microbiome-diet interconnections for a healthy living
- 2022:** Invited Speaker at the international conference “Microbial Foods 2022”, Hillerød (Denmark), 8-12 May 2022. Presentation: Metagenomics unravel the microbial heritage of Italian typical fermented foods
- 2021:** Oral presentation at the international conference “6th International Conference on Microbial Diversity 2021”, on-line due to COVID-19, 14-15 December 2021. Presentation: Gut microbiome and allergy development in early life.
- 2021:** Invited Speaker at the national conference “Dieta Mediterranea: la cultura della salute dalla tradizione al futuro”, Portici (NA), Italia, 4 November 2021. Presentation: The gut microbiome and the Mediterranean diet.
- 2021:** Oral presentation at the international conference “Microbiome Virtual International Forum”, on-line due to COVID-19, 14 September 2021. Presentation: Newly Explored *Faecalibacterium* Diversity Is Connected to Age, Lifestyle, Geography, and Disease.
- 2021:** Invited Speaker at the national conference “XXVIII National Congress of Phytotherapy”, on-line due to COVID-19, 21-23 May 2021. Presentation: Modulation of the gut microbiome by a diet rich in vegetable products.
- 2020:** Keynote Speaker at the international conference “Third Symposium on Fruit and Vegetable Processing”, on-line due to COVID-19, 24-25 November 2020. Presentation: Metagenomics approaches to explore the microbial community of Fruit & Vegetables;
- 2019:** Invited Speaker at the international conference “MIBIOC – The way of the microbiota in cancer”, Milan (Italy), 21-22 November 2019. Presentation: Gut microbiome and diet inter-connections for a healthy living;
- 2019:** Invited Speaker the International Course organized by Campden BRI “Advances in food safety and integrity: do those genes suit you?”, Chipping Campden (UK), 12 November 2019. Presentation: Metagenomics: future trends;
- 2019:** Oral presentation at the international conference “5th International Conference on Microbial Diversity 2019”, Catania (Italy), 25-27 September 2019. Presentation: Mediterranean-style dietary intervention promotes the production of beneficial metabolites and modulates gut microbiome in healthy obese subjects;
- 2019:** Invited Speaker at the international conference “IAFP’s (International Association for Food Protection) European Symposium on Food Safety”, Nantes (Francia), 24-26 April 2019. Presentation: Current Research in Food Microbiomes and How Industry Can Benefit;
- 2018:** Oral presentation at the national conference “XXXIX National Congress of the Italian Society of Human Nutrition (SINU2018)”, Napoli (Italy), 19-21 November 2018. Presentation: Modulation of gut microbiota through a Mediterranean diet intervention in obese subjects;
- 2018:** Invited Speaker at the international conference “BioKorea2018”, within the “Korea-Italy Bilateral Workshop on Human Microbiome”, organized by the Italian Embassy in South-Korea, Seoul, 10 May 2018. Presentation: Modulation of the gut microbiome through diet for a healthy living;
- 2018:** Invited Speaker at the international conference “Top-Ten in Gastroenterology”, Bergamo (Italy), 2-3 March 2018. Presentation: Microbiota and nutrition;
- 2017:** Invited Speaker at the international conference “4th International Conference of JPI HDHL 2017”, Brussels (Belgium), 1 December 2017. Presentation: The DINAMIC project;
- 2017:** Oral presentation at the international conference “4th International Conference on Microbial Diversity 2017”, Bari (Italy), 24-26 October 2017. Presentation: Dissection of gut metagenomes highlights a diet-induced selection of specific *Prevotella copri* strains;
- 2017:** Invited Speaker at the international conference “IAFP’s (International Association for Food Protection) European Symposium on Food Safety”, Brussels (Belgium), 29-31 March 2017. Presentation: High-resolution exploration of microbial consortia in food processing environments;

2014: Oral presentation at the international conference “XXIV Int. ICFMH Symposium FoodMicro2014”, Nantes (France) 1-4 September 2014. Presentation: RNA-based study of the microbiome of an Italian pasta-filata cheese during manufacturing and ripening

LIST OF PUBLICATIONS

1. **De Filippis, F.**, Bonelli, M., Bruno, D., Sequino, G., Montali, A., Reguzzoni, M., Pasolli, E., Savy, D., Cangemi, S., Cozzolino, V., Tettamanti, G., Ercolini, D., Casartelli, M., Caccia, S. 2023. Plastics shape the black soldier fly larvae gut microbiome and select for biodegrading functions. *Microbiome* 11:205.
2. Sequino, G., Valentino, V., Esposito, A., Volpe, S., Torrieri, E., **De Filippis, F.***, Ercolini, D. 2023. Microbiome dynamics, antibiotic resistance gene patterns and spoilage-associated genomic potential in fresh anchovies stored in different conditions. *Food Res. International*, in press. *corresponding author
3. Blanco-Míguez, A., Gálvez, E.J.C., Pasolli, E., **De Filippis, F.**, Amend, L., Huang, K.D., Manghi, P., Lesker, T.R., Riedel, T., Cova, L., Punčochář, M., Thomas, A.M., Valles-Colomer, M., Schober, I., Hitch, T.C.A., Clavel, T., Berry, S.E., Davies, R., Wolf, J., Spector, T.D., Overmann, J., Tett, A., Ercolini, D., Segata, N., Strowig, T. 2023. Extension of the *Segatella copri* complex to 13 species with distinct large extrachromosomal elements and associations with host conditions. *Cell Host Microbe* 31(11):1804-1819.e9.
4. Valentino, V., **De Filippis, F.**, Sequino, G., Ercolini, D. 2023. Psychrotrophic Bacteria Equipped with Virulence and Colonization Traits Populate the Ice Cream Manufacturing Environment. *Appl. Environ. Microbiol.* in press, doi:10.1128/aem.00765-23
5. Abuqwider, J., Di Porzio, A., Barrella, V., Gatto, C., Sequino, G., **De Filippis, F.**, Crescenzo, R., Spagnuolo, M.S., Cigliano, L., Mauriello, G., Iossa, S., Mazzoli, A. 2023. *Limosilactobacillus reuteri* DSM 17938 reverses gut metabolic dysfunction induced by Western diet in adult rats. *Front. Nutr.* 10:1236417.
6. Di Lorenzo, F., Paparo, L., Pisapia, L., Oglio, F., Pither, M.D., Cirella, R., Nocerino, R., Carucci, L., Silipo, A., **De Filippis, F.**, Ercolini, D., Molinaro, A., Berni Canani, R. 2023. The chemistry of gut microbiome- derived lipopolysaccharides impacts on the occurrence of food allergy in the pediatric age. *Front. Mol. Biosci.* 10:1266293.
7. Tagliamonte, S., Barone Lumaga, R., **De Filippis, F.**, Valentino, V., Ferracane, R., Guerville, M., Gandolfi, I., Barbara, G., Ercolini, D., Vitaglione, P. 2023. Milk protein digestion and the gut microbiome influence gastrointestinal discomfort after cow milk consumption in healthy subjects. *Food Res. International* 170:112953.
8. Giello, M., Volpe, S., Sequino, G., **De Filippis, F.**, Villani, F., Torrieri, F. 2023. Design of bioactive biopolymer coating based on *Latilactobacillus curvatus* 54M16 producer of bacteriocins to preserve the safety of minimally processed fennel. *Food Packaging and Shelf Life* 38:101111.
9. Pinchera, B., Scotto, R., Zappulo, E., Buonomo, A.R., Maraolo, A.E., Schiano Moriello, N., Viceconte, G., Cattaneo, L., Villari, R., Gison, F., **De Filippis, F.**, Ercolini, D., Gentile, I. 2023. Impact of oral antiviral therapy against HCV on gut microbiota. A prospective study. *The new microbiologica* 46:196-201.
10. Rodriguez Lopez, J., GrandeBurgos, M.J., **De Filippis, F.**, Pérez Pulido, R., Ercolini, D., Galvez, A., Lucas, R. 2023. Determination of the effect of the bacteriocin enterocin AS-48 on the microbial loads and bacterial diversity of blueberries. *Heliyon* 9:e15921.
11. Coppola, S., Nocerino, R., Paparo, L., Bedogni, G., Calignano, A., Di Scala, C., de Giovanni di Santa Severina, A.F., **De Filippis, F.**, Ercolini, D., Berni Canani, R.B. 2022. Therapeutic Effects of Butyrate on Pediatric Obesity: A Randomized Clinical Trial. *JAMA network open* 5:e2244912.
12. Sequino, G., Valentino, V., Torrieri, E., **De Filippis, F.** 2022. Specific microbial communities are selected in minimally-processed fruit and vegetables according to the type of product. *Foods* 11:2164.
13. Aponte, M., Esposito, F., Sequino, G., Blaiotta, G., **De Filippis, F.** 2022. Stuck or sluggish fermentations in home-made beers: Beyond the surface. *Int. J. Food Microbiol.* 383:109956.
14. Tarallo, S.*, Ferrero, G.*, **De Filippis, F.***, Francavilla, A., Pasolli, E., Panero, V., Cordero, F., Segata, N., Grioni, S., Pensa, R.G., Pardini, B., Ercolini, D., Naccarati, A. 2022. Stool microRNA profiles reflect different dietary and gut microbiome patterns in healthy individuals. *Gut* 71(7):1302–1314 *co-first authors
15. Aponte, M., Esposito, F., Sequino, G., Blaiotta, G., **De Filippis, F.** 2022. Stuck or sluggish fermentations in home-made beers: Beyond the surface. *Int. J. Food Microbiol.* 383:109956.
16. Coppola, S., Paparo, L., Chiariotti, L., Ercolini, D., Nocerino, R., de Giovanni Di Santa Severina, A.F., Carucci, L., **De Filippis, F.**, Agangi, A., Napolitano, M., Passariello, A., Messina, F., Berni Canani, R. 2022. Effects of the Mediterranean Diet during pregnancy on the onset of allergy in at risk children:

- A study protocol of a multi-center, randomized- controlled, parallel groups, prospective trial (the PREMEDI study). *Front. Nutr.* 9:951223.
17. Valentino, V., Sequino, G., Cobo-Díaz, J., Álvarez-Ordóñez, A., **De Filippis, F.**, Ercolini, D. 2022. Evidence of virulence and antibiotic resistance genes from the microbiome mapping in minimally processed vegetables producing facilities. *Food Res. International* 162:112202.
 18. **De Filippis, F.**, Esposito, A., Ercolini, D. 2022. Outlook on next-generation probiotics from the human gut. *Cellular and Molecular Life Sciences* 79:76.
 19. Sequino, G., Valentino, V., Villani, F., **De Filippis, F.** 2022. Omics-based monitoring of microbial dynamics across the food chain for the improvement of food safety and quality. *Food Res. International* 157:111242.
 20. Valentino, V., **De Filippis, F.**, Menghi, L., Gasperi, F., Ercolini, D. 2022. Food Neophobia and scarce olfactory performances are linked to oral microbiota. *Food Res. International* 155:111092.
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According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV.

Napoli, 12/09/2023

