Antonella Del Fiore

PERSONAL INFORMATION

Affiliation

ENEA, Italian National Agency for New Technologies, Energy and Sustainable Economic Development
Department for Sustainability
– Biotechnology and Agroindustry Division – Agri-Food Sustainability, Quality and Safety Laboratory (SSPT-BIOAG-SOQUAS)
C.R. Casaccia, Via Anguillarese 301, 00123 Roma

+39-06 30484269 +39-349 4257653

antonella.delfiore@enea.it

https://bioagro.sostenibilita.enea.it/people/antonella-fiore

Sex Female | *Date of birth* 17/01/1969 | *Nationality* Italian

Enterprise	University	EPR
☐ Management Level	☐ Full professor	☐ Research Director and 1st level Technologist / First Researcher and 2nd level Technologist / Principal Investigator
☐ Mid-Management Level	☐ Associate Professor	☒ Level III Researcher and Technologist
☐ Employee / worker level	☐ Researcher and Technologist of IV, V, VI and VII level / Technical collaborator	☐ Researcher and Technologist of IV, V, VI and VII level / Technical collaborator

WORK EXPERIENCE

26/05/2010 – ongoing

Permanent Researcher

ENEA - Italian National Agency for New Technologies, Energy and Sustainable Economic Development - http://www.enea.it/en - Department for Sustainability – Biotechnology and Agroindustry Division – AgriFood Sustainability, Quality and Safety Laboratory (SSPT-BIOAG-SOQUAS)

• Research activities in the field of agri-food Microbiology and Chemistry: development and application of classical microbiological, and molecular methods (PCR, Real Time PCR) for quantification and characterization of the microbial flora in food; microbiological shelf life studies through the monitoring of microbial alteration markers, of fresh or minimally processed products; isolation and characterization of pathogenic microorganisms (bacteria, toxigenic fungi); execution of Microbial Challenge Test, (MCT) for the validation of stabilization or processing of food; in vitro and in "vivo" evaluation of the antibacterial and anti-fungal efficacy of natural, plant-based food preservatives (e.g. essential oils). Development and application of spectrophotometric and chromatographic (HPLC/GC) methods for: the qualitative characterization of plant); characterization of plant crops for applications in the food and no-food sector, from a circular economy perspective. Activities concerning the assessment of the environmental performance of agro-industrial processes: definition of improvement plans for the purpose of increasing the global sustainability of agro-industrial chains.

Business or sector -.Public research institute

07/01/2004 – 25/05/2010

Research Assistant

ENEA – Italian National Agency for New Technologies, Energy and Sustainable Economic Development - http://www.enea.it/en - Technical Unit for Sustainable Development and Innovation of Agro-Industrial System (UTAGRI)

▪ Research to increase competitiveness, quality, safety and sustainability of food production systems and agroforestry

Business or sector - Public research institute

04/09/1998 - 29/10/2004

Collaboration contracts for research activities – n°. 6

University of Basilicata, SAFE - School of Agricultural, Forest, Food, and Environmental Sciences

▪ Research activities on food safety and quality

Business or sector - University

01/10/2003 – 29/10/2004

Teaching activity

Cooperativa Nazionale Qualificazione Imprese (C.N.Q.I. S.c.a.r.l.)

▪ Teaching activity on food safety, quality and technology

Business or sector - Company

EDUCATION AND TRAINING

2009 **PhD in Botanical Sciences** *EQF level 8*
- "Fast and non-destructive diagnostic analytical methods for the control of toxigenic biological contaminants".

University of Rome "La Sapienza

2005 **Post-graduate Course** *EQF level 8*
- **"**Control and HACCP Self-Control Food"

2000 Faculty of Medicine, University "Agostino Gemelli", Rome.
Post-graduate advanced training master *EQF level 8*
- Expert in quality control technology transfer"-Transfer of technologies for the quality control of production processes in the agri-food industry"

University of Basilicata, Potenza

2001 – ongoing **Registration in the National Register of Food Technologists** *EQF level 8*

1999 **Professional licence as food technologist** *EQF level 8*

23/01/1998 **Master Degree in Food Science and Technology** *EQF level 8*
University of Basilicata, Potenza

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s English, B2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2: Proficient user Common European Framework of Reference for Languages.

Job-related skills Ability to do "teamwork"

Digital skills Microsoft Office, Video conferencing platforms (MS Teams, Zoom, Webex, Skype), Collaboration Tools (Google Gmail, Google Drive)

Other skills Good communications skills.

ADDITIONAL INFORMATION

Publications

total number of publications in peer-review journals: 31
total Impact Factor (IF) (average IF/paper)
total number of citations: 605
H index: 9 (Scopus)
Scopus ID: =7801315017; ORCID: https://orcid.org/0000-0003-3728-8864; https://www.researchgate.net/profile/Antonella-Del-Fiore

1) Pagliarello R., Bennici E., Cemmi A., Di Sarcina I., Spel C., Nardi L., Del Fiore A., et al. (2023). Designing a novel tomato ideotype for future cultivation in space mannd missions. Frontiers in Astronomy and .Space Sciences. 9:1040633.doi: 10.3389/fspas.2022.1040633. **2)** Di Gregorio L., Tchuenchieu A., Poscente V., Arioli S., Del Fiore A., Costanzo M., Giorgi D., Lucretti S., Bevivino A. (2022). Synergistic Action of Mild Heat and Essential Oil Treatments on Culturability and Viability of Escherichia coli ATCC 25922 Tested In Vitro and in Fruit Juice. Foods 11 (11), 1615. **3)** Massa S., Pagliarello R., Cemmi A., Di Sarcina I., Bombarely A., Demurtas O. C., Diretto G., Paolini F., Bennici E., Del Fiore A., et al. (2022). Modifying Anthocyanins Biosynthesis in Tomato Hairy Roots: A Test Bed for Plant Resistance to Ionizing Radiation and Antioxidant Properties in Space. Frontiers in Plant Science. 13: 83093, doi: 10.3389/fpls.2022.830931. **4)** Tabacchioni, S., Passato S., Ambrosino P., Huang L., Caldara M., Cantale C., Hett J., Del Fiore A., Fiore A., Schlüter A., et al. (2021). "Identification of beneficial microbial consortia and bioactive compounds with potential as plant biostimulants for a sustainable agriculture". Microorganisms. 9(2): 1-23. https://doi.org/10.3390/microorganisms9020426. [Scopus] **5)** Nitiema L, Sombié P, Moumouni K, Del Fiore A. (2020). "Phytochemical Composition and Antioxidant Activity of Balanites aegyptiaca, Securidaca longepedunculata and Acacia gourmaensis Used against Seed-borne Fungi in Burkina Faso". Current Journal of Applied Science and Technology. 39(1): 79-87 DOI: 10.9734/cjast/2020/v39i130483..

Projects

1) Progetto CE "SIMBA-Sustainable Innovation of MicroBiome Applications in Food Systems" Funding: Horizon 2020, Call Food Security, Sustainable Agriculture and Forestry, Marine, Maritime and Inland Water Research and the Bioeconomy (2018-2023). Budget: 5 M€, WP Leader) Role: Identification and verification of microbial consortia to be used as biofertilizers and biocontrol agents, for the improvement of productivity and for the protection of plant health. **2**) Project "SAFE&SMART - Nuove tecnologie abilitanti per la food safety e l'integrità delle filiere agro-alimentari in uno scenario globale" Funding: (CL.USTER A.GRIFOOD N.AZIONALE - CL.AN) (2013 - 2017) Budget: 9,25 M€, Role: Verification (in vitro and through challenge tests) of the antimicrobial activity of essential oils for their use in jars with functionalized caps for the extension of the "secondary" shelf life of commercial tomato sauces. **3)** FOOD FLAVOR Project - "Metodologie avanzate per garantire l'origine dei prodotti alimentari Made in Italy e studio di nuove tecnologie per il miglioramento della durata e delle qualità sensoriali" Funding: (MISE), Program "Industria 2015" (2010 -2014). Budget: (8,3 M) Role: Microbiological monitoring of ready-to-eat salads during shelf life according to different types of packaging and process.