

## PERSONAL INFORMATION

### Annamaria Bevivino



ENEA, Italian National Agency for New Technologies, Energy and Sustainable Economic Development

Department for Sustainability  
Via Anguillarese 301, Rome

+390630483868 +3933576641887

[annamaria.bевивино@enea.it](mailto:annamaria.bевивино@enea.it)

<https://bioagro.sostenibilita.enea.it/en/people/annamaria-bevivino>

Sex Female | Date of birth 19/11/1964 | Nationality Italian

Enterprise	University	EPR
<input type="checkbox"/> Management Level	<input checked="" type="checkbox"/> Full professor	<input checked="" type="checkbox"/> Research Director and 1st level Technologist / First Researcher and 2nd level Technologist / Principal Investigator
<input type="checkbox"/> Mid-Management Level	<input type="checkbox"/> Associate Professor	<input type="checkbox"/> Level III Researcher and Technologist
<input type="checkbox"/> Employee / worker level	<input type="checkbox"/> Researcher and Technologist of IV, V, VI and VII level / Technical collaborator	<input type="checkbox"/> Researcher and Technologist of IV, V, VI and VII level / Technical collaborator

## WORK EXPERIENCE

From 2023 to present

### **Research Director ENEA, Department for Sustainability Formerly Head of the ENEA Laboratory for AgriFood Sustainability, Quality and Safety, Biotechnologies and Agroindustry Division**

ENEA, Italian National Agency for New Technologies, Energy and Sustainable Economic Development, <https://www.enea.it/en>

- Director of the research activities focused on innovation on research, development and transfer activities to increase competitiveness, quality, safety and sustainability of food production systems and agroforestry.

From 2013 to present

### **Professor, University Campus Bio-Medico of Rome**

University Campus Bio-Medico of Rome, <http://www.unicampus.it/eng/>

- Contract professor of Agro-Food and Food Microbiology, master's degree in food science and human nutrition.
- Contract professor of Food Microbiology and Microbiology and Microbial Biotechnology in Food, master's degree in food science and technology, and Supply Chain Management

From 2020 to present

### **Accademico corrispondente of the Georgofili Academy, Florence, Italy**

## EDUCATION AND TRAINING

From 2024 – to present

### National Scientific Habilitation as Associate Professor in the Italian higher education system

EQF level 8

Disciplinary field 07/I1 – AGRICULTURAL MICROBIOLOGY, ASN call 2023-2025 -- Italian Ministry of Education, universities and research (MIUR, Ministerial Decree n. 1796/2023) for the disciplinary field of 07/I1 – Agricultural microbiology (Academic Recruitment Field 07/I - Agricultural microbiology, according to the national classification)

From 2021 – to present

### National Scientific Habilitation as Full Professor in the Italian higher education system

EQF level 8

Disciplinary field 05/I2 - MICROBIOLOGY, ASN call 2018-2020 -- Italian Ministry of Education, universities and research (MIUR, Ministerial Decree n. 2175/2018); Academic Recruitment Field 05/I - Genetics and microbiology, according to the national classification

From 2014 – to 2020	National Scientific Habilitation as Associate Professor in the Italian higher education system Disciplinary field 05/11 (ASN 2012-2013) – GENETICS AND MICROBIOLOGY- Italian Ministry of Education, universities and research (MIUR, Ministerial Decree n. 222/2012)	EQF level 8
1988	Habilitation in Biology University La Sapienza, Rome	
1987	Master Degree in Biological Sciences cum laude University La Sapienza, Rome	

**WORK ACTIVITIES**

Awards	Award Poster AMCLI 2016, Association of Italian Clinical Microbiologists
Editorial activity	PLOSONE, Frontiers in Microbiology, Microorganisms-MDPI
Invited presentations	More than 100 contributions at national and international congresses as invited and/or selected

**PERSONAL SKILLS**

Mother tongue(s)	Italian
Other language(s)	English, C1
Digital skills	Microsoft Office, Proficient in MAC tools Keynote Numbers Pages, Social medias (Facebook LinkedIn YouTube), Video conferencing platforms, GraphPad PRISM, MAC OS, Google Gmail, Google Drive, Collaboration Tools (MS Teams, Zoom, Webex, Skype for Business)
Other skills	Good organizational and managerial skills of research groups developed over the years.

**ADDITIONAL INFORMATION**

Publications	total number of publications in peer-review journals: 70 total number of citations: 2488 (Scopus) H index: 26 (Scopus) Scopus: ID: 6602516452; ORCID: <a href="http://orcid.org/0000-0003-4277-7048">http://orcid.org/0000-0003-4277-7048</a> ; ResearchGate <a href="https://www.researchgate.net/profile/Annamaria_Bevivino">https://www.researchgate.net/profile/Annamaria_Bevivino</a> Last five years (2020-2025) * corresponding author <ol style="list-style-type: none"> <li>1. Koutika L, Cafiero L, <b>Bevvivino A</b>, Merino A. (2020) Organic matter quality of forest floor as a driver of C and P dynamics in acacia and eucalypt plantations established on a Ferralic Arenosols, Congo. <i>For. Ecosyst.</i> 7, 40 <a href="https://doi.org/10.1186/s40663-020-00249-w">https://doi.org/10.1186/s40663-020-00249-w</a></li> <li>2. Bacci G, Taccetti G, Dolce D, Armanini F, Segata N, Di Cesare F, Lucidi V, Fiscarelli E, Morelli P, Casciaro R, Negroni A, Mengoni A <b>Bevvivino A*</b> (2020) Untargeted Metagenomic Investigation of the Airway Microbiome of Cystic Fibrosis Patients with Moderate-Severe Lung Disease. <i>Microorganisms</i> , 8, 1003. <a href="https://doi.org/10.3390/microorganisms8071003">https://doi.org/10.3390/microorganisms8071003</a></li> <li>3. Koutika L-S, Fiore A, Tabacchioni S, Aprea G, Pereira APdA, <b>Bevvivino A*</b> (2020) Influence of Acacia mangium on Soil Fertility and Bacterial Community in Eucalyptus Plantations in the Congolese Coastal Plains. <i>Sustainability</i> 2020, 12, 8763. <a href="https://doi.org/10.3390/su12218763">https://doi.org/10.3390/su12218763</a></li> <li>4. Tabacchioni S, Passato S, Ambrosino P, Huang L, Caldara M, Cantale C, Hett J, Del Fiore A, Fiore A, Schlueter A, Sczryba A, Maestri E, Marmiroli N, Neuhoff D, Nesme J, Sørensen SJ, Aprea G, Nobili C, Presenti O, Giovannetti G, Giovannetti C, Pihlanto A, Brunori A,</li> </ol>
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- Bevvivino A\*** (2021) Identification of Beneficial Microbial Consortia and Bioactive Compounds with Potential as Plant Biostimulants for a Sustainable Agriculture. *Microorganisms*. 19;9(2):426. doi: 10.3390/microorganisms9020426.
5. Latini A, Fiorani F, Galeffi P, Cantale C, **Bevvivino A** and Jablonowski ND (2021) Phenotyping of Different Italian Durum Wheat Varieties in Early Growth Stage With the Addition of Pure or Digestate-Activated Biochars. *Front. Plant Sci.* 12:782072. doi: 10.3389/fpls.2021.782072
  6. Bacci G, Rossi A, Armanini F, Cangioli L, De Fino I, Segata N, Mengoni A, Bragonzi A, **Bevvivino A\*** (2021) Lung and Gut Microbiota Changes Associated with *Pseudomonas aeruginosa* Infection in Mouse Models of Cystic Fibrosis. *Int. J. Mol. Sci.* 2021, 22, 12169. <https://doi.org/10.3390/ijms222212169>
  7. Koutika L-S, Zagatto MRG, Pereira APdA, Miyittah M, Tabacchioni S, **Bevvivino A** and Rumpel C (2021) Does the Introduction of N-Fixing Trees in Forest Plantations on Tropical Soils Ameliorate Low Fertility and Enhance Carbon Sequestration via Interactions Between Biota and Nutrient Availability? Case Studies From Central Africa and South America. *Front. Soil Sci.* 1:752747. doi: 10.3389/fsoil.2021.752747
  8. Tchuenchieu A, Kamdem SS, Bevvivino A, Etoa F-X, Ngang J-JE (2022) Development of a predictive model of the microbial inactivation of *L. monocytogenes* during low thermal treatment of fruit juices in combination with carvacrol as aroma compound. *Current Research in Food Science* 5, 374-381. <https://doi.org/10.1016/j.cfrs.2022.02.002>
  9. Di Gregorio L, Tchuenchieu A, Poscente V, Arioli S, Del Fiore A, Costanzo M, Giorgi D, Lucretti S, **Bevvivino 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, 1615. <https://doi.org/10.3390/foods11111615>
  10. Hett J, Neuhoff D, Döring TF, Masoero G, Ercole E, **Bevvivino A**. Effects of Multi-Species Microbial Inoculants on Early Wheat Growth and Litterbag Microbial Activity. *Agronomy*. 2022; 12(4):899. <https://doi.org/10.3390/agronomy12040899>
  11. Graziano S, Caldara M, Gullì M, **Bevvivino A**, Maestri E, Marmiroli N. A Metagenomic and Gene Expression Analysis in Wheat (*T. durum*) and Maize (*Z. mays*) Biofertilized with PGPM and Biochar. *International Journal of Molecular Sciences*. 2022; 23(18):10376. <https://doi.org/10.3390/ijms231810376>
  12. Magarelli RA, Trupo M, Ambroco A, Larocca V, Martino M, Palazzo S, Balducci R, Joutsjoki V, Pihlanto A, **Bevvivino A**. Designing a Waste-Based Culture Medium for the Production of Plant Growth Promoting Microorganisms Based on Cladodes Juice from *Opuntia ficus-indica* Pruning. *Fermentation*. 2022; 8(5):225. <https://doi.org/10.3390/fermentation8050225>
  13. Hett J, Döring TF, **Bevvivino A**, Neuhoff D. Impact of microbial consortia on organic maize in a temperate climate varies with environment but not with fertilization. *European Journal of Agronomy* 2023; 144, 126743. <https://doi.org/10.1016/j.eja.2023.126743>.
  14. Turchetti B, **Bevvivino A**, Casella P, Coleine C, Felis GE, Girometta CE, Molino A, Perugini I, Pollio A, Prigione V, et al. Selected Case Studies on Fastidious Eukaryotic Microorganisms: Issues and Investigation Strategies. *Diversity*. 2023; 15(7):862. <https://doi.org/10.3390/d15070862>
  15. Poscente V, Di Gregorio L, Costanzo M, Nobili C, Bernini R, Garavaglia L and **Bevvivino A\*** (2023) *Lactiplantibacillus plantarum* monolayer enhanced bactericidal action of carvacrol: biofilm inhibition of viable foodborne pathogens and spoilage microorganisms. *Front. Microbiol.* 14:1296608. doi: 10.3389/fmicb.2023.1296608
  16. Visca A, Di Gregorio L, Clagnan E, **Bevvivino A**. Sustainable strategies: Nature-based solutions to tackle antibiotic resistance gene proliferation and improve agricultural productivity and soil quality. *Environ. Res.* Published online February 1, 2024. doi:10.1016/j.envres.2024.118395
  17. Poscente V, Di Gregorio L, Costanzo M and Bevvivino A (2024) Flow cytometry: unravelling the real antimicrobial and antibiofilm efficacy of natural bioactive compounds. *Journal of Microbiological Methods* 222 106956, <https://doi.org/10.1016/j.mimet.2024.106956>.
  18. Moretti M., Tartaglia J., Accotto G.P., Beato M.S., Bernini, V. **Bevvivino A**. et al. (2024) The treasure of Italian microbial Culture Collections: an overview of preserved biological resources, offered services and know-how, and management. *Sustainability* 2024, 16, 3777. <https://doi.org/10.3390/su16093777>
  19. Koutika L-S, Pereira ADPA, Fiore A, Tabacchioni S, Costanzo M, Di Gregorio L, **Bevvivino A\*** (2024). Impact of mixed-species forest plantations on soil mycobiota community structure and diversity in the Congolese coastal plains. *PLOS ONE*, 19(10): e0311781. <https://doi.org/10.1371/journal.pone.0311781>
  20. Clagnan E, Costanzo M, Visca A, Di Gregorio L, Tabacchioni S, Colantoni E, Sevi F, Sbarra F, Bindo A, Nolfi L, Magarelli RA, Trupo M, Ambroco A and **Bevvivino A\*** (2024) Culturomics- and metagenomics-based insights into the soil microbiome preservation and

application for sustainable agriculture. *Front. Microbiol.* 15:1473666. doi: 10.3389/fmicb.2024.1473666

<b>Projects</b>	<p>Principal Investigator ENEA in national and EU projects      PNRR PE0000003 "Partenariato Esteso ON Foods - Research and innovation network on food and nutrition Sustainability, Safety and Security – Working ON Foods"      PNRR SUS-MIRRI.IT - Strengthening the MIRRI Italian Research Infrastructure for Sustainable Bioscience and Bioeconomy"      DELISOIL (Delivering, safe, sustainable, tailored &amp; socially accepted soil improvers from circular food production processes for boosting soil health, Horizon Europe 2021-2017), WP leader      ECO-READY (Achieving Ecological Resilient Dynamism for the European food system through consumer-driven policies, Horizon Europe 2021-2017, GA No.101084201) Task Leader      SIMBA (Sustainable innovation of microbiome applications in food system) (H2020, 2018-2023, GA No. 818431) WP Leader      EJP SOIL (Towards climate-smart sustainable management of agricultural soils) (H2020, 2020- 2025, GA No. 862695, Head ENEA unit, subcontractor CREA      SOMMIT (Sustainable management of soil organic matter to mitigate trade-offs between C-sequestration and nitrous oxide, methane and nitrate losses). Partner, Head ENEA unit, funded by the EU's Horizon 2020, GA N. 862695 (2021-2024)      MINOTAUR (Modeling and mapping soil biodiversity patterns and functions across Europe) funded by the EU's Horizon 2020, GA n. 862695 (2021-2024). Partner Head ENEA unit      ARTEMIS (Agro-ecological strategies for promoting climate change mitigation and adaptation by enhancing soil ecosystem services and sustainable crop production) Partner Head ENEA unit, funded by the EU's Horizon 2020      SOIL HUB (Creazione di un HUB italiano a supporto della partecipazione dell'Italia alla Global soil partnership ed alla rete di eccellenza europea sulla ricerca sul suolo), funded by MIPAAFT (d.m. 35581, 5/11/2019 2020-2023, Role: partner.      BIOLINK Cost Action (Linking belowground biodiversity and ecosystem function in European forests), Management Committee substitute for Italy (2015-2018)      SOILSINK (FISR, 2007-2009: Head ENEA unit, subcontractor University of Florence) Head of the ENEA Unit in research projects funded by the Ministry of Education, University and Research (MIUR), the Ministry of Agricultural, Food and Forestry Policies (MIPAF), the Ministry of Economic Development (MISE)      Project 5 x 1000 ENEA Tecnologie "mild" e aggiunta di antimicrobici naturali per il prolungamento della shelf-life ed il miglioramento della sicurezza dei succhi di frutta – Tecnologie per controllare la sicurezza degli alimenti da eseguire nell'ambito del finanziamento previsto dal MIUR per i Fondi 5x1000 rif. Dichiarazione 2017. Role: Responsible scientific (2020→2021).      Coordinator and PI of several projects funded by Italian Cystic Fibrosis Research Foundation (2004→2019).</p>
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#### Other Relevant Information

Member of National and International Scientific Societies (SIMGBM, SIMTREA, IUMS, FEMS, ECFS). Member of CTS of Microbial Resource Research Infrastructure Italian Node (MIRRI-IT).
Member Commissione esaminatrice Rif. ASS/01/2019, n. 19 assegni di ricerca per collaborazioni ad attività tecnico - scientifiche dell'Agenzia ENEA - Disposizione n. 283/2019/PRES
Member Commissione esaminatrice del concorso pubblico CNR, n. 5 unità di personale con il profilo di Ricercatore - III livello professionale, presso strutture del Consiglio Nazionale delle Ricerche, Bando n. 368.32 RIC – AREA STRATEGICA “PRODUZIONI ALIMENTARI E ALIMENTAZIONE” BANDO 368.32 N.5 POSTI RIC. III LIV.
Member Commissione esaminatrice del concorso pubblico ENEA, n. 20 unità di personale laureato da assumere a contratto di lavoro a tempo indeterminato nel livello economico iniziale del profilo professionale di ricercatore (RIF. 01/2019)
Member oncorso pubblico per l'assegnazione di borse di dottorato in Scienze delle Produzioni Vegetali e Animali - SPVA XXXVII ciclo - University La Tuscia, Viterbo, D.R n. 370/2021 del 2/07/2021
Member commissione del concorso pubblico per l'assegnazione di borse di dottorato aggiuntive su tematiche del green per l'ammissione al corso di dottorato di ricerca in Scienze delle Produzioni Vegetali e Animali - XXXVII CICLO, DELL'UNIVERSITÀ DEGLI STUDI DELLA TUSCIA DI VITERBO bandito con D.R. rep. 573/2021 del 18/10/2021
Member commissione giudicatrice per l'ammissione al Corso di Dottorato di Ricerca in Scienze delle Produzioni Vegetali e Animali, XXXIX ciclo a.a. 2023/24, con sede

amministrativa presso l'Università degli Studi della Tuscia di Viterbo, Decreto rettorale 10 luglio 2023, n. 316.