

**Curriculum Vitae**  
**Lorenzo Brusetti Ph.D.**  
**Researcher of Agricultural and Environmental Microbiology**

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Researchgate: [https://www.researchgate.net/profile/Lorenzo\\_Brusetti](https://www.researchgate.net/profile/Lorenzo_Brusetti)

**Qualification to Associate Professorship sector 07/F2-Microbiologia Agraria (exp. Feb 6<sup>th</sup> 2033; doc. n. 9975/2023)**

**Education and job career**

1993-2000 Master Degree	University of Milan, Milan, Italy	Biology and ecology
2000-2001 Scientific Collaborator	Conisma, Italy	Marine microbiology
2002-2005 Ph.D. Fellow	University of Milan, Milan, Italy	Soil microbiology
2006-2007 Postdoctoral Fellow	University of Milan, Milan, Italy	Marine microbiology
2007-2008 Postdoctoral Fellow	University of Milan, Milan, Italy	Soil and plant microbiology
2009- Permanent researcher	Free University of Bolzano/Bozen, Italy	Agroenvironmental microbiology

**Research activities**

*Free University of Bozen/Bolzano:*

- Microbial communities as promising bioindicators of emerging pollution, micro- and nanoplastics, and antibiotic resistance
- Microbial communities in high mountain environments: role of rock degradation, soil and freshwater sediment genesis and pioneer plant growth
- Bacterial communities as key players of nitrogen cycle in mountain systems
- Microbial consortia involved in pollutant biotransformation and biodegradation

*Past activities at the University of Milan:*

- Biodegradation of rocks and artworks by actinobacteria of the order *Frankinae*
- Genetic diversity of the genus *Bacillus*
- Effects of transgenic plants on the environmental microbial communities
- Biodiversity and role of microorganisms in deep sea sediments

**Grants and Funding**

Date granted	Award Holder(s), Role	Funding Body	Title
Start 28/09/2023 End 27/09/2025	P.I.: UNIPD WP leader: Lorenzo Brusetti	PRIN 2022 2022AL7WKC	Ecohydrological and environmental significance of subsurface ice in alpine catchments (SUBSURFACE)

Start 01/03/2022 End 28/02/2025	Lorenzo Brusetti (Co-P.I.); P.I.: Francesco Comiti	Euregio Science Fund - 4th call 2020 Europaregion Euregio Tirol Südtirol Trentino	Geochemical response of Alpine Rock Glaciers to global warming: hydroecological consequences of trace element Export (ROCK-ME)
Start 01/06/2021 End 31/05/2024	P.I. Rosenheim Tech. University Lorenzo Brusetti (contractor)	Horizon 2020 - Research and Innovation Framework Programme	A Multi-Criteria Decision Support System For A Common Forest Management to Strengthen Forest Resilience, Harmonise Stakeholder Interests and Ensure Sustainable Wood Flows (ONEFOREST)
Start 01/10/2019 End 31/07/2021	Lorenzo Brusetti (Co-P.I.); P.I.: Maurizio Ventura	UNIBZ, CRC RTD call 2019	Effect of Increased N depositions on Soil microbial communities through DNA- and RNA-based techniques in mountain forest Ecosystems (INSIDE)
Start 01/08/2018 End 31/07/2021	Lorenzo Brusetti (P.I.)	UNIBZ, CRC call 2018	Disentangling the Network of Wood-Decomposer Microbial Community in a Montane South Tyrolean Forest (WoodMicroNet)
Start: 03/04/2018 End: 02/10/2020	Lorenzo Brusetti (WP responsible); P.I.: Politecnico di Milano	Fondazione Cariplo	A microbe-based value chain: treatment and valorisation of textile wastewater (TRETILE)
Start 01/11/2017 End 31/10/2020	Lorenzo Brusetti (Co-P.I.); P.I.: Marco Gobbetti	UNIBZ, CRC call 2017	Functional microbiota diversity of the Alto Adige cows' milk. (FUNMICROMILK)
Start 01/06/2017 End 31/01/2019	Lorenzo Brusetti (WP responsible); P.I.: Leonardo Montagnani	UNIBZ, RTD call 2017	Temperature sensitivity of heterotrophic respiration in soil: can be teabags weight loss and <i>Acidobacteria</i> density adequate methods for its determination? (Climicrobe)
Start 01/03/17 End 31/12/17	Lorenzo Brusetti P.I.: Swedish Agricultural University (SLU)	External Funding, Alter-Net Consortium	The advantage of teatime at your home field (TeaTime)
Start 16/01/2017 End 15/01/2019	Lorenzo Brusetti (P.I.)	UNIBZ, CRC call 2016	Patterns of wood-decomposer communities in a montane South Tyrolean forest (WoodDecomp)
Start 15/10/2015 End 15/10/2017	Lorenzo Brusetti (WP responsible); P.I.: MUSE	Fondazione Caritro	Valutazione del Rischio Ambientale dei Contaminanti Emergenti nei fiumi TreNtini: effetti sulla vita selvatica e sull'uomo (RACE-TN)
Start 15/01/2015 End 14/01/2018	Lorenzo Brusetti (P.I.)	UNIBZ, CRC call 2014	Leaves degradation in mountain environments (LeDEME)
Start 01/04/2014 End (extended) 30/06/2016	Lorenzo Brusetti (WP responsible); P.I.: Camilla Wellstein	UNIBZ, Projects as from June 2011	Multidisciplinary characterization of a forest-ecosystem supersite (MULTFOR)
Start 16/01/2014 End 15/01/2017	Lorenzo Brusetti (P.I.)	UNIBZ, CRC call 2013	Effects of forest aerial fertilization on the microbial communities of coniferous tree phyllosphere, residuosphere and rhizosphere (MICRONITRAIR)
Start 15/12/2012 End 15/12/2015	Lorenzo Brusetti (WP responsible); P.I.: Stefano Benini	UNIBZ, CRC call 2012	Galactose and glucuronic Acid Metabolism in <i>Erwinia</i> spp. (GAMES)

Start 01/07/2012 End 30/06/2014	Lorenzo Brusetti (Co-P.I.); P.I.: Armin Schmitt	UNIBZ, CRC call 2012	Metagenomic study of the microbial communities involved in the nitrogen cycle on the forefield of a retreating glacier (METAGLACIER)
Start 01/12/2011 End 31/05/2014	Lorenzo Brusetti (WP responsible); P.I.: Massimo Tagliavini	UNIBZ, CRC call 2010-2011	Quantification of net carbon ecosystem exchange in an apple orchard in South Tyrol
Start 01/12/2011 End 30/09/2013	Lorenzo Brusetti (WP responsible); P.I.: Marco Baratieri	UNIBZ, CRC call 2010-2011	Bench scale pyrolysis and torrefaction of lignocellulosic biomass: process characterization, byproducts analysis and transformation
Start 01/09/2011 End 31/08/2014	Lorenzo Brusetti (WP responsible); P.I.: Matteo Scampicchio	UNIBZ, CRC call 2010-2011	Beer brewing with nanomaterials
Start 01/01/2011 End (extended) 31/12/2016	Lorenzo Brusetti (Co-P.I.); P.I.: Stefan Zerbe	Kurt Eberhard Bode-Stiftung within Stifterverband of the Deutsche Wissenschaft	Retreating glaciers and emerging ecosystems in the Southern Alps (EMERGE)
Start 15/12/2010 End 14/12/2013	Lorenzo Brusetti (P.I.)	UNIBZ, CRC call 2010-2011	Effects of climate change on high-altitude ecosystems: monitoring the upper Matsch Valley (ZEFO)
Start 20/07/2010 End (extended) 30/06/2018	Lorenzo Brusetti (WP responsible); P.I.: Stefan Zerbe	Kurt Eberhard Bode-Stiftung within Stifterverband of the Deutsche Wissenschaft	Sustainable water management and wetland restoration in settlements of continental-arid Central Asia (SuWaRest)
Start 22/03/2010 End 22/03/2012	Lorenzo Brusetti (Vice-responsible); P.I.: Massimo Tagliavini	PRIN 2008; MIUR	Ciclo del carbonio in ecosistemi produttivi arborei
Start 16/01/2010 End 15/01/2012	Lorenzo Brusetti (WP responsible); P.I.: Stefan Zerbe	UNIBZ, CRC call 2007-2009	Sustainable chain for biomass in South-Tyrol
Start 01/09/2009 End 31/08/2011	Lorenzo Brusetti (P.I.)	UNIBZ, CRC projects until May 2001	Structure of rhizobacterial communities in an apple orchard under different nitrogen amendments
Start 11/09/2008 End (extended) 31/10/2011	Lorenzo Brusetti (WP responsible); P.I.: Massimo Tagliavini	UNIBZ, CRC call 2007-2009	Ecological and physiological consequences of soil nitrogen availability for trees and herbaceous plants

### Peer Reviewed publications on international journals.

Data from Scopus

Lorenzo Brusetti's h-index: 32

Sum of the Times Cited: 3,343

(December 5<sup>th</sup> 2023)

1. Urzì C., Brusetti L., Salamone P., Sorlini C., Stackebrandt E., Daffonchio D. 2001. Biodiversity of *Geodermatophilaceae* isolated from altered stones and monuments in the Mediterranean basin. **Environmental Microbiology**, 3:471-479. DOI: 10.1046/j.1462-2920.2001.00217.x
2. Gtari M., Brusetti L., Aouani M.E., Daffonchio D., Boudabous A. 2002. *Frankia* nodulating *Alnus glutinosa* and *Casuarinaceae* in Tunisia. **Annals of Microbiology**, 52:145-153.
3. Zucchi M., Angiolini L., Borin S., Brusetti L., Dietrich N., Gigliotti C., Barbieri P., Sorlini C., Daffonchio D. 2003. Response of bacterial community during bioremediation of an oil-polluted soil. **Journal of Applied Microbiology**, 94:248-257. DOI: 10.1046/j.1365-2672.2003.01826.x
4. Cherif A., Brusetti L., Borin S., Rizzi A., Boudabous A., Khyami-Horani H., Daffonchio D. 2003. Genetic relationship in the "Bacillus cereus group" by rep-PCR fingerprinting and sequencing of a *Bacillus anthracis*-specific rep-PCR fragment. **Journal of Applied Microbiology**, 94:1108-1119. DOI: 10.1046/j.1365-2672.2003.01945.x
5. Daffonchio D., Cherif A., Brusetti L., Rizzi A., Mora D., Boudabous A., Borin S. 2003. Nature of polymorphisms in 16S-23S rRNA gene Intergenic Transcribed Spacer fingerprinting of *Bacillus* and related genera. **Applied and Environmental Microbiology**, 69:5128-5137. DOI: 10.1128/aem.69.9.5128-5137.2003

6. Gtari M., Brusetti L., Skander G., Mora D., Boudabous A., Daffonchio D. 2004. Isolation of *Elaeagnus*-compatible *Frankia* from soils collected in Tunisia. **FEMS Microbiology Letters**, 234:349-355. DOI: 10.1016/j.femsle.2004.04.001
7. Cardinale M., Brusetti L., Quatrini P., Borin S., Puglia A.M., Rizzi A., Zanardini E., Sorlini C., Corselli C., Daffonchio D. 2004. Comparison of different primer sets for use in Automated Ribosomal Intergenic Spacer Analysis of complex bacterial communities. **Applied and Environmental Microbiology**, 70:6147-6156. DOI: 10.1128/AEM.70.10.6147-6156.2004
8. Brusetti L., Francia P., Bertolini C., Pagliuca A., Borin S., Sorlini C., Abruzzese A., Sacchi G., Viti C., Giovannetti L., Giuntini E., Bazzicalupo M., Daffonchio D. 2004. Bacterial communities associated with the rhizosphere of transgenic Bt 176 maize (*Zea mays*) and its non transgenic counterpart. **Plant and Soil**, 266:11-21. DOI: 10.1007/s11104-005-5399-x
9. Raddadi N., Cherif A., Mora D., Brusetti L., Borin S., Boudabous A., Daffonchio D. 2005. The autolytic phenotype of the *Bacillus cereus* group. **Journal of Applied Microbiology**, 99:1070-1081. DOI: 10.1111/j.1365-2672.2005.02713.x
10. Daffonchio D., Raddadi N., Merabishvili M., Cherif A., Carmagnola L., Brusetti L., Rizzi A., Chanishvili N., Visca P., Sharp R., Borin S. 2006. Strategy for identification of *Bacillus cereus* and *Bacillus thuringiensis* strains closely related to *Bacillus anthracis*. **Applied and Environmental Microbiology**, 72:1295-1301. DOI: 10.1128/AEM.72.2.1295-1301.2006
11. Marzorati M., Alma A., Sacchi L., Pajoro M., Palermo S., Brusetti L., Raddadi N., Balloi A., Tedeschi R., Clementi E., Corona S., Quaglino F., Bianco PA., Beninati T., Bandi C., Daffonchio D. 2006. A novel *Bacteroidetes* symbiont is localized in *Scaphoideus titanus*, the insect vector of Flavescence Dorée in *Vitis vinifera*. **Applied and Environmental Microbiology**, 72:1467-1475. DOI: 10.1128/AEM.72.2.1467-1475.2006
12. Daffonchio D., Borin S., Brusa T., Brusetti L., van der Wielen P.W.J.J., Bolhuis H., Yakimov M.M., D'Auria G., Giuliano L., Marty D., Tamburini C., McGenity T.J., Hallsworth J.E., Sass A.M., Timmis K., Tselepidis A., de Lange G.J., Hübner A., Thomson J., Varnavas S.P., Gasparoni F., Gerber H.W., Malinverno E., Corselli C., Biodeep Scientific Party. 2006. Stratified prokaryote network in the oxic-anoxic transition of a deep sea halocline. **Nature**, 440:203-207. DOI: 10.1038/nature04418
13. Brusetti L., Borin S., Mora D., Rizzi A., Raddadi N., Sorlini C., Daffonchio D. 2006. Usefulness of length heterogeneity-PCR for monitoring lactic acid bacteria succession during maize ensiling. **FEMS Microbiology Ecology**, 56:154-164. DOI: 10.1111/j.1574-6941.2005.00059.x
14. Borin S., Marzorati M., Brusetti L., Zilli M., Cherif H., Hassen A., Converti C., Sorlini C., Daffonchio D. 2006. Microbial succession in a compost-packed biofilter treating benzene-contaminated air. **Biodegradation**, 17:181-191. DOI: 10.1007/s10532-005-7565-5
15. Marzorati M., Borin S., Brusetti L., Daffonchio D., Marsilli C., Carpani G., de Ferra F. 2006. Response of 1,2-dichloroethane-adapted microbial communities to *ex-situ* biostimulation of polluted groundwater. **Biodegradation**, 17:143-158. DOI: 10.1007/s10532-005-9004-z
16. Merabishvili M., Natidze M., Rigvava S., Brusetti L., Raddadi N., Borin S., Chanishvili N., Tediashvili M., Sharp R., Barbeschi M., Visca P., Daffonchio D. 2006. Diversity of *Bacillus anthracis* strains in Georgia and of vaccine strains from the former Soviet Union. **Applied and Environmental Microbiology**, 72:5631-5636. DOI: 10.1128/AEM.00440-06
17. Gtari M., Brusetti L., Hassen A., Mora D., Daffonchio D., Boudabous A. 2007. Genetic diversity among *Elaeagnus* compatible *Frankia* strains and sympatric-related nitrogen-fixing actinobacteria revealed by *nifH* sequence analysis. **Soil Biology & Biochemistry**, 39:372-377. DOI: 10.1016/j.soilbio.2006.07.005
18. Cappitelli F., Nosanchuk J.D., Casadevall A., Toniolo L., Brusetti L., Florio S., Principi P., Borin S., Sorlini C. 2007. Synthetic consolidants attacked by melanin-producing fungi: case study of the biodeterioration of

Milan (Italy) Cathedral marble treated with acrylics. **Applied and Environmental Microbiology**, 73:271-277. DOI: 10.1128/AEM.02220-06

19. Favia G., Ricci I., Damiani C., Raddadi N., Crotti E., Marzorati M., Rizzi A., Urso R., Brusetti L., Borin S., Mora D., Scuppa P., Pasqualini L., Clementi E., Genchi M., Corona S., Negri I., Grandi G., Alma A., Kramer L., Esposito F., Bandi C., Sacchi L., Daffonchio D. 2007. Bacteria of the genus *Asaia* stably associate with *Anopheles stephensi*, an Asian malarial mosquito vector. **Proceeding of the National Academy of Science USA**, 104:9047-9051. DOI: 10.1073/pnas.0610451104
20. Gtari M., Brusetti L., Cherif A., Boudabous A., Daffonchio D. 2007. Heteroduplex structures in 16S-23S rRNA intergenic transcribed spacer PCR products reveal ribosomal interoperonic polymorphisms within single *Frankia* strains. **Journal of Applied Microbiology**, 103:1031-1040. DOI: 10.1111/j.1365-2672.2007.03329.x
21. Cherif H., Ouzari H., Marzorati M., Brusetti L., Jedidi N., Hassen A., Daffonchio D. 2008. Bacterial community diversity assessment in municipal solid waste compost amended soil using DGGE and ARISA fingerprinting methods. **World Journal of Microbiology and Biotechnology**, 24:1159-1167.
22. Raddadi N., Cherif A., Ouzari H., Marzorati M., Brusetti L., Boudabous A., Daffonchio D. 2007. *Bacillus thuringiensis* beyond insect biocontrol: plant growth promotion and biosafety of polyvalent strains. **Annals of Microbiology**, 57:481-494.
23. Rizzi A., Pontiroli A., Brusetti L., Borin S., Sorlini C., Abruzzese A., Sacchi G.A., Vogel T.M., Simonet P., Bazzicalupo M., Nielsen K.M., Monier J.-M., Daffonchio D. 2008. Strategy for In Situ detection of natural transformation-based Horizontal Gene Transfer events. **Applied and Environmental Microbiology**, 74:1250-1254.
24. Brusetti L., Rizzi A., Abruzzese A., Sacchi G.A., Ragg E., Bazzicalupo M., Sorlini C., Daffonchio D. 2008. Effects of rhizodeposition of non-transgenic and transplastomic tobaccos on the soil bacterial community. **Environmental Biosafety Research**, 7:11-24.
25. Brusetti L., Borin S., Rizzi A., Mora D., Sorlini C., Daffonchio D. 2008. Exploration of methods used to describe bacterial communities in silage of maize (*Zea mays*) cultivars. **Environmental Biosafety Research**, 7:25-33.
26. Brusetti L., Glad T., Borin S., Myren P., Rizzi A., Johnsen P.J., Carter P., Daffonchio D., Nielsen K.M. 2008. Low prevalence of bla<sub>TEM</sub> genes in Arctic environments and agricultural soil and rhizosphere. **Microbial Ecology in Health and Disease**, 20:27-36.
27. Morandi S., Brasca M., Lodi R., Brusetti L. 2008. Molecular typing of *Staphylococcus aureus* isolated from Italian dairy products on the basis of coagulase gene polymorphism, multiple-locus variable-number tandem-repeat and toxin genes. 2008. **Journal of Dairy Research**, 75:444-449.
28. Marzorati M., Pajoro M., Clementi E., Brusetti L., Raddadi N., Balloi A., Tedeschi R., Corona S., Quaglino F., Bianco P.A., Bandi C., Sacchi L., Alma A., Daffonchio D. 2008. Characterization of the microflora associated to *Scaphoideus titanus* (Hemiptera: Cicadellidae), the insect vector of Flavescence dorée. **Bulletin of Insectology**, 61:215-216.
29. Gonella E., Negri I., Marzorati M., Brusetti L., Pajoro M., Mandrioli M., Tedeschi R., Daffonchio D., Alma A. 2008. Study of the bacterial community affiliated to *Hyalestes obsoletus* (Hemiptera: Cixiidae), the insect vector of Bois Noir phytoplasma of grape. **Bulletin of Insectology**, 61:221-222.
30. Rizzi A., Brusetti L., Nielsen K.M., Arioli S., Tamburini A., Sorlini C., Daffonchio D. 2008. Detection of feed-derived *Bt*-maize DNA in goat milk and evaluation of possible horizontal gene transfer to bacteria. **European Food Research and Technology**, 227:1699-1709.
31. Brusetti L., Malkhazova I., Gtari M., Tamagnini I., Borin S., Merabishvili M., Chanishvili N., Mora D., Cappitelli F., Daffonchio D. 2008. Fluorescent-BOX-PCR for resolving bacterial genetic diversity, endemism and biogeography. **BMC Microbiology**, 8:220. DOI 10.1186/1471-2180-8-220.

32. Cherif H., Ayari F., Ouzari I., Marzorati M., Bruseti L., Jedidi N., Hassen A., Daffonchio D. 2009. Effects of municipal solid waste compost, farmyard manure and chemical fertilizers on wheat growth, soil composition and soil bacterial characteristics under Tunisian arid climate. **European Journal of Soil Biology**, 45:138-145.
33. Tedeschi R., Lauterer P., Bruseti L., Tota F., Alma A. 2009. Composition, abundance and phytoplasma infection in the hawthorn psyllid fauna of northwestern Italy. **European Journal of Plant Pathology**, 3:301-310.
34. Borin S., Bruseti L., Mapelli F., D'Auria G., Brusa T., Marzorati M., Rizzi A., Yakimov M., Marty D., DeLange G., Van der Wielen P., Bolhuis H., McGenity T., Polymenakou P., Malinverno E., Giuliano L., Corselli C., Daffonchio D. 2009. Sulfur cycling and methanogenesis primarily drive microbial colonisation of highly sulfidic Urania deep hypersaline lake. **Proceeding of National Academy of Science USA**, 106:9151-9156.
35. Milanesi C., Baldi F., Borin S., Bruseti L., Ciampolini F., Iacopini F., Cresti M. 2009. Firmicutes bacteria cause biodeterioration in fresco painting from Medieval Hospital in Siena (Italy). 2009. **International Biodeterioration & Biodegradation**, 63:844-850.
36. Bulgari D., Casati P., Bruseti L., Quaglino F., Daffonchio D., Bianco PA. 2009. Endophytic bacterial diversity in grapevine (*Vitis vinifera* L.) leaves described by 16S rRNA gene sequence analysis and Length Heterogeneity-PCR. **Journal of Microbiology**. 47:393-401.
37. Borin S., Bruseti L., Daffonchio D., Delaney E., Baldi F. 2009. Biodiversity of prokaryotic communities in sediments of different sub-basins of the Venice lagoon. **Research in Microbiology**. 160:307-314.
38. Morandi S., Brasca M., Lodi R., Bruseti L., Andrighetto C., Lombardi L. 2010. Biochemical profiles, restriction fragment length polymorphism (RFLP), random amplified polymorphic DNA (RAPD) and multilocus variable number tandem repeat analysis (MLVA) for typing *Staphylococcus aureus* isolated from dairy products. **Research in Veterinary Science**. 88: 427-435.
39. Borin S., Ventura S., Tambone F., Mapelli F., Schubotz F., Bruseti L., Scaglia B., D'Acqui L., Solheim B., Turicchia S., Marasco R., Hinrichs K.-U., Baldi F., Adani F., Daffonchio D. 2010. Rock weathering creates oases of life in a High Arctic desert. **Environmental Microbiology**. 12:293-303.
40. Glad T., Bernhardsen P., Nielsen K.M., Bruseti L., Andersen M., Aars J., Sundset M.A. 2010. Bacterial diversity in faeces from polar bear (*Ursus maritimus*) in Arctic Svalbard. **BMC Microbiology**, 10:10; <http://www.biomedcentral.com/1471-2180/10/10>.
41. Essoussi I., Ghodhbane F., Amairi H., Sghaier H., Jaouani A., Bruseti L., Daffonchio D., Boudabous A., Gtari M. 2010. Esterase as an enzymatic signature of Geodermatophilaceae adaptability to Sahara desert stones and monuments. **Journal of Applied Microbiology**. 108:1723-1732.
42. Polo A., Cappitelli F., Bruseti L., Principi P., Villa F., Giacomucci L., Ranalli G., Sorlini C. 2010. Feasibility of removing surface deposits on stone using biological and chemical remediation methods. **Microbial Ecology**, 60:1-14.
43. Glad T., Kristiansen V.F., Nielsen K.M., Bruseti L., Wright A.-D.G., Sundset M.A. 2010. Ecological characterization of the colonic microbiota in Arctic and sub-Arctic seals. **Microbial Ecology**, 60: 320-330.
44. Cardinale M., Bruseti L., Lanza A., Orlando S., Daffonchio D., Puglia A.M., Quatrini P. 2010. Rehabilitation of Mediterranean anthropogenic soils using symbiotic wild legume shrubs: Plant establishment and impact on the soil bacterial community structure. **Plant Soil Ecology**, 46:1-8.
45. Bulgari D., Casati P., Crepaldi P., Daffonchio D., Quaglino F., Bruseti L., Bianco P.A. (2011) Restructuring of endophytic bacterial communities in grapevine yellows-diseased and recovered *Vitis vinifera* L. plants. **Applied and Environmental Microbiology**, 77: 5018-5022.
46. Bruseti L., Crotti E., Tamburini A., Cittaro D., Garavaglia V., Rolli E., Sorlini C., Daffonchio D., Borin S. 2011. Influence of transgenic Bt176 and non-transgenic corn silage on the structure of rumen bacterial communities. **Annals of Microbiology**, 61: 925–930.

47. Nordgård L., Brusetti L., Raddadi N., Traavik T., Averhoff B., Nielsen K. M. 2012. An investigation of horizontal transfer of feed introduced DNA to the aerobic microbiota of the gastrointestinal tract of rats. **BMC Research Notes**, 5:170.
48. Gtari M., Essoussi I., Maaoui R., Sghaier H., Boujmil R., Gury J., Pujic P., Brusetti L., Chouaia B., Crotti E., Daffonchio D., Boudabous A., Normand P. 2012. Contrasted resistance of stone-dwelling Geodermatophilaceae to stresses generating reactive oxygen species. **FEMS Microbiology Ecology**, 80: 566–577.
49. Chouaia B., Crotti E., Brusetti L., Daffonchio D., Essoussi I., Nouioui I., Sbissi I., Ghodhbane-Gtari F., Gtari M., Vacherie B., Barbe V., Médigue C., Gury J., Pujic P., Normand P. 2012. Genome sequence of *Blastococcus saxosidens* DD2, a stone inhabiting bacterium. **Journal of Bacteriology**, 194: 2752.
50. Normand P., Gury J., Pujic P., Chouaia B., Crotti E., Brusetti L., Daffonchio D., Vacherie B., Barbe V., Médigue C., Calteau A., Ghodhbane-Gtari F., Essoussi I., Nouioui I., Abbassi-Ghozzi I., Gtari M. 2012. Genome sequence of radiation-resistant *Modestobacter marinus* strain BC501, a representative Actinobacterium that thrives on calcareous stone surfaces. **Journal of Bacteriology**, 194: 4773–4774.
51. Esposito A., Ciccazzo S., Borruso L., Zerbe S., Daffonchio D., Brusetti L. 2013. A three scale analysis of bacterial communities involved in rocks colonization and soil formation in high mountain environments. **Current Microbiology**, 67: 472-479. DOI: 10.1007/s00284-013-0391-9.
52. Ettoumi B., Guesmi A., Brusetti L., Borin S., Najjari A., Boudabous A., Cherif A. 2013. Microdiversity of deep-sea *Bacillales* isolated from Tyrrhenian sea sediments as revealed by ARISA, 16S rRNA gene sequencing and BOX-PCR fingerprinting. **Microbes and Environments**, 28: 361-369. DOI: 10.1264/jsme2.me13013.
53. Chiellini C., Gori R., Tiezzi A., Brusetti L., D'Amato E., Chiavola A., Sirini P., Lubello C., Petroni G. 2014. Ozonation effects for excess sludge reduction on bacterial communities composition in a full-scale activated sludge plant for domestic wastewater treatment. **Environmental Technology**. 35: 1462-1469. DOI: 10.1080/09593330.2013.870588.
54. Glad T., Barboza P., Mackie R.I., Wright A.-D. G., Brusetti L., Mathiesen S.D., Sundset M.A. 2014. Dietary supplementation of usnic acid, an antimicrobial compound in lichens, does not affect rumen bacterial diversity or density in reindeer. **Current Microbiology**. 68: 724-728. DOI: 10.1007/s00284-014-0534-7.
55. Ciccazzo S., Esposito A., Rolli E., Zerbe S., Daffonchio D., Brusetti L. 2014. Safe-site effects on rhizosphere bacterial communities in a high-altitude alpine environment. **BioMed Research International**, Special Issue on "Exploring and Exploiting the Microbial Resource of Hot and Cold Deserts". Article ID 480170. DOI: 10.1155/2014/480170.
56. Ciccazzo S., Esposito A., Rolli E., Zerbe S., Daffonchio D., Brusetti L. 2014. Different pioneer plant species select specific rhizosphere bacterial communities in a high mountain environment. **SpringerPlus**, 3:391. DOI: 10.1186/2193-1801-3-391.
57. Borruso L., Bacci G., Mengoni A., De Philippis R., Brusetti L. 2014. Rhizosphere effect and salinity competing to shape microbial communities in *Phragmites australis* (Cav.) Trin. ex-Steud. **FEMS Microbiology Letters**, 359:193-200. DOI: 10.1111/1574-6968.12565.
58. Gatta G., Beneduce L., Brusetti L., Borruso L. et al., 2015. Irrigation with treated agro-industrial wastewater on tomato crop: effects on the production and on microbiological properties of the produce and the field environment. **Agricultural Water Management**, 149:33-43. DOI: 10.1016/j.agwat.2014.10.016.
59. Borruso L., Zerbe S., Brusetti L. 2015. Bacterial community structures as a diagnostic tool for watershed quality assessment. **Research in Microbiology**, 166:38-44. DOI: 10.1016/j.resmic.2014.11.004.
60. Mengistu Lemma S., Esposito A., Mason M., Brusetti L., Cesco S., Scampicchio M. 2015. Removal of bacteria and yeast in water and beer by nylon nanofibrous membranes journal of food engineering. **Journal of Food Engineering**, 157:1-6. DOI: 10.1016/j.jfoodeng.2015.02.005.

61. Esposito A., Ahmed E., Ciccazzo S., Sikorski J., Overmann J., Holström S.J.M., Brusetti L. 2015. Comparison of rock varnish bacterial communities with surrounding non-varnished rock surfaces: Taxon-specific analysis and morphological description. **Microbial Ecology**, 70:741-750. DOI: 10.1007/s00248-015-0617-4.
62. Ciccazzo S., Esposito A., Borruso L., Brusetti L. 2016. Microbial communities and primary succession in high altitude mountain environments. **Annals of Microbiology**, 66:43-60. DOI: 10.1007/s13213-015-1130-1.
63. Pii Y., Borruso L., Brusetti L., Crecchio C., Cesco S., Mimmo T. 2016. The interaction between iron nutrition, plant species and soil type shapes the rhizosphere microbiome. **Plant Physiology and Biochemistry**, 99:39-48. DOI: 10.1016/j.plaphy.2015.12.002.
64. Esposito A., Engel M., Ciccazzo S., Daprà L., Penna D., Comiti F., Brusetti L. 2016. Spatial and temporal variability of microbial communities in high alpine waterspring sediments. **Research in Microbiology**, 4:325-333. DOI: 10.1016/j.resmic.2015.12.006.
65. Ettoumi B., Chouchane H., Guesmi A., Mahjoubi M., Brusetti L., Neifar M., Borin S., Daffonchio D., Cherif A. 2016. Diversity, ecological distribution and biotechnological potential of Actinobacteria inhabiting seamounts and non-seamounts in the Tyrrhenian Sea. **Microbiological Research**, 186:71-80. DOI: 10.1016/j.micres.2016.03.006.
66. Borruso L., Harms K., Johnsen P.J., Nielsen K.M., Brusetti L. 2016. Distribution of class 1 integrons in a highly impacted catchment. **Science of the Total Environment**, 566-567:1588-1594. DOI: 10.1016/j.scitotenv.2016.06.054.
67. Pii Y., Borruso L., Brusetti L., Cesco S., Mimmo T. 2016. How do plants having different exudation patterns shape a similar microbial community? **Research and Reviews: Journal of Botanical Sciences**, 5:61-64.
68. Borruso L., Esposito A., Bani A., Ciccazzo S., Papa M., Zerbe S., Brusetti L. 2017. Ecological diversity of sediment rhizobacteria associated with *Phragmites australis* along a drainage canal in the Yellow River watershed. **Journal of Soils and Sediments**, 17:253-265. DOI: 10.1007/s11368-016-1498-y.
69. Pioli S., Antonucci S., Giovannelli A., Traversi M.T., Borruso L., Bani A., Brusetti L., Tognetti R. 2018. Community fingerprinting reveals increasing wood-inhabiting fungal diversity in unmanaged Mediterranean forests. **Forest Ecology and Management**, 408:202-210. DOI: 10.1016/j.foreco.2017.10.052.
70. Bani A., Pioli S., Ventura M., Panzacchi P., Borruso L., Tognetti R., Tonon G., Brusetti L. 2018. The role of microbial community in the decomposition of leaf litter and deadwood. **Applied Soil Ecology**, 126:75-84. DOI: 10.1016/j.apsoil.2018.02.017.
71. Bani A., Borruso L., Fornasier F., Pioli S., Wellstein C., Brusetti L. 2018. Microbial decomposer dynamics: Diversity and functionality investigated through a transplantation experiment in boreal forests. **Microbial Ecology**, in press. DOI: 10.1007/s00248-018-1181-5.
72. Brusetti L., Ciccazzo S., Borruso L., Bellucci M., Zaccone C., Beneduce L. 2018. Metataxonomy and functionality of wood-tar degrading microbial consortia. **Journal of Hazardous Materials**, 353:108-117. DOI: 10.1016/j.jhazmat.2018.03.041.
73. Szymańska S., Borruso L., Brusetti L., Hulisz P., Furtado B., Hryniewicz K. 2018. Bacterial microbiome of root-associated endophytes of *Salicornia europaea* in correspondence to different levels of salinity. **Environmental Science and Pollution Research**, 25:25420-25431. DOI: 10.1007/s11356-018-2530-0.
74. Borruso L., Wellstein C., Bani A., Casagrande Bacchiocchi S., Margoni A., Tonin R., Zerbe S., Brusetti L. 2018. Temporal shifts in endophyte bacterial community composition of sessile oak (*Quercus petraea*) are linked to foliar nitrogen, stomatal length, and herbivory. **PeerJ**, 6:e5769. DOI: 10.7717/peerj.5769.
75. Berbegal C., Borruso L., Fragasso M., Tufariello M., Russo P., Brusetti L., Spano G., Capozzi V. 2019. A metagenomic-based approach for the characterization of bacterial diversity associated with spontaneous



- malolactic fermentations in wine. **International Journal of Molecular Sciences**, 20:3980. DOI: 10.3390/ijms20163980.
76. Bani A., Borruso L., Matthews Nicholass K.J., Bardelli T., Polo A., Pioli S., Gómez-Brandón M., Insam H., Dumbrell A.J., Brusetti L. 2019. Site-specific microbial decomposer communities do not imply faster decomposition: Results from a litter transplantation experiment. **Microorganisms**, 7:349. DOI: 10.3390/microorganisms7090349.
  77. Esposito A., Borruso L., Rattray J.E., Brusetti L., Ahmed E. 2019. Taxonomic and functional insights into rock varnish microbiome using shotgun metagenomics. **FEMS Microbiology Ecology**, 95:fiz180. DOI: 10.1093/femsec/fiz180.
  78. Bellucci M., Borruso L., Brusetti L., Russo P., Beneduce L. 2020. Microbial community dynamics and process performance of a full scale two-stage anaerobic digester under the replacement from energy crop to poultry manure. **Journal of Chemical Technology & Biotechnology**, 95:1064-1072. DOI: 10.1002/jctb.6286.
  79. Pioli S., Sarneel J., Thomas H.J.D., Domene X., Andrés P., Hefting M., Reitz T., Laudon H., Sandèn T., Piscová V, Aurela M., Brusetti L. 2020. Linking plant litter microbial diversity to microhabitat conditions, environmental gradients and litter mass loss: Insights from a European study using standard litter bags. **Soil Biology and Biochemistry**, 144:107778 DOI: 10.1016/j.soilbio.2020.107778
  80. Sannino C., Borruso L., Smiraglia C., Bani A., Mezzasoma A., Brusetti L., Turchetti B., Buzzini P. 2020. Dynamics of in situ growth and taxonomic structure of fungal communities in Alpine supraglacial debris. **Fungal Ecology**, 44:100891. DOI: 10.1016/j.funeco.2019.100891
  81. Piergiacomo F., Borruso L., Ciccazzo S., Rizzi S., Zerbe S., Brusetti L. 2020. Environmental distribution of AR Class 1 Integrons in upper Adige River catchment (Northern Italy). **International Journal of Environmental Research and Public Health**, 17:2336. DOI: 10.3390/ijerph17072336
  82. Mosca Angelucci D., Clagnan E., Brusetti L., Tomei M.C. 2020. Anaerobic phenol biodegradation: kinetic study and microbial community shifts under high concentrations dynamic loading. **Applied Microbiology and Biotechnology**, 104:6825–6838. DOI: 10.1007/s00253-020-10696-8
  83. Pieri A., Aschbacher R., Fasani G., Mariella J., Brusetti L., Pagani E., Sartelli M., Pagani L. 2020. Country income is only one of the tiles: the global journey of antimicrobial resistance among humans, animals and environment. **Antibiotics**, 9:473. DOI: 10.3390/antibiotics9080473
  84. Visigalli S., Turolla A., Bellandi G., Bellucci M., Clagnan E., Brusetti L., Jia M., Di Cosmo R., Menin G., Bargna M., Bergna G., Canziani R. 2020. Autotrophic nitrogen removal for decentralized treatment of ammonia-rich industrial textile wastewater: process assessment, stabilization and modelling. 2021. **Environmental Science and Pollution Research**, 28:46643-46654. DOI: 10.1007/s11356-020-11231-y
  85. Borruso L., Bani A., Pioli S., Ventura M., Panzacchi P., Antonielli L., Giammarchi F., Polo A., Tonon G., Brusetti L. 2021. Do aerial nitrogen depositions affect fungal and bacterial communities of oak leaves? **Frontiers in Microbiology**, 12:633535. DOI: 10.3389/fmicb.2021.633535
  86. Clagnan E., Brusetti L., Pioli S., Visigalli S., Turolla A., Jia M., Bargna M., Ficara E., Bergna G., Canziani R., Bellucci M. 2021. Microbial community and performance of a partial nitrification/anammox sequencing batch reactor treating textile wastewater. **Heliyon**, 7:e08445. DOI: 10.1016/j.heliyon.2021.e08445
  87. Bellucci M., Borruso L., Piergiacomo F., Brusetti L., Beneduce L. 2022. The effect of substituting energy crop with agricultural waste on the dynamics of bacterial communities in a two-stage anaerobic digester. **Chemosphere**, 294:133776. DOI: 10.1016/j.chemosphere.2022.133776
  88. Piergiacomo F., Borruso L., Esposito A., Zerbe S., Brusetti L. 2022. The geochemical drivers of bacterial community diversity in the watershed sediments of the Heihe River (Northern China). **Water**, 14:1948. DOI: 10.3390/w14121948

89. Picozzi C., Clagnan E., Musatti A., Rollini M., Brusetti L. 2022. Characterization of two *Zymomonas mobilis* wild strains analysis of populations dynamics during their leavening of bread-like doughs. **Foods**, 11:2768. DOI: 10.3390/foods11182768
90. Rolli E., Marasco R., Fusi M., Scaglia B., Schubotz F., Mapelli F., Ciccazzo S., Brusetti L., Trombino L., Tambone F., Adani F., Borin S., Daffonchio D. 2022. Environmental micro-niche filtering shapes bacterial pioneer communities during primary colonization of a Himalayas' glacier forefield. **Environmental Microbiology**, 24: 5998–6016. DOI: 10.1111/1462-2920.16268
91. Piergiacomo F., Brusetti L., Pagani L. 2022. Understanding the interplay between antimicrobial resistance, microplastics and xenobiotic contaminants: A leap towards One Health? **International Journal of Environmental Research and Public Health**, 20:42. DOI: 10.3390/ijerph20010042
92. Marazzi F, Fornaroli R, Clagnan E, Brusetti L., Ficara E, Bellucci M, Mezzanotte V. 2023 Wastewater from textile digital printing as a substrate for microalgal growth and valorization. **Bioresource Technology**, 375: 128828. DOI: 10.1016/j.biortech.2023.128828
93. Pioli S., Clagnan E., Chowdhury A. A., Bani A., Borruso L., Ventura M., Tonon G., Brusetti L. 2023. Structural and functional microbial diversity in deadwood responds to decomposition dynamics. **Environmental Microbiology**, 25:2351–2367. DOI: 10.1111/1462-2920.16459

N.	First author	Year	Journal	Vol.	Pages	IF
1	Urzi et al.	2001	Environ. Microbiol.	3	471-479	4.909
2	Gtari et al.	2002	Ann. Microbiol.	52	145-153	0.359
3	Zucchi et al.	2003	J. Appl. Microbiol.	94	248-257	2.098
4	Cherif et al.	2003	J. Appl. Microbiol.	94	1108-1119	2.098
5	Daffonchio et al.	2003	Appl. Environ. Microbiol.	69	5128-5137	3.686
6	Gtari et al.	2004	FEMS Microbiol. Lett.	234	349-355	2.199
7	Cardinale et al.	2004	Appl. Environ. Microbiol.	70	6147-6156	3.686
8	Brusetti et al.	2004	Plant Soil	266	11-21	2.517
9	Raddadi et al.	2005	J. Appl. Microbiol.	99	1070-1081	2.098
10	Daffonchio et al.	2006	Appl. Environ. Microbiol.	72	1295-1301	3.686
11	Marzorati et al.	2006	Appl. Environ. Microbiol.	72	1467-1475	3.686
<b>12</b>	<b>Daffonchio et al.</b>	<b>2006</b>	<b>Nature</b>	<b>440</b>	<b>203-207</b>	<b>34.480</b>
13	Brusetti et al.	2006	FEMS Microbiol. Ecol.	56	154-164	3.598
14	Borin et al.	2006	Biodegradation	17	181-191	1.873
15	Marzorati et al.	2006	Biodegradation	17	143-158	1.873
16	Merabishvili et al.	2006	Appl. Environ. Microbiol.	72	5631-5636	3.686
17	Gtari et al.	2007	Soil Biol. Biochem.	39	372-377	2.978
18	Cappitelli et al.	2007	Appl. Environ. Microbiol.	73	271-277	3.686
<b>19</b>	<b>Favia et al.</b>	<b>2007</b>	<b>Proc. Nat. Acad. Sci. USA</b>	<b>104</b>	<b>9047-9051</b>	<b>9.432</b>
20	Gtari et al.	2007	J. Appl. Microbiol.	103	1031-1040	2.098
21	Raddadi et al.	2007	Ann. Microbiol.	57	481-494	0.359
22	Cherif et al.	2008	World J. Microb. Biotech.	24	1159-1167	1.082
23	Rizzi et al.	2008	Appl. Environ. Microbiol.	74	1250-1254	3.686
24	Brusetti et al.	2008	Environ. Biosafety Res.	7	11-24	-
25	Brusetti et al.	2008	Environ. Biosafety Res.	7	25-33	-
26	Brusetti et al.	2008	Micr. Ecol. Health Dis.	20	27-36	-
27	Morandi et al.	2008	J. Dairy Res.	75	444-449	1.704

28	Marzorati et al.	2008	Bull. Insectol.	61	215-216	0.448
29	Gonella et al.	2008	Bull. Insectol.	61	221-222	0.448
30	Rizzi et al.	2008	Eur. Food Res. Technol.	227	1699-1709	1.370
31	Brusetti et al.	2008	BMC Microbiol.	8	220	2.890
32	Cherif et al.	2009	Eur. J. Soil Biol.	45	138-145	1.247
33	Tedeschi et al.	2009	Eur. J. Plant Pathol.	3	301-310	1.931
<b>34</b>	<b>Borin et al.</b>	<b>2009</b>	<b>Proc. Nat. Acad. Sci. USA</b>	<b>106</b>	<b>9151-9156</b>	<b>9.432</b>
35	Milanesi et al.	2009	Int. Biodegr. Biodeter.	63	844-850	2.252
36	Bulgari et al.	2009	J. Microbiol.	47	393-401	1.463
37	Borin et al.	2009	Res. Microbiol.	160	307-314	1.771
38	Essoussi et al.	2010	J. Appl. Microbiol.	108	1723-1732	2.098
39	Borin et al.	2010	Environ. Microbiol.	12	292-303	4.909
40	Glad et al.	2010	BMC Microbiol.	10	10	2.890
41	Morandi et al.	2010	Res. Veter. Sci.	88	427-435	1.345
42	Polo et al.	2010	Micr. Ecol.	60	1-14	3.251
43	Glad et al.	2010	Micr. Ecol.	60	320-330	3.251
44	Cardinale et al.	2010	Appl. Soil Ecol.	46	1-8	2.122
45	Bulgari et al.	2011	Appl. Environ. Microbiol.	77	5018-5022	3.686
46	Brusetti et al.	2011	Ann. Microbiol.	61	925-930	0.359
47	Nordgård et al.	2012	BMC Res. Notes	5	170	-
48	Gtari et al.	2012	FEMS Microbiol. Ecol.	80	566-577	3.563
49	Chouaia et al.	2012	J. Bacteriol.	194	2752-2753	3.194
50	Normand et al.	2012	J. Bacteriol.	194	4773-4774	3.194
51	Esposito et al.	2013	Curr. Microbiol.	67	472-479	1.815
52	Ettoumi et al.	2013	Microbes Environ.	28	361-369	2.444
53	Chiellini et al.	2014	Env. Technol.	35	1462-1469	1.606
54	Glad et al.	2014	Curr. Microbiol.	68	724-728	1.815
55	Ciccazzo et al.	2014	BioMed Res. Int.	-	480170	2.880
56	Ciccazzo et al.	2014	SpringerPlus	3	391	-
57	Borruso et al.	2014	FEMS Microbiol. Lett.	359	193-200	2.046
58	Gatta et al.	2015	Agricult. Water Manage.	149	33-43	2.333
59	Borruso et al.	2015	Res. Microbiol.	166	38-44	2.826
60	Lemma M. et al.	2015	J. Food Eng.	157	1-6	2.576
61	Esposito et al.	2015	Microb. Ecol.	70	741-750	3.118
62	Ciccazzo et al.	2016	Ann. Microbiol.	66	43-60	0.990
63	Pii et al.	2016	Plant Physiol. Biochem.	99	39-48	2.756
64	Esposito et al.	2016	Res. Microbiol.	4	325-333	2.826
65	Ettoumi et al.	2016	Microbiol. Res.	186	71-80	2.561
66	Borruso et al.	2016	Sci. Total Env.	566/7	1588-1594	4.099
67	Pii et al.	2016	Res. Rev. J. Bot. Sci.	5	61-64	0.330
68	Borruso et al.	2017	J. Soil Sed.	17	253-265	2.206
69	Pioli et al.	2018	For. Ecol. Manage.	408	202-210	3.064
70	Bani et al.	2018	Appl. Soil Ecol.	126	75-84	2.786
71	Bani et al.	2018	Micr. Ecol.	76	1030-1040	3.118
72	Brusetti et al.	2018	J. Haz. Mat.	353	108-117	6.065
73	Szymanska et al.	2018	Env. Sci. Poll. Res.	25	25420-25431	2.800
74	Borruso et al.	2018	PeerJ	6	e5769	2.200

75	Berbegal et al.	2019	Int. J. Mol. Sci.	20	3980	4.183
76	Bani et al.	2019	Microorganisms	9	349	4.167
77	Esposito et al.	2019	FEMS Microbiol. Ecol.	95	fiz180	4.098
78	Bellucci et al.	2020	J. Chem. Technol. Biotechnol	95	1064-1072	2.587
79	Sannino et al.	2020	Fung. Ecol.	44	100891	3.990
80	Pioli et al.	2020	Soil Biol. Biochem.	144	107778	5.290
81	Piergiacomo et al.	2020	Int. J. Env. Res. Pub. Health	17	2336	2.468
82	Mosca Angelucci et al.	2020	Appl. Microbiol. Biotechnol.	104	6825–6838	3.670
83	Pieri et al.	2020	Antibiotics	9	473	2.446
84	Visigalli et al.	2020	Environ. Sci. Pollut. Res.	28	46643-46654	3.056
85	Borruso et al.	2021	Front. Microbiol.	12	633535	4.235
86	Clagnan et al.	2021	Heliyon	7	e08445	2.850
87	Bellucci et al.	2022	Chemosphere	294	133776	7.086
88	Piergiacomo et al.	2022	Water	14	1948	3.530
89	Picozzi et al.	2022	Foods	11	2768	5.561
90	Rolli et al.	2022	Environ. Microbiol.	24	5998–6016	5.476
91	Piergiacomo et al.	2022	Int. J. Environ. Res. Public Health	20	42	4.614
<b>92</b>	<b>Marazzi et al.</b>	<b>2023</b>	<b>Bioresour. Technol.</b>	<b>375</b>	<b>128828</b>	<b>11.889</b>
93	Pioli et al.	2023	Environ. Microbiol.	25	2351–2367	5.476
						TOT.

#### **Editor activities.**

International Scholarly Research Notices (from 2013 to 2017)

PLOS One (from 2014)

Probe - Ecology and Ecosystems (from 2019)

MDPI Microorganisms (from 2019)

Frontiers in Fungal Biology - Marine and Freshwater Fungi (from 2020)

Frontiers in Microbiology – Microbiotechnology (From 2022)

#### **Reviewer activities.**

Aerobiologia, Annals of Microbiology, Applied and Environmental Microbiology, Applied Soil Ecology, Aquatic Botany, Aquatic Microbial Ecology, Biology and Fertility of Soils, BioMed Research International, Canadian Journal of Microbiology, Communications Biology, Environmental Science & Technology, Extremophiles, FEMS Microbiology Ecology, FEMS Microbiology Letters, Food Research International, Frontiers in Microbiology, Geomicrobiology Journal, Heliyon, ISRN Microbiology, Microbial Ecology, Nature Communications, Pedosphere, PLOS One, Polar Biology, Proceedings of the National Academy of Sciences - India Section B: Biological Sciences, Research in Microbiology, Reviews in Infection, Science of the Total Environment, Scientific Reports, Systematic and Applied Microbiology, World Journal of Microbiology and Biotechnology.

### **DIDACTICS**

#### **Teaching activities.**

- From 2010/2011: Biology of the Microorganisms and Agricultural Microbiology, Bachelor in Agricultural, Food and Mountain Environmental Sciences (9 credits). Formerly: Agro-environmental microbiology; Agricultural Microbiology (6 credits); Bachelor in Agricultural and Agro-Environmental Sciences. Free University of Bozen/Bolzano.

- 2016/2017: Food Microbiology, Bachelor in Agricultural Science and Agricultural Technology – 6 credits, Bachelor in Agricultural and Agro-Environmental Sciences. Free University of Bozen/Bolzano.
- 2015/2016: Optional course "Bodenqualität und Bodenfruchtbarkeit / Soil Quality and Soil Fertility / Qualità e fertilità dei suoli" (Cod. 47012) - 5 credits – Master Degree in Environmental Management of Mountain Areas (EMMA) LM-73 - Free University of Bozen/Bolzano and University of Innsbruck (Austria).
- 2013/2014: Didattica delle scienze naturali e fisiche laboratorio, Degree course for the training of Nursery and Primary School Teachers – Italian and Ladin section. Free University of Bozen/Bolzano.
- 2011/2012: Didattica delle scienze naturali/fisiche (laboratorio), Degree course for the training of Nursery and Primary School Teachers (in-service) - Italian section. Free University of Bozen/Bolzano.
- 2009/2010: Environmental Microbiology, Bachelor in Agricultural Science and Agricultural Technology. Free University of Bozen/Bolzano.
- 2009/2010: Introduction to Theory and Scientific Work, Bachelor in Agricultural Science and Agricultural Technology. Free University of Bozen/Bolzano.
- 2008/2010: Microbiologia per il restauro, Master Degree “Scienze e Tecnologie per i Beni Archeologici ed Artistici”. University of Padua.
- 2006/2008: Microbiologia per il restauro, Master Degree “Scienze e Tecnologie per i Beni Archeologici ed Artistici”. University of Padua.

### **THIRD MISSION**

#### **Selected Invited Lectures as Keynote Speaker.**

- 2013: The fate of tar after biomass pyrolysis: a microbiological point of view. University of Foggia, Foggia (Italy), April 5<sup>th</sup> 2013
- 2013: Usefulness of bacterial community analysis for environmental bioindication. Université Claude Bernard Lyon I, Lyon (France), May 5<sup>th</sup> 2013.
- 2013: Microbial communities as biomarkers for land management and environmental studies in Zhangye. Zu Gong Hotel, Lanzhou (China), September 13<sup>th</sup> 2013.
- 2013: Water sediment quality in the main drainage canal of Hetao and Wuliangshuai water system. Agricultural University of Inner Mongolia, Huhhot (China), September 16<sup>th</sup> 2013.
- 2013: Can bacterial communities be a helpful tool to assess pollution stress and land use management in China? Chinese Research Academy of Environmental Science, Beijing (China), September 17<sup>th</sup> 2013.
- 2015: Bacteria, rocks and plants: A complex story in the recently deglaciated area of Matschertal, Italy. University of Innsbruck (Austria), May 7<sup>th</sup> 2015.
- 2017: Leaf litter microbial communities in an alpine forest: a dynamical point of view. University of Milan, Milan (Italy), December 21<sup>st</sup> 2017.
- 2020: La resistenza agli antibiotici negli ambienti naturali. World Antimicrobial Awareness Week, World Health Organization, November 19<sup>th</sup> 2020 (Online webinar with 850 attendants).
- 2022: La resistenza agli antibiotici negli ambienti naturali. In: Giornata formativa del dipartimento di prevenzione, organized by the Azienda Sanitaria dell’Alto Adige, June 7<sup>th</sup> 2022.
- 2023: Le resistenze agli antibiotici nell’ambiente e il loro rapporto con i contaminanti emergenti. In: Giornata formativa del dipartimento di prevenzione, organized by the Azienda Sanitaria dell’Alto Adige, November 24<sup>th</sup> 2023.

### **INSTITUTIONAL DUTIES**

- Member of the L25 Bachelor Study Council (Since 2023).

- Setup of the Faculty laboratories specialized in microbiology (2009-2011).
- Appointed member of the Faculty Council for Researchers and RTDs (2009-2012).
- Member of the Ph.D. Board “Mountain Environment and Agriculture” (2011-2018)
- Member of the Ph.D. Board “Food Engineering and Biotechnology” (Since 2018)
- Proposal for the PhD School in Management of mountain environment (2009-2010).
- Consulting for the microbiological section in the next Technopark in Bolzano (2011).
- Member of the Laboratory Commission (2013-2016).
- Co-member of L25 Bachelor Study Council (Since 2015-2023).
- Presidency of Erasmus and Bilateral Agreement Commission (2014; 2015).
- Member/President of the Test Entrance Exam commission (Since 2014).
- Scientific responsible of the TER - Transdisciplinary Environment and Health Research Network South Tyrol (2016-2018).

**Scientific Societies:**

- American Society of Microbiology member (from 2009)
- Italian Society of Agricultural, Food and Environmental Microbiology (SIMTREA; from 2006)

**Society duties:**

- Member of the “Osservatorio permanente per la Ricerca” within SIMTREA society (from 2014)

**ADDITIONAL ACTIVITIES**

**Language certifications:**

- Cambridge Advanced English (CAE): C1 level (2016)
- Internal UNIBZ computer based certification: Deutsch A2 level (2017)