Name



Paola BONFANTE

Birth Nationality Born in Torino, May 7, 1947

Italian

Present address and role

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Full Professor of Plant Biology

Education

- Italian Thesis in Biological Sciences, University of Torino (1970).
- PhD equivalent in Soil Mycology- CSMT, National Council of Research, Torino, ITALY (1970-1973)

Key qualificatio ns

Research Field: Biology of Plant-Microorganism Interactions
Research Group coordination: Her group has a research tradition on the biology of symbiotic associations, mainly mycorrhizas, and fungal taxonomy which dates back to 1975. PB spent a long part of her scientific activity studying the intimate interactions that occur between fungi and plants as well as between bacteria and fungi, using cellular and molecular approaches. Applying DNA technologies, early in the nineties, she provided contribution to the knowledge of mycorrhizal diversity in natural as well as in cultivated fields. She has discovered a group of endobacteria which live inside mycorrhizal fungi and may modulate some of the functional traits of their fungal hosts.

The current main scientific missions of the group are: To understand the cellular and molecular basis of plant-fungal interactions in mycorrhizas; to investigate the genetic determinants which characterize some mycorrhizal fungi; to define the fungal biodiversity in soil; to evaluate the fungal impact in natural and agricultural ecosystems; to investigate the fungal interactions with other microorganisms. The expertise on cellular and molecular biology of plant/fungal interactions as well as on dynamics of fungal populations is witnessed by a large number of original, review and technical papers and multiple international collaborations.

Major current scientific projects

Bacterial and fungal microbiomes in rice, tomato and wheat; Dissecting the role of the fungal intracellular microbiota, Rice and tomato responses to AM fungi; Genomics and Functional genomics in mycorrhizal fungi; Cellular and molecular interactions between plants and mycorrhizal fungi, with particular attention to signalling and colonization processes; Systemic effects of mycorrhizal fungi on plant traits

Positions

Full Professor of Plant Biology at the University of Torino (1984-2017)
Head of the Department of Plant Biology (October 2006-December 2011)
Responsible of the Centro di Studio sulla Micologia del Terreno del CNR- Torino, currently named Sezione di Torino dell'Istituto di Protezione per le Piante (1995-2009), Coordinator of the PhD school in Biological and Biotechnological Sciences; (2006-2013), Coordinator the PhD Course in Biology and Biotechnology of Fungi (2000-2005)

Current

Natural Sciences (Botany, Plant-Microbe interactions), Biology (Plant-Microbe

teaching positions

interactions), Plant Biotechnology

Supervisors of more than 20 Ph.D students

Scientific production

Papers in refereed journals: 283 (listed in the official site of the University Ministry and in the web sites of the Torino University

http://www.dbios.unito.it/do/docenti.pl/Show? id=pbonfant#pubblicazioni

Google scholar: H index 81; citations: 19917

https://scholar.google.it/citations?user=WiJOKEQAAAAJ&hl=en

Web of Science: H index 53; citations: 9837

https://tinyurl.com/y85tkylj

Scopus: H index 59; citations: 11478

https://www.scopus.com/authid/detail.uri?authorld=7005707157

Scientific responsibili ties Editorial activities

Member of the Scientific Committee of CNR (2012-2016); Member of the Scientific Committee for Research Activities-Provincia di Trento (2014-).

Organizer of many symposia, workshops and meetings on mycorrhizas and symbiotic fungi;

Visiting scientist in Japan (1989) and Brasil (2012).

Invited speakers in many international congresses of Mycology, Microbiology, Botany, Biotechnology, Plant Pathology, Cell Biology, Fungal genetics, Genetics, Memorial Symposium for Biology of Symbiosis, ICOM, iMMM, Microbiota meetings Invited to be External examiner (Opponent) for more than 15 PhD Dissertations in Europe

Member of the Scientific Committee of the Dijon Campus (France) Member of the Scientific Committee of Plant for Future (Italy)

Organizing committee of many meetings, among which MPMI Meeting in Sorrento (2007), 8th International Congress of Plant Pathology (Torino, 2008), Indian-Italian Workshop (November, 2010), MMM (Cambridge 2015), ISME 2016

Editorial activities

Editor of Environmental Microbiology (2013-); Associated Editor of Fungal Biology (Till 2015); Board member in international journals (The ISME Journal, New Phytologist) and referee for papers concerning mycorrhizas for different journals (ie. Science, Nature, Plant Cell, Plant Journal, Plant Physiology, Planta, Fungal Biology & Genetics, PNAS) and for scientific European and American (NSF) Agencies. Referee for ERC (Senior grants, 2011, Consolidated grants, 2016)

Awards

Fellow of Academy of Sciences of Torino (2000), Academy of Agriculture of Torino (2000) Academia dei Lincei Rome (November 2011), Académie d'Agriculture de France (2017- 2018)

Award for Plant Biology 2010, Roma, June 2010

Award for the Award for the French Food Spirit- Science – Paris, December 16, 2010 She is in the list of:

- 1. Top Italian Scientists- Ranking 5 for the typology **Natural sciences** http://www.topitalianscientists.org/TIS_HTML/Top_Italian_Scientists_Natural_Environmental_Sciences.htm;
- 2. Highly Quoted Researchers, (ISI) Philadelphia.http://hcr.stateofinnovation.com;
- 3. One hundred Italian Experts: http://100esperte.it/search?id=bonfante-paola-70

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