

Beatrice Giuntoli

PERSONAL INFORMATION

Current position: Assoc. Prof. in Plant Physiology (BIO/04) at the University of Pisa (UNIFI), Biology Department, 2020-.

Previous positions: Assistant professor (RTD-B) in Plant Physiology (BIO/04) at the University of Pisa (UNIFI), Biology Department, 2017-2020. Post-doctoral fellow in Plant physiology (BIO/04) at Scuola Superiore Sant'Anna of Pisa (SSSA), 2010-2012 and 2014-2017. Post-doctoral fellow in Crop genetics at the Accademia Nazionale dei Lincei (Rome), 2012-2013.

Researcher unique identifier: ORCID ID 0000-0003-4968-4071

EDUCATION

2010: PhD in Molecular Biotechnologies, Unipi.

2006: Master in Plant and Microbial Biotechnologies, Unipi, Agriculture Faculty.

2004: Bachelor in Agro-industrial Biotechnologies, Unipi, Agriculture Faculty.

2001-2006: Undergraduate student in Agricultural Sciences and Plant Biotechnology, Scuola Superiore Sant'Anna (SSSA, Pisa).

SCIENTIFIC CV

- Past position: Assistant professor (RTD-B) in Plant Physiology at the University of Pisa, Biology Department, 2017-2020.

- Academic research training: Post-doctoral fellow in Plant physiology (BIO/04) at SSSA (Pisa), 2010-2012 and 2014-2017. Post-doctoral fellow in Crop genetics at the Accademia Nazionale dei Lincei (Rome), 2012-2013.

- Research expertise: molecular biology, molecular plant physiology, plant biotechnology.

- Research interests: plant signaling, plant stress physiology. Cross-kingdom comparison of hypoxia sensing mechanisms in eukaryotes. Design of synthetic biosensors for plants, yeast and mammals. Hypoxia signaling during plant development. Plants as biofactories for protein production.

- Current collaborations: UniTo, plant nutritional responses during flooding. Oxford University, cross-kingdoms mechanisms of hypoxia sensing, modulation of oxygen perception. UNIFI, modeling of protein biosensor components for plants, design of photoenzymes. SNS (Pisa), computational modelling of PCO substrates.

- Past collaborations: SSSA, Universidad Pública de Navarra, Nottingham University, RWTH University Aachen, UC Riverside.

•Participation to funded projects and project responsibilities: PRIN2022, REMIND, drought stress memory in tomato. 2022, Regulation of adaptive responses to flood-induced hypoxia in *Marchantia polymorpha* (UKRI). 2020-2022, Wh-Italy, NBT for agriculture (CREA). 2017-2022, ETHERNA (Fondazione Pisa). 2014-2016, N-vironment (ERA-CAPS).

TEACHING AND PHD SUPERVISION

Lecturer in Plant Physiology since 2018. Lecturer in Molecular plant physiology since 2019. Lecturer in Plant synthetic biology since 2021. Laboratory trainer in Plant Physiology (Unipi, AY 2017/18). Lecturer in Synthetic biology (SSSA, 2015-2018).

PhD supervision: Arianna Del Greco, UNUPI. Noemi La Monaca, , SSSA. Yuri Telara, SSSA. Mikel Lavilla-Puerta, SSSA. Luca Piccinini, SSSA. Haytham Hamedeh, SSSA. Sergio Iacopino, SSSA. Vinay Shukla, SSSA. Liem T. Bui, SSSA.

POSITION RESPONSIBILITY

Tutor of the Master degree in Molecular Biotechnologies (WBO-LM, UNUPI). Permanent member of WBO-LM graduation committee (UNUPI). Panel member of the PhD Program in Biology (UNUPI).

MEMBERSHIP OF SCIENTIFIC SOCIETIES

Società Italiana di Biologia Vegetale. International Society of Plant Low O₂ Research (Board). International Society of Protein Termini (Board).

SELECTED SCIENTIFIC PUBLICATIONS

1. Lavilla-Puerta (2023) JBC. 10.1016/j.jbc.2023.105366
2. Weits (2023) PCE. 10.1111/pce.14440
3. Piccinini (2022) Plant Physiol. 10.1093/plphys/kiac122
4. Masson N et al (2019) Science. 10.1126/science.aaw0112
5. Puerta M et al (2019) IJMS. 10.1016/j.jmb.2019.05.023
6. Shukla V et al. (2019) Mol Plant. 10.1016/j.molp.2019.01.007
7. Giuntoli B et al. (2017) Plant Cell Environ. 10.1111/pce.13037
8. Weits DA et al. (2014) Nature Comm. 10.1038/ncomms4425
9. Giuntoli B et al. (2014) PLoS Biol. 10.1371/journal.pbio.1001950
10. Licausi F et al. (2011) Nature. 10.1038/nature10536

BIBLIOMETRIC DATA

H-Index (Scopus): 18

Total citations: 2640.

Pisa, 7/10/2025