



## Beatrice Giuntoli

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### PERSONAL INFORMATION

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

Previous positions: Assistant professor (RTD-B) in Plant Physiology (BIO/04) at the University of Pisa (UNIPi), 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

- Previous position: Assistant professor (RTD-B) in Plant Physiology at the University of Pisa, Biology Department, 2017-2020.
- Affiliations: Center for Plant Sciences, SSSA (Pisa).
- Academic research training: Post-doctoral fellow in Plant physiology (BIO/04) at SSSA (Pisa), 2010-2012 and 2014-2017 (topics: investigation of the environmental factors affecting sugarbeet flowering, biotechnological applications of plant oxygen sensing pathways). Post-doctoral fellow in Crop genetics at the Accademia Nazionale dei Lincei (Rome), 2012-2013 (molecular mechanisms of plant adaptation to hypoxia).
- Research expertise: molecular biology, molecular plant physiology, plant biotechnologies.
- 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.
- Active collaborations: University of Torino, plant nutritional responses during flooding. Oxford University, cross-kingdoms mechanisms of hypoxia sensing, modulation of oxygen perception.

Utrecht University, oxygen as a developmental cue in plants. SSSA, stress improvement in crops. University of Pisa, modeling of protein biosensor components for plants.

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

- Participation to funded projects: 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: Yuri Telara (nutritional responses during flooding), Mikel Lavilla Puerta (synthetic N-end rule-dependent pathway in yeast), Luca Piccinini (small molecule biosensors for plants), Haytham Hamedeh (submergence responses in crops), Sergio Iacopino (synthetic oxygen sensors for plants), Vinay Shukla (hypoxia in root development), Liem Bui (molecular regulation of low oxygen responses in plants).

## **POSITION RESPONSIBILITY**

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

## **MEMBERSHIP OF SCIENTIFIC SOCIETIES**

Società Italiana di Biologia Vegetale. International Society of Plant Anaerobiosis (Member and Membership manager).

## **TOP SCIENTIFIC PUBLICATIONS**

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

## **BIBLIOMETRIC DATA**

H-Index (Scopus): 15

Total number of publications in peer-reviewed journals 24