

PERSONAL INFORMATION

Family name, First name: Zaffagnini Mirko

Date of birth: February 15, 1976

Nationality: Italian

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EDUCATION

2002. Bachelor in Biological Science, University of Bologna, Italy.

2006. PhD in Functional Biology of Molecular and Cellular Systems, University of Bologna, Italy.

WORK EXPERIENCE

- 1/2019 – current: Associate Professor, Laboratory of Molecular Plant Physiology directed by Prof. Paolo Trost, University of Bologna, Italy.
- 1/2016 – 12/2018: Senior fixed-term Assistant Professor (RTD-B), Laboratory of Molecular Plant Physiology directed by Prof. Paolo Trost, University of Bologna, Italy.
- 7/2009 – 12/2015: Postdoctoral fellowship, Laboratory of Plant Redox Biology directed by Prof. Paolo Trost, University of Bologna, Italy.
- 7/2006 – 6/2009: Postdoctoral fellowship, Laboratory of Redox Signaling directed by Dr. Stéphane D. Lemaire, University Paris-Sud, Orsay, France.
- 1/2006 – 6/2006: Postdoctoral fellowship, Laboratory of Molecular Plant Physiology directed by Prof. Paolo Trost. University of Bologna, Italy.
- 10/2004 – 5/2005: Ph. D Stage (funded by Italian Ministry of Research and Education, Marco Polo fellowship), stage in the Laboratory of Redox Signaling directed by Dr. Myroslawa Miginiac-Maslow, University Paris-Sud 11, France.
- 1/2003 – 12/2005: Ph. D. fellow, Laboratory of Molecular Plant Physiology directed by Prof. Paolo Trost, University of Bologna, Italy.

PERSONAL GRANTS

- 2010. Galileo Grant for France-Italy exchange (1 year), collaboration with Dr. Stéphane D. Lemaire, Institut de Biologie Physico-Chimique (IBPC), Université Pierre et Marie Curie, CNRS, Paris, France.
- 2011. Research in Paris Fellowship (9 months) (funded by “La Ville de Paris”, France), postdoctoral position in the Laboratory of Molecular and Cellular Biology of Eukaryotes directed by Dr. Stéphane D. Lemaire, Institut de Biologie Physico-Chimique (IBPC), University Pierre et Marie Curie, CNRS, Paris, France.
- 2016. Almaldea funded by the University of Bologna...
- 2019. Attract....

PUBLICATIONS IN PEER-REVIEWED JOURNALS

I am author of 48 publications including 47 research articles (n. 1-47) and 1 book chapter (n. 48) in peer-reviewed journals:

BIBLIOMETRIC PARAMETERS

Total Impact Factor (IF): 201,1

Average IF per item (total IF/42): 4,79

Web of Science (WoS). H-index 26. Total citations: 1752. Average citation per item (1752/43): 40,7
Scopus. H-index: 26; Total citations: 1879; Average citation per item (1879/43): 43,7

NATIONAL SCIENTIFIC HABILITATION

2012 (COMPETITION D.D. 222/2012). Habilitation for Associate Professor Position in the sector competition reference 05/A2 – Plant Physiology (Scientific sector BIO/04 – Plant Physiology).

REVIEWER/EDITORIAL DUTIES

- 2005 – present. Ad hoc reviewer for several peer-reviewed scientific journals including Advances in Botanical Research, Annals of Botany, Biochimica et Biophysica Acta (BBA) - General Subjects, Biologia Plantarum, BMC Plant Biology, BMC Structural Biology, Ecotoxicology and Environmental Science, FEBS Letters, Frontiers in Plant Science, International Journal of Molecular Science, Journal of Agricultural Science and Technology, **Molecular Plant**, Photosynthesis Research, **Plant Physiology**, Plant Physiology and Biochemistry, Plant Systematics and Evolution, Plant Science, Planta, Proteomics, **The Plant Cell**, and **The Protein Journal**.
- 2018. Guest Editor for a Special Issue of Antioxidants (ISSN 2076-3921) entitled "Thioredoxin and Glutaredoxin Systems".

INVITED PRESENTATIONS AND SEMINARS

- 2004. SIFV-SIGA Joint Meeting, Lecce (IT). Title: "**Regulatory mutants of glyceraldehyde-3-phosphate dehydrogenase of spinach chloroplasts**".
- 2006. SIFV Congress, II Meeting in Bertinoro (IT). Title: "**Photosynthetic A₄-GAPDH as a target of multiple post-translational modifications in relation to stress conditions**".
- 2006. Annual Congress of GDR (Groupment de recherche), Orsay (FR). Title: "**Photosynthetic A₄-GAPDH as a target of multiple post-translational modifications in relation to stress conditions**".
- 2006. Annual Congress of ANR (Agence nationale de recherché), Nancy (FR). Title: "**Protein glutathionylation in chloroplasts: a new mechanism of regulation of photosynthetic metabolism**".
- 2007. FISV IX° Annual Congress, Riva del Garda (IT). Title: "**Redox regulation of photosynthetic glyceraldehyde-3-phosphate dehydrogenase**".
- 2007. Invited seminar at the University of Verona (IT). Title: "**Protein glutathionylation in chloroplasts: a new mechanism of regulation of photosynthetic metabolism**".
- 2009. SIBV First Congress, Verona (IT). Title: "**Biochemical characterization of the atypical chloroplastic glutaredoxin S12**".
- 2009. Seminar at the Department BES, University of Bologna (IT). Title: "**Protein glutathionylation: methods of analysis and physiological roles**".
- 2010. SFPhi Congress, Paris (FR). Title: "**Redox regulation by glutathionylation in photosynthetic organisms**".
- 2012. Academy of Georgofili, Firenze (IT). Title: "**Redox regulation in the chloroplast**".
- 2012. Invited seminar at the University of Verona (IT). Title: "**Thiol-based post-translational modifications in photosynthetic organisms**".
- 2012. Invited seminar at the University of Napoli (IT). Title: "**Redox regulation in photosynthetic organisms: methods of analysis and physiological roles**".
- 2013. SIBV Fifth Congress, Foggia (IT). Title: "**Mechanism of nitrosylation and denitrosylation of cytosolic GAPDH from Arabidopsis**".

- 2014. FISV XIII° Congress, Pisa (IT). Title: “**Unraveling the redox regulation and structure of Calvin-Benson cycle enzymes from *C. reinhardtii*: from proteomic data to in vitro studies**”.
- 2014. Invited seminar at the Ludwig-Maximilians-Universität München, Munich (D). Title: “**Unraveling the redox regulation and structure of Calvin-Benson cycle enzymes from *C. reinhardtii***”.
- 2015. Plant Biology Winter School, Bertinoro (IT). Title: “**Unraveling the redox regulation and structure of Calvin-Benson cycle enzymes from *C. reinhardtii*: from proteomic data to in vitro studies**”.
- 2015. SIBV-SIGA Joint Congress, Milan (IT). Title: “**Structural and biochemical characterization of *S-nitrosoglutathione reductase* from *Chlamydomonas reinhardtii***”
- 2017. Redox regulation: Historical background and future developments (Congress to celebrate the retirement of Prof. Jean-Pierre Jacquot), Nancy (FR). Title: “**ROS-mediated glutathionylation triggers amyloid-like aggregation of plant glycolytic GAPDH**”
- 2017. Invited seminar at the University of Bonn (D). Title: “**Thiol-based redox switches of plant glycolytic GAPDH: when the expected becomes surprising**”
- 2017. Invited seminar at the Institute of Plant Science (IPS2), Université Paris-Saclay (FR). Title: “**Thiol-based redox switches of plant glycolytic GAPDH: when the expected becomes surprising**”

AWARDS

- 2004. Best poster award during the SIFV-SIGA Congress, Lecce (Italy).
- 2007. “**Franca Rasi Caldogno**” award assigned by the Italian Society of Plant Physiology (SIFV) for the best PhD thesis (academic years: 2006-2007) during the FISV IX° Annual Congress, Riva del Garda (IT).
- 2018. “**Assunta Baccarini-Melandri**” award assigned by the Italian Society of Plant Biology (SIBV) during the FISV XV° Congress, Roma (Italy).

TEACHING AND RELATED ACTIVITIES

- 2009 – 2011. Tutoring for the Laboratory of Molecular Plant Physiology (24 h, code: 12942), Master in Molecular and Cell Biology, University of Bologna
- 2012 – present. Lecture on Redox Proteomics (4 h), Stress physiology and redox dynamics in plants (code: 72575), Master in Molecular and Cellular Biology, University of Bologna.
- 2016 – present. Plant Physiology (32 h, code: 76334), Master in Science and Management of Natural Science, University of Bologna.
- 2017 – present. Primary productivity and sustainable development (32 h, code: 69576), B.sc in Biological Science, University of Bologna.
- 2017 – present. Laboratory of Biology and Biotechnology (40 h), National Bachelor and Scientific Programme (PLS, Piano Lauree Scientifiche), University of Bologna.

SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

2005 – present. 15 Undergraduate students (8 Master students, 7 BS students), 2 PhD students and 5 postdocs.

NATIONAL/INTERNATIONAL COLLABORATIONS

- Dr. Stéphane D. Lemaire, Laboratory of Molecular and Cellular Biology of Eukaryotes, Institut de

- Biologie Physico-Chimique (IBPC), University Pierre et Marie Curie, CNRS, Paris, France
- Dr. Simona Fermani, Dr. Marco Montalti, Pr. Luca Prodi and Pr. Giuseppe Falini, Department of Chemistry "G. Ciamician", University of Bologna, Italy
 - Pr. Giovanni Venturoli, Dr. Marco Malferrari, Dr. Christian Bergamini, and Dr. Claudia Zanna, Department of Pharmacy and Biotechnology, University of Bologna, Italy
 - Pr. Alex Costa, Department of Biology, University of Milano, Italy
 - Pr. Graham Noctor and Dr. Emmanuelle Issakidis, Institut of Plant Science, Univ Paris-Sud 11, Orsay, France
 - Pr. Nicholas Rouhier and Pr. Jean Pierre Jacquot, Unité Mixte de Recherches 1136 UHP-INRA Interaction Arbres-Microorganismes, Nancy Université, Faculté des Sciences, Vandoeuvre, France
 - Pr. Ute Vothknecht, IZMB - Plant Cell Biology, University of Bonn, Germany
 - Pr. Andreas J. Meyer, INRES, University of Bonn, Germany
 - Pr. Elizabeth Vierling, Department of Biochemistry and Molecular Biology, UMassAmherst, USA
 - Pr. Francesco Licausi and Pr. Pierdomenico Perata, Scuola Superiore Sant'Anna, Italy