

Piacentini Diego, M.Sc.



Curriculum Vitae

Date of Birth: August 13, 1986

Place of Birth: Rome

Citizenship: Italian

EDUCATION

- 11/2016 to present **PhD in Botany**, Sapienza University of Rome
- 10/2012 to 12/2014 **MSc Environmental Analysis and Monitoring**, Sapienza University of Rome
- Study emphases: Plant Biology
 - Master's thesis: "Heavy metals and metalloids affect root development by altering both auxin accumulation and distribution in plants"
 - Advisors: Prof. G. Falasca; Prof. M.M. Altamura
 - Final Grade: 110/110 cum Lode
- 10/2008 to 05/2012 **BSc Environmental Science**, Sapienza University of Rome
- Study emphases: Ecology, Botany, air and soil hazardous chemical
 - Master's thesis: "Analysis of thermal condition of ice-wedges in Northern Victoria Land (East Antarctica) during the period 2006-2010"
 - Advisor: Prof. R. Raffi
 - Final Grade: 108/110
- 2005 **It. High School Degree**, Liceo Scientifico Statale Maria Montessori
- Advanced courses in Science
 - Final Grade: 70/110

FELLOWSHIP/AWARDS

- 2017 **Sapienza Università di Roma**
Botany Tutor Fellowship for Faculty of Mathematical, Physical and Natural Sciences students
- 2016 **Sapienza Università di Roma**
Three-year PhD Fellowship awarded by the Department of Environmental Botany
- 2015 **Sapienza Università di Roma**
Post graduate abroad research Fellowship awarded by the Department of Environmental Botany.

PROFESSIONAL EXPERIENCE

- 03/2017 to 07/2017 **Tutor**, Sapienza University of Rome
Tutor activity for Biological Science and Agro-Industrial Biotechnologies BSc students
- 11/2016 to present **PhD researcher**, Sapienza University of Rome
Investigating the effects of heavy metals and nitric oxide on *Oryza Sativa* root system and auxin homeostasis.
- 10/2015 to 04/2016 **Honorary research fellow**, University College Dublin
PEAC – Program for Experimental Atmospheres and Climate
Research work about the effect of high atmospheric CO₂ on phytochelatin synthase enzyme (PCS) activity, in plants grown in the presence of heavy metals and metal micronutrients.
- 2014 **Graduate Intern**, Sapienza University of Rome
12-months MSc internship in the prof M.M. Altamura's laboratory of morphogenesis, *in vitro* culture and plant anatomy, Department of Environmental Biology, Sapienza University of Rome.

SKILLS

Laboratory

- Plant tissue culture
- Plant transient expression analysis
- GUS assay
- Protein, DNA and RNA extraction
- Histological techniques

Computer

- Proficient in Microsoft office (Word, Power Point, Excel and Access)
- Skilled with image analysis and processing software (Leica Image Manager, AxioVision Release, ImageJ), Adobe Photoshop
- Competent with data analysis software (Graphpad Instat 3).

Language

- Italian (native speaker)
- English (B2 proficiency level)

REFERENCES

- **Prof. G. Falasca, PhD**
Associate Professor - Department of Environmental Biology, Sapienza University of Rome
Tel (work): (+39)06/499122452. e-mail: giuseppina.falasca@uniroma1.it
- **Prof. J. Mc Elwain, PhD**
Associate Professor - UCD School of Biology and Environmental Science
Tel (work): ext. 2524. email: jennifer.mcelwain@ucd.ie
- **Prof. M.M. Altamura, PhD**
Full Professor - Department of Environmental Biology, Sapienza University of Rome
Tel (work): (+39)06/499122452. e-mail: mariamaddalena.altamura@uniroma1.it

PUBLICATIONS

- 2018 Fattorini L., Hause B., Gutierrez L., Velocchia A., Della Rovere F., **Piacentini D.**, Falasca G., Altamura M.M. Jasmonate promotes auxin-induced adventitious rooting in dark-grown *Arabidopsis thaliana* by a cross-talk with ethylene signalling and a modulation of xylogenesis. Submitted to BMC Plant Biology il 21/02/2018.
- 2018 Ronzan M., **Piacentini D.**, Fattorini L., Della Rovere F., Riemann M., Altamura M.M., Falasca G. (2017). Cadmium and arsenic affect root development in *Oryza sativa* L. negatively interacting with auxin. Ms. Ref. No.: EEB-D-17-01183 (accepted with minor modifications).
- 2017 Fattorini L., Ronzan M., **Piacentini D.**, Della Rovere F., De Virgilio C., Sofo A., Altamura M.M., Falasca G. (2017). Cadmium and arsenic affect quiescent centre formation and maintenance in *Arabidopsis thaliana* post-embryonic roots disrupting auxin biosynthesis and transport. Environ. Exp. Bot., 144: 37-48.

CONFERENCES/PRESENTATIONS

- 2017 **Piacentini D.**, Ronzan M., Fattorini L., Della Rovere F., Sofo A., Altamura M.M., Falasca G. Cadmium and Arsenic alter auxin homeostasis during adventitious root formation in *Arabidopsis thaliana* L. (Heynh). Riunione annuale dei gruppi di lavoro SBI Biologia Cellulare e Molecolare Biotecnologie e Differenziamento, Università degli Studi di Milano-Bicocca, Milano, 14-16 giugno 2017. Abstract p. 51
- 2017 Fattorini L., Ronzan M., **Piacentini D.**, Della Rovere F., Buran I., Sofo A., Altamura M.M. Arabidopsis root formation is altered by cadmium and arsenic. 3rd Global Summit on Plant Science, Holiday Inn Roma Aurelia, Roma, 7-9 agosto 2017. Proceedings of 3rd Global Summit on Plant Science p. 40, J Plant Physiol Pathol 2017, 5:5.
DOI: 10.4172/2329-955X-C1-011

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- 2017 Ronzan M., **Piacentini D.**, Fattorini L., Della Rovere F., Riemann M., Altamura M.M., Falasca G. Cadmium and arsenic affect *Oryza sativa* L. root development by interacting negatively with auxin. Riunione annuale dei gruppi di lavoro SBI Biologia Cellulare e Molecolare Biotecnologie e Differenziamento, Università degli Studi di Milano-Bicocca, Milano, 14-16 giugno 2017. Abstract p. 38
- 2015 Fattorini L., **Piacentini D.**, Buran I., Zanella L., Della Rovere F., Ronzan M., Sanità di Toppi L., Altamura M.M., Falasca G. "*Cadmium and Arsenic affect adventitious root Formation and the definition of the quiescent centre in Arabidopsis thaliana (L.) Heynh plantlets*". Poster presented at the 110th of the Italian Botanical Society (International Plant Science Conference), Pavia, Italy
- 2015 Fattorini L., **Piacentini D.**, Buran I., Zanella L., Della Rovere F., Sanità di Toppi L., Sofo A., Altamura M.M., Falasca G. "*Effects of Cadmium and Arsenic on root development and auxin distribution in Arabidopsis Thaliana Heynh (L.) plantlets*". Paper presented at the Cellular and Molecular Biology workshop, University of "Tor Vergata", Rome, Italy
- 2015 Fattorini L., **Piacentini D.**, Buran I., Zanella L., Della Rovere F., Ronzan M., Sanità di Toppi L., Sofo A., Altamura M.M., Falasca G. "*Cadmium affects root formation and development by altering auxin transport and accumulation*". Paper presented at the "II Cadmium Symposium", University of Sassari, Italy
- 2015 Della Rovere F., Fattorini L., **Piacentini D.**, Ronzan M., Sanità di Toppi L., Sofo A., Altamura M.M., Falasca G. "*Auxin accumulation and transport in Arabidopsis thaliana (L.) Heynh adventitious roots are modified by cadmium and arsenic*". Presented at the "110^o Congresso della Società Botanica Italiana onlus (IPSC)", Pavia, Italy

Roma, il 12/03/18

