ANDREOLLI MARCO

– *Curriculum Vitae* –

Date and place of birth: 21.07.1981, Trento (TN, Italy)
Address: Via due Maggio 9, 38060, Brentonico, (TN, Italy)
Phone: 0039 3494148067
e- mail: marco.and81@gmail.com; marco.andreolli@univr.it

EDUCATION:

- *01/01/2007 – 31/12/2009; University of Verona*

  (9/04/2010) *PhD/Doctorate* (Final mark: Very Good) in Applied Life and Health Sciences; PhD program: Molecular, Industrial and Environmental Biotechnology.

  Discussion of the thesis entitled: "Molecular, phylogenetic and functional characterization of *Burkholderia* sp. DBT1, a bacterial strain involved in polycyclic aromatic hydrocarbon (PAHs) degradation" Supervisor: Prof. Giovanni Vallini

- *Academic year 2004-2005; University of Verona*

  (29/03/2006) Degree in Agro-Industrial Biotechnology (Final mark 110/110). Thesis work entitled: "Production of transgenic plants of *Arabidopsis thaliana* altered in the expression levels of *AtGC1* for cyclic GMP study in plant" Supervisor: prof. Massimo Delledonne.

- *2000; Agricultural Institute of San Michele all'Adige (TN, Italy).*

  Agro Industrial Secondary School diploma (Final mark, 73/100).

RESEARCH AND DEVELOPMENT

Temporary Assistant Professor

01/09/2022 – 31/08/2025 University of Verona, Dip. Biotecnologie

RtdA: BIOS-15/A - Microbiologia

Scholarships

- *01/04/2010 – 30/03/2011 University of Verona, Department of Biotechnology*

  Study of the plant-rhizobacteria interaction through arsenic phytoextraction in the fern *Pteris vittata*: a soil bioremediation prospective.

- *15/03/2012 – 14/03/2013 (Law 240) University of Verona, Department of Biotechnology*

  Development of a PAHs-degrading microbial inocula for the bioremediation of burned woodland soils contaminated by toxic hydrocarbons.

- *01/07/2013 – 30/06/2014 (Law240) University of Verona, Department of Biotechnology*

  Study of bacterial cenosis in polluted soil for a potential bioremediation treatment: a biomolecular approach.

- *01/07/2014 – 30/06/2015 (Law 240) University of Verona, Department of Biotechnology*

Study of bacterial cenosis in polluted soil for a potential bioremediation treatment: a biomolecular approach.

- *01/08/2015 – 31/07/2016 (Law 240) University of Verona, Department of Biotechnology*

  Study of biorestoration strategies for the recovery of ornamental stones affected by biological, physical and chemical deterioration.

- *01/09/2016 – 31/08/2017 (Law 240) University of Verona, Department of Biotechnology*

  Development of a new bio-consolidation protocol for ornamental stone through microbial precipitation of $CaCO_3$.

- *01/10/2019 – 30/09/2020 (Law 240) University of Verona, Department of Biotechnology*

  Characterization of bacterial strains isolated from black crusts on stone monuments able to precipitate $CaCO_3$ for a potential bio-consolidation protocol in ornamental stone.

Study grants

- *01/02/2018 – 31/10/2018 University of Verona, Department of Biotechnology*

  Study of new bioremediation approach for the recovery of dredged sediments.

- *01/10/2018 – 31/07/2019 University of Verona, Department of Biotechnology*

  Evaluation of bacterial colonization in vine plants infected with plant growth promoting bacteria during a standard process of grapevine nursery propagation.

- *01/10/2020 – 31/07/2021 University of Verona, Department of Biotechnology*

  Study of microbial catalysis in biobed on the degradation of pesticide.

TECHNOLOGY TRANSFER

Business

- *February 2017 until now*

  Chairman, board and founding member of *Innovative StartUp* **Bactory srl**.

  → Bactory srl aims to develop an innovative metallic nanostructures bio-production through bacterial metabolism.

  → Bactory srl provides analysis and counselling in Industrial, Food and Environmental Microbiology, for instance:

  – *Ecofarm srl*: counselling and analysis for the use of the ozone as surface and air sanitizer (e.g. livestock farm, greenhouse...),

  – *Albrigi srl*: evaluation of different cleaning/sanitation methods for the tanks used in wine industry.

  – *Calzedonia spa*: counselling regarding different sanitation methodologies against virus (surfaces and air).

  – *Envitec Biogas srl*: analysis of bacterial inhibitory substances in organic matrix used for biogas production.

  – *Marmi La Bella srl*: identification of the microbial contamination grown on the marble surface. Evaluation of a cleaning/sanitation method for its removal.

Cooperation and development

- 2015-2019

Socio-technical and scientific counselling for "CBM Italy Onlus" for the project: 010171/CBM/ETH "Amhara Trachoma Control Project, Etiopia" funded from Ministry of Foreign Affairs of Italy.

→ Microbiological analysis of different drinking water sources (surface waters, springs, walls) in rural areas. Moreover, the social and health impact after of the installation of wells and toilette in school was evaluated.

- June- August 2012; University of Science and Technology (MUST), Mbarara, Uganda

Head of the Cooperation Project: "Drinking water intervention – In-depth assessment and microbiological analysis".

→ M. Andreolli, M. Giovannini, F. Fatone, M. Kyamunyogonya and J. Yatuha (2015) A basic bottom-up approach for small systems of safe-water supply: a decentralized case study in Uganda. *Journal of Water Supply: Research and Technology: AQUA*. 64: 105-116.

TEACHING

- May 2020; University of Verona, Department of Biotechnology

Theoretical and practical course in Environmental Microbiology for high school students (PLS project).

- September 2019; University of Verona, Department of Biotechnology

Theoretical and practical course in Environmental Microbiology for high school students (PLS project).

- *March -April 2019*: *University of Verona, Department of Biotechnology*

Theoretical and practical course in Environmental Microbiology for high school students (PLS project).

- February 2015; ORDA, Bahir Dar, Etiopia

Training course: (i) "Water quality: microbiological criteria" and (ii) "Sanitation System and Technologies: an overview".

- 2008-2010; University of Verona, Department of Biotechnology

Practical course of "Applied Microbiology – Food and Environmental module".

- Supervisor of about 30 master thesis.

FIXED-TERM CONTRACT

- April-December 2011; University of Verona, Department of Biotechnology

Laboratory Technician of Food and Environmental Microbiology.

LANGUAGES

Italian: native speaking.

English: fluid speech and good reading and writing.

PRIZES AND AWARDS

- *2016* Business idea for Bactory srl (BioInItaly Investment Forum).
- *2015* Business idea for Bactory srl (1st place START CUP VENETO 2015).
- *2010* Business idea for BioRimedia (Final stage, START CUP VENETO 2010)
- *2009* Awarded of Short Term Scientific Mission, COST 859. "Characterization of endophytic bacteria from aspen and their ability to degrade PAHs."

ABROAD EXPERIENCES

- *March – May 2009; University of Helsinki, Department of Biological and Environmental Sciences.* Short Term Scientific Mission, COST 859. "Characterization of endophytic bacteria from aspen and their ability to degrade PAHs." Supervisor: dott. Kim Yrjälä.

REVIEWER FOR INTERNATIONAL SCIENTIFIC JOURNALS

- Water Science and Technology
- Frontiers of Environmental Science & Engineering
- Science of the Total Environment
- Casa editrice MPDI
- mSphere and other...

BOOK CHAPTER

Andreolli M, Lampis S, Vallini G (2017) Diversity, distribution and functional role of bacterial endophytes in *Vitis vinifera. In: Endophytes: Biology and Biotechnology.* Ed, DK Maheshwari. Springer, pp. 233-266.

NATIONAL ACADEMIC QUALIFICATION AS ASSOCIATE PROFESSOR

- BIOS-15/A - Microbiologia
- *AGRI-08/A - Microbiologia agraria, alimentare e ambientale*

Tutto quanto dichiarato nel presente CV corrisponde a verità ai sensi degli articoli 46 e 47 del D.P.R. 445/2000. Acconsento al trattamento dei miei dati personali in accordo con il D.lgs. 196/2003.

Maria Andreolli