

**MICHELA SCHIAVON, PhD**ORCID: [ORCID.ORG/0000-0001-8817-5515](https://orcid.org/0000-0001-8817-5515)

	<p>2019-2020 Guest Editor of the special issue “Molecular Characterization of Humic Substances and Regulatory Processes Activated in Plants”. <i>Frontiers in Plant Science</i> (Crop and Product Physiology section).</p> <p>2018-2020 Guest Editor of the special issue “Selenium metabolism and accumulation in plants”. <i>Plants</i> (MDPI).</p> <p>2018- Member of the editorial board of <i>Plants</i> (MDPI), “Phytochemistry” and “Plant Responses to Abiotic Stress and Climate Change” sections.</p> <p>2007-2008 Guest Editor of the special issue “Multiple Roles of Wetlands”. <i>Desalination</i>, Elsevier.</p>
<p>VISITING SCIENTIST</p>	<p>BrIAS fellow, BrIAS - VUB-ULB University, Bruxelles (Belgium)</p> <p>October 2015 – June 2017 Biology Dept., Colorado State University (US)</p> <p>August 2013 – September 2013 Biology Dept., Colorado State University (US)</p> <p>July 2009 - August 2009 Biology Dept., Colorado State University (US)</p> <p>July 2005 Biology Dept., Colorado State University (US)</p> <p>April 2004 - September 2004 Biology Dept., Colorado State University (US)</p>
<p>MAIN RESEARCH PROJECTS (PRINCIPAL INVESTIGATOR OR PARTICIPANT)</p>	<p>2023- Effects of water management in paddy soils on Se accumulation and distribution in rice as a function of Fe-oxyhydroxide dynamics and phosphorus availability (Proposal: I-20220767, DESY Photon Science, Hamburg)</p> <p>2022- Innovative concepts and technologies for ecologically sustainable nutrient management in agriculture aiming to prevent, mitigate and eliminate pollution in soils, water and air (ECONUTRI) (101081858). HORIZON-CL6-2022-ZEROPOLLUTION-01.</p> <p>2022- Nature Based Solutions for Soil Management (NBSoil) (101091246). HORIZON-MISS-2021-SOIL-02</p> <p>2021- SCHM_RILO_21_01 - RICERCA LOCALE 2021 - Study of the relationship between phosphorus availability in paddy soils and phosphorus nutrition in rice plants.</p> <p>2020-2023 Fly ash as precursors of functionalizing materials for application in environmental engineering, civil engineering and agriculture. TEAM-NET FNP programme. Grant Program No.1/4.4/2018. [Member of the Scientific and Economic Committee (SEC) del TEAM-NET]</p> <p>2019-2022 Plants for Plants (P4P) for the discovery and development of biostimulant products obtained from plants. Project funded to Landlab-Thesis/Van Iperen dall’EU LIFE Programme, Grant Agreement LIFE18 ENV/NL/000043.</p> <p>2014-2020 Rise Phosphorus Efficiency. POR FESR</p> <p>2018-2019 PRID 2018 Effects of salinity on weed-crop competition: agronomic and physiological aspects.</p> <p>2011-2012 Generation of Se-fortified crops as functional food: impact of selenium and sulfur fertilization on the production of plant compounds with putative health benefits. Progetto Giovani Studiosi, University of Padova.</p> <p>2016-2017 Mechanisms of Selenate-Specific Transport and Selenium Hyperaccumulation and Tolerance in <i>Stanleya pinnata</i> - Hypothesized Key Genes SpSultr1;2 and SpAPS2. National Science Foundation (NSF) (grant</p>

	<p>number #1456361). [Research Scientist II (2015), Research Scientist III, Biology Dept., Colorado State University, USA].</p> <p>2009 Activators of secondary defense metabolic routes of plants. METADUE Project, P.Q.R. Contract no. 10/2011.</p> <p>2004 Genetic Engineering Approaches for the in Vivo Study of Plant Metabolism of Selenium and Other Oxyanions. National Science Foundation (NSF) (grant number #9982432). [Research Scholar Grant, Biology Dept., Colorado State University, USA].</p>
TEACHING EXPERIENCE	<p>Lecturer of the following courses:</p> <p>University of Turin: 2022-2023 "Food Biochemistry" in the Bachelor's Degree in Food Technologies. 2022-2023 "Environmental Fate of Agrochemicals" in the Bachelor's Degree in Agricultural Sciences. 2022-2023 "Chemical-Agricultural Analysis Laboratory" in the Bachelor's Degree in Agricultural Sciences. 2021-2023 "Laboratory of Soil-Vine System" in the Bachelor's Degree in Viticulture and Oenology. 2020-2023 "Chemistry of the Vineyard System" in the Bachelor's Degree in Viticulture and Oenology. 2020-2023 "Soil Organic Matter and Nutrient Cycling in Agroecosystems" in the Bachelor's Degree in Agricultural Sciences (Smart Agriculture curriculum). 2020-2022 Lecturer of the course "Agro-Food Analysis Laboratory" in the Bachelor's Degree in Food Technology.</p> <p>University of Padova: 2018-2020 "Agricultural Biochemistry and Plant Physiology", in the bachelor degree of Agricultural Sciences 2017 – 2019 "Plant Biology" in the bachelor degree of Forestry Sciences 2017-2018 "General Biology" in the Bachelor's degree of Land use and restoration.</p> <p>Colorado State University 2016 "Cell Biology" 2016 "Plant Physiology"</p>
RESEARCH ACTIVITY (BRIEF DESCRIPTION)	<p>M. Schiavon's research initially focused on investigating the physiological and molecular mechanisms of heavy metal tolerance and crop acquisition, as well as the interactions between metals and nutrients during root uptake. Subsequently, she developed a keen interest in technologies aimed at biofortifying crops with selenium and using biostimulants, such as humic substances, protein hydrolysates, algal and plant extracts, to enhance nutrient acquisition and crop use efficiency. To explore this, she employs molecular tools and biochemical assays to study the intricate mechanisms by which crops respond to variable nutrient availability, with or without biostimulants, and the signalling pathways involved. Additionally, she examines the way various biostimulants alleviate oxidative stress caused by abiotic stresses like drought and salinity. Her international publications on these subjects demonstrate her expertise in working with biostimulants and in the fields of plant nutrition and biofortification.</p>
REFEREE ACTIVITY	<p>Referee for the following journals: New Phytologist, Planta, Environmental and Experimental Botany, Journal of Plant Physiology, New Biotechnology, Plant Physiology and Biochemistry, Plant and Soil, Desalination, International</p>

	Journal of Phytoremediation, Journal of Agronomy and Crop Science, Tree Physiology, Aquatic Toxicology, Bioresource Technology, Acta Physiologiae Plantarum, Plant Biology, PlosONE, Molecules, Scientia Horticulturae, Plants, Agronomy, Applied Sciences, Frontiers in Plant Science
SUPERVISOR	<p>2003-2023 Supervisor or co-supervisors of several Bachelor, Master and PhD students;</p> <p>2022 supervisor of Klaudia Dębiec-Andrzejewska, senior research assistant presso Department of Environmental Microbiology and Biotechnology, Faculty of Biology, University of Warsaw</p> <p>2019 Assistance and coordination of the internship activities of Piotr Ostapczuk, master's student at the University of Warsaw (Faculty of Biology). The internship was part of the "Student Mobility for Traineeships" Erasmus+ program.</p>
OTHER ACTIVITIES	<p>2022- Member of the Student Career Committee for the Bachelor's Degrees in Food Technologies and Viticulture and Enology.</p> <p>2021- Member of the CMR Committee for Agricultural Sciences.</p> <p>2018 Change agent (promoter of innovative teaching initiatives), contact person for the DAFNAE department, University of Padua.</p> <p>2018-present Member of the teaching staff of the Animal and Food Science PhD program, University of Padua.</p> <p>2019 Evaluator of international projects for the "Fonds National de la Recherche Luxembourg".</p> <p>2018 Member of the evaluation committee for PhD students and post-docs for the allocation of travel awards for participation in international conferences. Funded by Plants (MDPI).</p> <p>2018 Member of the evaluation committee for the promotion of Dr. Dough Van Hoewyk to Full Professor, Coastal Carolina University, USA.</p> <p>2017-2022 Member of the evaluation committee for PhD and Master's students affiliated with the Department of Biology at Colorado State University (USA).</p>
SPEAKER AT INTERNATIONAL CONFERENCES AND CONVENTIONS	<ul style="list-style-type: none"> - Speaker at the PhD Winter School of the Italian Society of Agricultural Chemistry. February 2023. Udine, Italy. Title of the presentation: The role of humic substances at the plant-soil interface: biological activity and mechanisms of action - Selenium and sulfur interactions in higher plants: case studies. BrIAS program. Brussels, Belgium. 2022, Invited. - Selenium biofortification: strategies, main outcomes and relevance for human health. BrIAS program. Brussels, Belgium. 2022, Invited. - Speaker at the 6th international Conference on Selenium in the Environment and Human Health. October 27-30, 2019, Yangling/Xi'an, China. Title of the presentation: Unraveling the complex trait of plant selenium hyperaccumulation: advances in research on potential candidate genes involved. Invited. - Speaker at the PhD Winter School of the Italian Society of Agricultural Chemistry. February 2020. Turin, Italy. Title of the presentation: Plant nutrient availability and uptake in the rhizosphere. - Speaker at the PhD Winter School of the Italian Society of Agricultural Chemistry. February 2019. Palermo, Italy. Title of the presentation: Crop biofortification with selenium: effects on plant metabolism and content in nutraceuticals. - Speaker at the XXXVI National Conference of the Italian Society of Agricultural Chemistry (SICA). Reggio Calabria, 2018, Italy. Title of the

	<p>presentation: Mechanisms of selenium hyperaccumulation in <i>Stanleya pinnata</i>: exploring the role of SULTR1;2 and ATPS2 genes.</p> <ul style="list-style-type: none"> - Speaker at the 3rd Sulphyton Meeting. September 2011, Conegliano, Italy. Title of the presentation: A transcriptomic approach for the identification of genes involved in the response to chromium and sulfur in <i>Brassica juncea</i>. - Speaker at the 7th Workshop "Sulfur in Plants" Warsaw, Poland. 2008. Title of the presentation (short): Interactions between chromate and sulfate affect growth, photosynthesis and ultrastructure in <i>Brassica juncea</i>.
<p>SCIENTOMETRIC DATA Publications in international scientific journals: Book chapters Total citations H index</p>	<p>58 15 3184 29</p>