

PERSONAL INFORMATION

Riccardo Aversano



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Enterprise	University	EPR
<input type="checkbox"/> Management Level	<input type="checkbox"/> Full professor	<input type="checkbox"/> Research Director and 1st level Technologist / First Researcher and 2nd level Technologist
<input type="checkbox"/> Mid-Management Level	<input checked="" type="checkbox"/> Associate Professor	<input type="checkbox"/> Level III Researcher and Technologist
<input type="checkbox"/> Employee / worker level	<input type="checkbox"/> Researcher and Technologist of IV, V, VI and VII level / Technical collaborator	<input type="checkbox"/> Researcher and Technologist of IV, V, VI and VII level / Technical collaborator

WORK EXPERIENCE

- From 2020 to now Associate Professor of Plant Genetics (sector E7/01 – Plant Genetics) at the Department of Agricultural Sciences, University of Naples Federico II.
- From 2007 to 2020 Researcher of Plant Genetics (sector E7/01 – Plant Genetics) at the Department of Biotechnology Sciences, University of Naples Federico II.

EDUCATION AND TRAINING

- From 2013 to 2013 Fellowship from the University of Naples Federico II as visiting scientist at the Department of Plant Pathology, University of Minnesota (Saint Paul, MN, USA), working on "Genome sequence analysis of wild potato species"
- From 2009 to 2010 *Boursier d'Excellence* at the Department of Plant Biology, University of Geneva (Geneve, CH) working on "Epigenetic mechanisms of gene silencing in *Arabidopsis thaliana* and investigation the molecular aspects related to DNA methylation".
- From 2006 to 2007 Fellowship of the University of Naples Federico II working on "Molecular characterization of potato hybrids", at the Department of Soil, Plant, and Environmental Sciences, Portici (Italy).
- From 2004 to 2005 PhD fellow at the Department of Plant Pathology, University of Minnesota (Saint Paul, MN, USA), working on "Genomics and biotechnology for resistance in potato".

PERSONAL SKILLS

- Mother tongue(s) ITALIAN
- Other language(s) ENGLISH

Job-related skills Riccardo Aversano's fundamental research focuses on potato and grapevine. His research activity encompasses whole plant phenotypic to molecular analyses, and both contribute to basic knowledge and provide pre-breeding material with the potential to impact global production. Riccardo Aversano's main scientific interests are 1) the development and exploitation of genomic and biotechnological tools to identify structural and regulative genes involved in response to stresses and in the antioxidants (i.e., anthocyanins) accumulation, 2) the biodiversity exploitation and valorization through molecular and bioinformatic tools, 3) the impact of chromosomal doubling on the genetic and epigenetic structure of polyploids, 4) the mechanisms of epigenetic regulation in crops.

Digital skills Microsoft Office™ (Word™, Excel™, PowerPoint™), R programming software, Basic knowledge of graphic design applications (Adobe Illustrator™, PhotoShop™).

ADDITIONAL INFORMATION

Publications

- 1) Villano C, Demurtas OC, Esposito S, Granell A, Ramble JL, Piombino P, Frusciante L, Carputo D, Diretto G, Aversano R (2023) Integrative analysis of metabolome and transcriptome profiles to highlight aroma determinants in Aglianico and Falanghina grape berries . *BMC Plant Biol* 23, 241.
- 2) Aiese Cigliano R, Aversano R, et al. (2022) Multi-omics data integration provides insights into the post-harvest biology of a long shelf-life tomato landrace. *Horticulture Research*, 18, 9:uhab042.
- 3) D'Amelia V, Villano C, Batelli G, Çobanoğlu O, Carucci F, Melito S, Chessa M, Chiaiese P, Aversano R, Carputo D (2020) Genetic and epigenetic dynamics affecting anthocyanin biosynthesis in potato cell culture. *Plant Science*, 298:1-11.
- 4) Villano C, Esposito S, Carucci F, Iorizzo M, Frusciante L, Carputo D, Aversano R (2019) High-throughput genotyping in onion reveals structure of genetic diversity and informative SNPs useful for molecular breeding. *Molecular Breeding*, 39:5.
- 5) D'Amelia V, Aversano R, Ruggiero A, Batelli G, Appelhagen I, Dinacci C, Martin C, Carputo D (2018) Subfunctionalization of duplicate MYB genes in *Solanum commersonii* generated the cold-induced ScAN2 and the anthocyanin regulator ScAN1. *Plant, Cell & Environment*, 41, 1038–1051.
- 6) Fasano C, Diretto G, Aversano R, D'Agostino N, Di Matteo A, Frusciante L, Giuliano G, Carputo D (2016) Transcriptome and metabolome of synthetic *Solanum* autotetraploids reveals key genomic stress events following polyploidization. *New Phytologist*, 210: 1382–1394.
- 7) Aversano R, Contaldi F, et al. (2015) The *Solanum commersonii* genome sequence provides insights into adaptation to stress conditions and genome evolution of wild potato relatives. *Plant Cell*, 27(4):954-968.
- 8) D'Amelia V, Aversano R, Batelli G, Caruso I, Moreno Castellano M, Castro-Sanz A, Chiaiese P, Fasano C, Palomba F, Carputo D (2014) High AN1 variability and interaction with basic helix-loop-helix co-factors related to anthocyanin biosynthesis in potato leaves. *Plant Journal*. 80:527-540.
- 9) Aversano R, Caruso I, Aronne G, De Micco V, Scognamiglio N, Carputo D (2013) Stochastic changes affect *Solanum* wild species following autopolyploidization. *Journal of Experimental Botany*. 64(2):625–635.
- 10) Mirouze M, Lieberman-Lazarovich M, Aversano R, Bucher E, Nicolet J, Reinders J, Paszkowski J. (2012) Loss of DNA methylation affects the recombination landscape in *Arabidopsis*. *Proceedings of the National Academy of Sciences of the United States of America*. 109(15):5880-5885.

Projects

- INDIGENA, PSR Campania, Coordinator (2020 – now).
- ADAPT – Influence of agro-climatic conditions on the microbiome and genetic expression of grapevines for the production of red wines: a multidisciplinary approach, PRIN2017, MUR, PI for UNINA (2018 – now).
- PORES – Deployment of potato genetic resources for sustainable agriculture, UNINA (FRA), Coordinator (2017 – 2019).