

EUROPEAN
CURRICULUM VITAE
FORMAT



PERSONAL INFORMATION

Name	LINDA AVESANI
Address	UNIVERSITA' DEGLI STUDI DI VERONA STRADA LE GRAZIE, 15. 37134 VERONA
SCOPUS links	https://www.scopus.com/authid/detail.uri?authorId=7801510680
Other link	https://www.dbt.univr.it/?ent=persona&id=151
E-mail	linda.avesani@univr.it
Nationality	Italian
Date of Birth	2/12/1975

WORK EXPERIENCE

- | | |
|------------------------------------|--|
| • Dates (from - to) | April 2020 - today |
| • Name and address of the employer | Università degli Studi di Verona – Department of Biotechnology |
| • Occupation or position held | Associate professor – Plant Genetics (AGR/07) |
| • Dates (from - to) | November 2016 – March 2020 |
| • Name and address of the employer | Università degli Studi di Verona – Department of Biotechnology |
| • Occupation or position held | Senior Researcher - Plant Genetics (AGR/07) |
| • Dates (from - to) | March 2012 – October 2016 |
| • Name and address of the employer | Università degli Studi di Verona – Department of Biotechnology |
| • Occupation or position held | Junior Researcher – Plant Genetics (AGR/07) |

INTERNATIONAL EXPERIENCE

September 2005-January 2006
John Innes Centre, Norwich (UK)
Visiting Scientist

July 2023
UC Davis, Davis (USA).
Visiting Scientist

EDUCATION AND TRAINING

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|--|---|
| • Dates (from - to) | 2004-2012 |
| • Name and type of organisation providing education and training | Università degli Studi di Verona |
| • Title of qualification awarded | Post Doc |
| • Dates (from - to) | 2001 – 2004 |
| • Name and type of organisation providing education and training | Università degli Studi di Verona |
| • Principal subjects/occupational skills covered | Expression of human GAD65 in plant systems |
| • Title of qualification awarded | Doctorate in Agro-Industrial Biotechnology |

- Dates (from - to)
- Name and type of organisation providing education and training
- Principal subjects/occupational skills covered
- Title of qualification awarded

1994 - 2000

Università degli Studi di Verona

Experimental degree thesis on Molecular Farming

Graduate in Agro-Industrial Biotechnology

PERSONAL SKILLS AND COMPETENCES

MOTHER TONGUE
OTHER LANGUAGES

ITALIAN
ENGLISH

SCIENTIFIC SKILLS AND COMPETENCES

- Research interests (5 Key words): plant molecular farming, Urban biodiversity, metabolic engineering, plant secondary metabolites, biopharmaceuticals.
- Author of 41 publications on Scientific Journals.
- Lecturer of 25 academic courses or modules since 2012 (i.e. Molecular farming, Plant Bioreactors, Plant Genetics, Genetics and Molecular Methodologies).
- Organization and Communication at national and international congresses (more than 50 communications).
- Supervisor of more than 60 university theses (three-year, specialist and master's); guiding teacher and co-rapporteur of 3 doctoral theses.
- Invited speaker:
 - o Avesani L., "Plant molecular farming of Virus Nano Particles from diagnosis to therapy" Transgenic Plants and Transformation Technologies VI, Vienna 2022 VISCEA
 - o Avesani L., "Piante Officiali: Aspetti Bio-agronomici, genetici e (fito)Terapeutici" Accademia dei Georgofili, Napoli 2022.
 - o Avesani L., "I virus vegetali: alleati per la salute umana?" FISV Days- Trento 2021
 - o Avesani L., "Molecular farming: the use of plant as bio factories for high-value products production molecules" Horizons in Plant Biotechnology, Scuola Sant'Anna di Pisa. On-line, 2021
 - o Avesani L., "Plant molecular Farming perspectives" Seminar for University of Sassari. On-line, 2020.
 - o Avesani L. Plant-made nanomaterials for diagnosis and therapy. XV FISV Congress. Sapienza University of Rome, 2018.
 - o Avesani L. Taming Plant Viruses - Fundamental Biology to Bionanotechnology. Biochemical Society. Pitlochry, UK 2016.
 - o Avesani L. Success Project: "Plant-made GREEN Kit". Bioeconomy and Biotech Topics in H2020 SME Instrument: new frontiers and opportunities. Italian Forum on Industrial Biotechnology and Bioeconomy. Altavilla Vicentina (CUOA) 23 September 2016
 - o Avesani L. Molecular farming - lessons learned for autoimmune diseases. International School of Pharmacology. Course on Nutraceuticals. Erice 26-30 September 2015.
 - o Avesani L. Molecular farming: produzione di molecole di interesse medico in planta. University of Urbino. Urbino 2006.

RELEVANT ROLES AND COMPETENCES

Coordination and administration of people, projects and budgets; awards

- Scientific and R&D Advisor of Diamante srl, spin-off of the University of Verona (today)
- Chief Executive Officer of Officina Biotecnologica srl, spin-off of the University of Verona (2014-2016)
- Coordinator of research projects as principal investigator or working package leader:
 - o 2022-2024 participant in the project National Biodiversity Future centre financed by European union (Next Generation EU). Spoke 6: Biodiversity and human wellbeing.
 - o 2017-2022 "Pharma-Factory". Funding body: Horizon2020, Bio-based Industry. Role: WP Leader;
 - o 2018-2019 "Pi-Greek". Funding body: Horizon2020, SME- Instrument Phase 1 Role: Scientific coordinator;

- 2016-2020 “Traditional and Innovative Approaches for the use of woad in textile industry”. Funding Body: University of Verona. Role: Principal Investigator
- 2012-2015 “Development of new strategies for autoimmune diseases immuno-modulation by using peptides produced in plant platforms”. Funding Body: MIUR, FIRB. Role: Principal Investigator
- 2017-2018 “Development of a prototype for vanillin production in a bioreactor”. Funding Body: Fondo Sociale Europeo (FSE). Role: Research Unit coordinator
- 2017-2020 “BB-drink: valorization of elite barley hyper-accumulating beta-glucans: from molecular characterization to healthy beverage production”. Funding Body: University of Verona. Role: Principal Investigator.
- Awards:
 - G_factor 2019
 - “GammaDonna”, 2018 Finalist.
 - Best Female Awards, 2 Corporate Gaetano Marzotto 2016
 - Marisa Bellisario. Premio Marisa Bellisario “Il germoglio d'oro”.

PUBLICATION INDEXES (SCOPUS)

- NUMBER OF PUBLICATIONS: 45
- TOTAL NUMBER OF CITATIONS: 888
- H-INDEX: 18

20 MOST RELEVANT
PUBLICATIONS

1. Lico, C., Santi, L., Baschieri, S., ...Di Bonito, P., Avesani, L. (2020). Plant Molecular Farming as a Strategy Against COVID-19 – The Italian Perspective. *Frontiers in Plant Science* 11, 609910
2. Zampieri, R., Brozzetti, A., Pericolini, E., ...Falorni, A., Avesani, L. (2020). Prevention and treatment of autoimmune diseases with plant virus nanoparticles. *Science Advances* 6(19)
3. Negri, S., Commisso, M., Avesani, L., Guzzo, F. (2021). The case of tryptamine and serotonin in plants: A mysterious precursor for an illustrious metabolite. *Journal of Experimental Botany* 72(15)
4. Bianconi, M., Ceriotti, L., Cuzzocrea, S., ...Avesani, L., Guzzo, F. (2020). Red Carrot Cells Cultured in vitro Are Effective, Stable, and Safe Ingredients for Skin Care, Nutraceutical, and Food Applications. *Frontiers in Bioengineering and Biotechnology*, 8, 575079.
5. Gecchele, E., Negri, S., Cauzzi, A., ...Zaffani, G., Avesani, L. (2021). Optimization of a sustainable protocol for the extraction of anthocyanins as textile dyes from plant materials. *Molecules*, 26(22), 6775
6. Santoni, M., Ciardiello, M.A., Zampieri, R., ...Mari, A., Avesani, L. (2019) Plant-made Bet v 1 for Molecular diagnosis. *Frontiers in Plant Science* 10, 1273
7. Arcalis E, Ibl V, Rademacher T, Avesani L, Morandini F, Bortesi L, Pezzotti M, Vitale A, Pum D, Stoeger E. Characterization of Russell-like bodies in the seeds of *Arabidopsis thaliana*. *Frontiers in Plant Science*. 2019, 10:277.
8. Bertini E, Merlin M, Gecchele E, Puggia A, Brozzetti A, Commisso M, Falorni A, Bini V, Klymyuk V, Pezzotti M, Avesani L. Design of a type-1 diabetes vaccine candidate using edible plants expressing a major autoantigen. *Frontiers in Plant Science*. 2018, 9:572.
9. Commisso M, Bianconi M, Di Carlo F, Poletti S, Bulgarini A, Munari F, Negri S, Stoccheri M, Ceoldo S, Avesani L, Assfalg M, Zoccatelli G, Guzzo F. Multi-approach metabolomics analysis and artificial simplified phytocomplexes reveal cultivar-dependent synergy between polyphenols and ascorbic acid in fruits of the sweet cherry (*Prunus avium* L.). *PLOS One*. 2017, Jul 21; 12(7): e0180889
10. Zenoni S, Fasoli M, Guzzo F, Dal Santo S, Amato A, Anesi A, Commisso M, Herderich M, Ceoldo S, Avesani L, Pezzotti M, Torielli GB. Disclosing the molecular basis of the postharvest life of berry in different grapevine genotypes. *Plant Physiology* 2016 : 16008651-8652016.
11. Merlin M, Pezzotti M, Avesani L. Edible plants for oral delivery of biopharmaceuticals. *British Journal of Clinical Pharmacology*. Br J Clin Pharmacol. 2016 Apr 1.
12. Zamboni A, Zanin L, Tomasi N, Avesani L, Pinton R, Varanini Z, Cesco S. Early transcriptomic response to Fe supply in Fe-deficient tomato plants is strongly influenced by the nature of the chelating agent. *BMC Genomics*. 2016 Jan 7;17(1):35.
13. Tinazzi E, Merlin M, Bason C, Beri R, Zampieri R, Lico C, Bartoloni E, Puccetti A, Lunardi C, Pezzotti M, Avesani L. Plant-Derived Chimeric Virus Particles for the Diagnosis of Primary Sjögren Syndrome. *Front Plant Sci*. 2015 Dec 1;6
14. Merlin M., Gecchele E., Arcalis E., Remelli S., Brozzetti A., Pezzotti M., Avesani L. Engineering the subcellular localization of GAD65 in plant cells is an efficient tool for the optimization of upstream production and downstream processing. *Biotechnology Journal*, 2015.
15. Pinnola A, Ghin L, Gecchele E, Merlin M, Alboresi A, Avesani L, Pezzotti M, Capaldi S, Cazzaniga S, Bassi R. Heterologous Expression of Moss Light-harvesting Complex Stress-related 1 (LHCSR1), the Chlorophyll a-Xanthophyll Pigment-protein Complex Catalyzing Non-photochemical Quenching, in *Nicotiana sp.* *J Biol Chem*. 2015 Oct 2;290(40):24340-54.
16. Milia G, Camiolo S, Avesani L, Porceddu A. (2015). The dynamic loss and gain of introns during the evolution of the Brassicaceae. *Plant J*, 82(6)
17. Commisso M, Negri S, Bianconi M, Gambini S, Avesani S, Ceoldo S, Avesani L, Guzzo F. (2019). Untargeted and Targeted Metabolomics and Tryptophan Decarboxylase In Vivo Characterization Provide Novel Insight on the Development of Kiwifruits (*Actinidia deliciosa*). *Int J Mol Sci* 20(4)
18. Cavallini E, Zenoni S, Finezzo L, Guzzo F, Zamboni A, Avesani L, Torielli GB. Functional diversification of grapevine MYB5a and MYB5b in the control of flavonoid biosynthesis in a petunia anthocyanin regulatory mutant. *Plant Cell Physiol*. 2014 Mar;55(3):517-34.
19. Morandini F, Avesani L, Bortesi L, Van Droogenbroeck B, De Wilde K, Arcalis E, Bazzoni F, Santi L, Brozzetti A, Falorni A, Stoger E, Depicker A, Pezzotti M. Non-

- food/feed seeds as biofactories for the high-yield production of recombinant pharmaceuticals. Plant Biotechnol. J. 2011. 9(8): 911-921.
20. Avesani L, Vitale A, Pedrazzini E, De Virgilio M, Pompa A, Barbante A, Gecchele E, Dominici P, Morandini F, Brozzetti A, Falorni A, Pezzotti M. Recombinant human GAD65 accumulates to high levels in transgenic tobacco plants when expressed as an enzymatically inactive mutant. Plant Biotechnology Journal. 2010 Oct 8(8): 862-872.

PATENTS

- 5 National Patents: RM2008A000375, 102015000020005, No. 102022000000581, No. 102021000028496, No. 102020000029498; 2 European Patents: WO 2010010594, WO201619401 A1; 2 US Patent: US20110289630, N. 15/579150 -

According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV

Verona, 19.08.20234

Signature

