

Brief CURRICULUM VITAE of Silvia GUIDONI
(updated on 25 March 2024)

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Silvia Guidoni has a degree in Agricultural Sciences, specializing in Viticulture and Oenology. She obtained his PhD in Arboriculture and Pomology at the University of Turin. She is an Associate Professor at the Department of Agricultural, Forestry and Food Sciences of the same University.

She was a scholarship student at the “Station Fédérale de recherches agronomiques de Changins (CH), visiting Professor at the “Universidade de Trás-os-Montes e Alto Douro (Vila Real, Portugal), visiting research at the Viticulture Department of the ARC-Fruit, Vine and Wine Research Institute of Stellenbosch, South Africa and visiting researcher at Universidad Nacional de Cuyo (UNCUYO), Mendoza (Argentina) in the framework of the Horizon2020 Project vWISE.

Teaching activities

Her teaching career has spanned 26 years at the University of Turin, where she is teaching “*Vineyard management*”, in the “*Viticulture and Enology*” for the degree program; she also taught “*Viticulture and Vineyard management*” and “*Vineyard Management, environment and ripening*” in the “*Viticulture and Enology Science International master program of the University of Turin* and “*Soil management and fertilization*” and “*Basic in soil*” for the International master program *Vinifera* (EMAVE consortium).

She has been mentor of 80 students of graduation program and 25 master students; she is/has served as a mentor/advisor or co-advisor for 9 PhD students. She has been member of evaluation committees of the “*PhD Course in Agriculture, Forest and Food Science - Italo Eynard*” (University of Turin) and abroad (University of Nova Gorica - Slovenia, Stellenbosch University - South Africa, University of Adelaide and Charles Sturt University - Australia, Bordeaux - France).

She has been a member of the Education Commission of her Department, member of the Monitoring and Review Commission and responsible for the Quality Program of the degree program in Viticulture & Enology.

Research activities

She is/has been a director of research programs supported by national, local and private financing and member of the University of Turin research team in the national research programs. She works in cooperation with several national and international interdisciplinary research group and also develops research activities in collaboration with many wine companies in Piemonte (north-western Italy).

Her researches and publications have focused on *Vitis vinifera* cultivar and clone characterisation; vineyard management and grape quality; relationship between site topography, vineyard microclimate, and grape maturation; vineyard microclimate and its influences on grape ripening; vineyard management and its influences on secondary metabolites in grape; vineyard management practices and soil characteristics; biodiversity expressions in vineyard; ICT in precision/decision viticulture.

She is co-author of more than 140 articles appeared on the national and international peer review journals, conference proceedings and technical journals. Her current H Index is at 17

Most peculiar and recent ISI articles

1. Cravero M.C., Guidoni S., Schneider A., Di Stefano R. 1994. Caractérisation variétale de cépages musqués à raisin coloré au moyen de paramètres ampélographiques descriptifs et biochimiques. *Vitis*. 33, 2, 75-80. <https://doi.org/10.5073/vitis.1994.33.75-80>. (cited 26 times)
2. Guidoni S., Mannini F., Ferrandino A., Argamante N., Di Stefano R. 1997. The effect of grapevine leafroll and rugose wood sanitation on agronomic performance and berry and leaf phenolic content of a Nebbiolo

- clone (*Vitis vinifera* L.). *Am. J. Enol. Vitic.* 48,438-442. <https://doi.org/10.5344/ajev.1997.48.4.438>. (cited 70 times)
3. Guidoni S., Mannini F., Ferrandino A., Argamante N., Di Stefano R. 2000. Effect of virus status on leaf and berry phenolic compounds in two wine grapevine *Vitis vinifera* cultivars. 5th International Symposium on Grapevine Physiology, Jerusalem, Israel, May 25-30. *Acta Horticulturae*, 526, 445-452. <https://doi.org/10.17660/ActaHortic.2000.526.49>. (cited 16 times)
 4. Guidoni S., Allara P., Schubert A. 2002. Effect of Cluster Thinning on Berry Skin Anthocyanin Composition of *Vitis vinifera* cv. Nebbiolo. *Am. J. Enol. Vitic.*, 53, 3, 224-226. <https://doi.org/10.5344/ajev.2002.53.3.224>. (cited 143 times)
 5. Rolle L., Guidoni S. 2007. Color and anthocyanin evaluation of red winegrapes by CIE L*, A*, B* parametres. *J. Int. Sci. Vigne Vin*, 41, 4, 193-201. <https://doi.org/10.20870/oeno-one.2007.41.4.838>. (cited 52 times)
 6. Guidoni S., G. Oggero, S. Cravero, M. Rabino, M.C. Cravero, P. Balsari. 2008. Manual and mechanical leaf removal in the bunch zone (*Vitis vinifera* L., cv. Barbera): effects on berry composition, health, yield and wine quality, in a warm temperate area. *J. Int. Sciences Vigne Vin*, 42,1, 49-58. <https://doi.org/10.20870/oeno-one.2008.42.1.831>. (cited 29 times)
 7. Guidoni S., Ferrandino A., Novello V. 2008. Effects of Seasonal and Agronomical Practices on Skin Anthocyanin Profile of Nebbiolo Grapes. *Am. J. Enol. Vitic.*, 59, 1, 22-29. DOI: [10.5344/ajev.2008.59.1.22](https://doi.org/10.5344/ajev.2008.59.1.22). (cited 103 times)
 8. Ferrandino A., Guidoni S. 2010. Anthocyanins, Flavonols And Hydroxycinnamates: an attempt to use them to discriminate *Vitis vinifera* l. cv 'Barbera' clones." *Eur Food Res Technol.*, 230, 3, 417-427. <http://dx.doi.org/10.1007/s00217-009-1180-3>. (cited 56 times)
 9. Chorti E., Guidoni S., Ferrandino A., Novello V. 2010. Effects of different cluster sunlight exposure levels on ripening and anthocyanin accumulation in Nebbiolo grapes. *Am J. Enol. Vitic.*, 61, 1, 23-30. DOI: [10.5344/ajev.2010.61.1.23](https://doi.org/10.5344/ajev.2010.61.1.23). (cited 173 times)
 10. Barbagallo M.G. Guidoni S., Hunter J.J. 2011. Berry Size and Qualitative Characteristics of *Vitis vinifera* L. cv. Syrah. *S. Afr. J. Enol. Vitic.*, Vol. 32, 1, 129-136. <http://dx.doi.org/10.21548/32-1-1372>. (cited 79 times)
 11. Rolle L., Torchio F., Ferrandino A., Guidoni S. - 2012 - Influence of wine-grape skin hardness on the kinetics of anthocyanin extraction. *International Journal of Food Properties*, 15, 2, 249-261. <https://doi.org/10.1080/10942911003778022>. (cited 44 times)
 12. Guidoni S., Hunter J.J. 2012. Anthocyanin profile in berry skins and fermenting must/wine, as affected by grape ripeness level of *Vitis vinifera* cv. Shiraz/r99. *Eur Food Res Technol*, 235, 3, 397-408. <http://dx.doi.org/10.1007/s00217-012-1744-5>. (cited 21 times)
 13. Matese A., Vaccari F.P., Tomasi D., Di Gennaro S.F., Primicerio J., Sabatini F., Guidoni S. 2013. CrossVit: Enhancing monitoring canopy management practices in viticulture. *Sensors* 2013, 13, 6, 7652-7667. <https://doi.org/10.3390/s130607652>. (cited 16 times)
 14. Matese A., Crisci A., Di Gennaro S.F., Primicerio J., Tomasi D., Marcuzzo P., Guidoni S. - 2014 - Spatial variability of meteorological conditions at different scales in viticulture. *Agricultural and Forest Meteorology*, 189-190, 159-167. <https://doi.org/10.1016/j.agrformet.2014.01.020>. (cited 26 times)
 15. Cugnetto A., Santagostini L., Rolle L., Guidoni S., Gerbi V., Novello V. 2014. Tracing the "terroirs" via the elemental composition of leaves, grapes and derived wines in cv Nebbiolo (*Vitis vinifera* L.). *Scientia Horticulturae* 172, 101-108. <https://doi.org/10.1016/j.scienta.2014.03.055>. (cited 24 times)
 16. Mania E., Isocrono D., Pedullà M.L., Guidoni S. 2015. Plant diversity in an intensively cultivated vineyard agro-ecosystem (Langhe, North-West Italy) *S. Afr. J. Enol. Vitic.*, 36, 3, 376-386. <http://dx.doi.org/10.21548/36-3-970> (cited 9 times)
 17. Giacosa S., Marengo F., Guidoni S., Rolle L., Hunter J.J. 2015. Anthocyanin yield and skin softening during maceration, as affected by vineyard row orientation and grape ripeness of *Vitis vinifera* L. cv. Shiraz. *Food Chemistry* 174, 8-15 <https://doi.org/10.1016/j.foodchem.2014.10.155>. (cited 15 times)
 18. Asproudi A., Petrozziello M., Cavalletto S., Guidoni S. 2016. Grape aroma precursors in cv. Nebbiolo as affected by vine microclimate. *Food Chemistry*, 211, 947-956. <http://dx.doi.org/10.1016/j.foodchem.2016.05.070>. (cited 46 times)
 19. Primicerio J., Caruso G., Comba L., Crisci A., Gay P., Guidoni S., Genesio L., Ricauda Aimonino D., Vaccari F.P. 2017. Individual plant definition and missing plant characterization in vineyards from high-

- resolution UAV imagery. *European Journal of Remote Sensing*, 50, 1, 179-186. <http://dx.doi.org/10.1080/22797254.2017.1308234>. (cited 37 times)
20. Comba L., Biglia A., Ricauda Aimonino D., Tortia C., Mania E., Guidoni S., Gay P. 2019 Leaf Area Index evaluation in vineyards using/exploiting 3D point-clouds from UAV imagery. *Precision Agriculture* <https://doi.org/10.1007/s11119-019-09699-x>. (cited 68 times)
 21. Asproudi A., Petrozziello M., Cavalletto S., Ferrandino A., Mania E., Guidoni S. 2020. Bunch microclimate affects carotenoids evolution in cv. Nebbiolo (V. vinifera L.). *Appl. Sci.*, 10, 3846; <https://www.mdpi.com/2076-3417/10/11/3846> (cited 9 times)
 22. Guidoni S., Drory E., Comba L., Biglia A., Ricauda Aimonino D., Gay P. 2021. A method for crop water status evaluation by thermal imagery for precision viticulture: preliminary results. *International Symposium on Precision Management of Orchards and Vineyards*, October 7-11, 2019, Palermo (Italy) *Acta Hortic.* 1314, 83-90. DOI: 10.17660/ActaHortic.2021.1314.12 <https://doi.org/10.17660/ActaHortic.2021.1314.12>. (cited 1 times)
 23. Mania E., Petrella F., Giovannozzi M., Piazzini M., Wilson A., Guidoni S. 2021. Managing vineyard topography and seasonal variability to improve grape quality and vineyard sustainability. *Agronomy*. 11(6):1142. <https://doi.org/10.3390/agronomy11061142>. (cited 6 times)
 24. Hunter J.J., Volschenk C.G., Mania E., Castro V., Booyse M., Guidoni S., Pisciotta A., Di Lorenzo R., Novello V., Zorer R., 2021. Grapevine row orientation mediated temporal and cumulative microclimatic effects on grape berry temperature and composition. *Agricultural and Forest Meteorology*, 310, 108660, ISSN 0168-1923, <https://doi.org/10.1016/j.agrformet.2021.108660>. (cited 8 times)
 25. Giffard B., Winter S., Guidoni S., Nicolai A., Castaldini M., Cluzeau D., Coll P., Cortet J., Le Cadre E., d'Errico G., Forneck A., Gagnarli E., Griesser M., Guernion M., Lagomarsino A., Landi S., Bissonais Y.L., Mania E., Mocali S., Preda C., Priori S., Reineke A., Rusch A., Schroers H-J., Simoni S., Steiner M., Temneanu E., Bacher S., Costantini E.A.C., Zaller J., Leyer I. 2022. Vineyard management and its impacts on soil biodiversity, functions, and ecosystem services. *Front. Ecol. Evol.* 10:850272. <https://doi.org/10.3389/fevo.2022.850272>. (cited 6 times)

Editorial activities

She has been:

- member of the Scientific Committee of national and international scientific congresses;
- reviser of international and national projects;
- Guest editor for the Special Issue "Recent Advances in Vineyard and Grape Quality Management" published by Applied Science in 2022
- referee for numerous scientific international journals including *Australian Journal of Agricultural Research*, *J. Int. Sci. Vigne Vin*; *Vitis*, *International Journal of Food Properties*, *South African J. Enol. Vitic.*, *Journal of Agricultural and Food Chemistry*, *Am. J. Enol. Vitic.*, *Italian J. Food Tech.*, *J. Hort. Sci. Biotech.*, *New Zealand Journal of Crop and Horticultural Science*, *Plant Physiology and Biochemistry*, *ISHS*, *International Journal of Fruit Science*, *Food Research International*, *Annals of Applied Biology*, *Physiologia Plantarum*.
- Since 2021, she is part of the Editorial Board Member of the journal "Agriculture".