



LUCA BRILLANTE, PH. D.

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Bronco Wine Co. Chair in Viticulture & Asst. Professor

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EXPERIENCE

| | |
|---|------------------|
| Bronco Wine Co, Chair in Viticulture & Asst. Professor | 08/2018-Present |
| California State University – Fresno, Dep. Viticulture and Enology | |
| Post-doctoral researcher | 05/2016-08/2018 |
| University of California - Davis Dep. Viticulture and Enology | |
| Post-doctoral researcher | 12/2014-04/2016 |
| CREA (same as USDA-ARS in ITA) Viticulture Research Center | |
| Engineer of Studies | |
| University of Burgundy – Dijon, FR | 02/2014-09/2014 |
| Ph.D. Student | |
| University of Burgundy – Dijon, FR | 01/2011-12/2013 |
| Viticulture and Enology Intern | 04/2010- 12/2010 |
| Chateau Mouton-Rothschild, 1 st Growth Bordeaux, FR | |
| Enology Intern | |
| Cave Les vins de Sylla, Apt – FR | 08/2009-11/2009 |

EDUCATION

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|------------|---|------|
| PhD | University of Burgundy, FR Earth Science/Viticulture. With highest honors | 2014 |
| MS | Bordeaux Sciences-Agro/Montpellier SupAgro, FR, Viticulture and Enology | 2010 |
| MS | University of Torino, ITA, Viticulture and Enology. With highest honors | 2010 |
| BS | University of Bari, ITA, Agricultural Sciences and Technology. With honors | 2008 |

GRANT AWARDS

Total Awards: \$2,172,170

- 1. USDA National Institute for Food and Agriculture – Non Land Grant College of Agriculture** *Brillante, L., Benes, S., Sethuramasamiraja, B.* 2022/2024

Enhancing education and research capacity in data assimilation for the spatial analysis of soils and crop performance

2. **USDA National Institute for Food and Agriculture – Hispanic Serving Institutions Education Grants Program** *Cecotti, H., Pedroza, M., Brillante, L.* 2022-2026
Undergraduate Research Experiences in Agricultural Technology: a team science approach
3. **2022 F3 Collaborative R&D Challenge, Fresno-Merced Future of Food Innovation Initiative** *Brillante, L., Carpin, S.* 2022
Partnership to advance robotics implementations in vineyard systems.
4. **2022 F3 Collaborative R&D Challenge, Fresno-Merced Future of Food Innovation Initiative** *Pinto De Castro, R., Brillante, L., Ehsani, R.* 2022
Non-invasive hybrid sensing of key chemical compositions of grapes.
5. **American Vineyard Foundation –** *Brillante, L., Laroche-Pinel, E.* 2022/2025
Variable rate irrigation scheduling based on high resolution short-wave infrared sensing and internet-of-things
6. **CSU Agricultural Research Institute – Campus Grant** *Brillante, L.* 2022/2025
Informing variable rate irrigation scheduling in vineyards with short-wave infrared hyperspectral imaging
7. **American Vineyard Foundation -** *Brillante, L.* 2021/2023
On-the-go mapping of grape composition in the field through hyperspectral machine-vision.
8. **CSU Agricultural Research Institute – Campus Grant** *Brillante, L.* 2021/2023
On-the-go mapping of grape composition in the field through hyperspectral machine-vision.
9. **CSU Agricultural Research Institute – System Grant** *Brillante, L., Fuchs, M., Cooper M.,*
Remote sensing-assisted scouting of virus infections in vineyards 2020-2022
10. **American Vineyard Foundation** 2020/2022
Control of vine mealybug (*Planococcus ficus* Signoret) in organic viticulture
11. **California Department of Food and Agriculture – 2019 Specialty Crop Block Grant Program –** *Brillante, L., Fuchs, M.*
Remote sensing-assisted scouting of virus infections in vineyards 2019/2022
12. **Daou Vineyards and Wines –** *Brillante, L.* 2019/2022
Ecophysiological characterization of Daou Mountain terroir for site-specific management
13. **CSU Agriculture Research Initiative - Seed Grant –** *Brillante, L.*
Modeling field-level grapevine water status at the regional scale through $\delta^{13}\text{C}$ analysis of grape musts and remote sensing of vine canopies 2019/2020
14. **American Vineyard Foundation –** *Brillante, L.* 2019/2022
Physiological responses of grapevine to salt stress and remediation by CaSO_4 amendments in Central Valley of California
15. **American Vineyard Foundation –** *Kurtural, S.K., Brillante, L., McElrone, A., Walker,*
Assessing rootstock biology and water uptake through proximal sensing under different wetting/drying conditions. 2017/2019

* *Indicates a student or a member of the lab*

Patents

1. Martinez, J., **Brillante, L.**, Kurtural, S. K. *Methods and compositions involving flavonols*, International Publication Number WO 2020/041310 A1, International Publication Date: Feb. 27, 2020. US Publication Number 2021/0333257 A1. US Publication Date: Oct., 28, 2021.

Peer-Reviewed Publications on Indexed Scientific Journals

1. *Sawyer, E., *Laroche-Pinel, E., Flasco, M., Cooper L. M., *Corrales, B., Fuchs, M., **Brillante, L.** *Phenotyping grapevine red blotch virus and grapevine leafroll-associated viruses before and after symptom expression through machine-learning analysis of hyperspectral images*. *Frontiers in Plant Science*, Accepted - In press
2. Bonfante, A., Brillante, L., *Terroir analysis and its complexity*. *Oeno One*, vol. 56, No. 2, doi: 10.20870/oeno-one.2022.56.2.5448
3. Priori, S., **Brillante, L.**, Bonfante, A., Vaudour, E., Winter, S., Conticelli, S. 2021 *Editorial: Biogeosciences and wine, the management and environmental processes that regulate the terroir effect in space and time*. *Frontiers in Environmental Sciences*. doi: 10.3389/fenvs.2021.711347
4. Yu, R., **Brillante, L.**, Torres, N., Kurtural, S.K. 2021, *Proximal sensing of vineyard soil and canopy vegetation for determining vineyard spatial variability in plant physiology and berry chemistry*. *OENO One*, vol. 55, No. 2, doi: 10.20870/oeno-one.2021.55.2.4598
5. **Brillante, L.**, Bonfante, A., Bramley, R., Tardaguila, J., Priori, S. 2020. *Unbiased scientific approaches to the study of terroir are needed!* *Frontiers in Earth Science*, 8:539377. doi: 10.3389/feart.2020.539377
6. Martinez-Lusher, J., Chen, C., **Brillante, L.**, Kurtural, S. K. 2020. *Mitigating heat wave and exposure damage to 'Cabernet Sauvignon' wine Grape with partial shading under two irrigation amounts*. *Frontiers in Plant Science*, 11:579192. doi: 10.3389/fpls.2020.579192
7. **Brillante, L.**, Yu, R., Martinez-Lusher, J., Kurtural, S. K. 2020 *Carbon isotope discrimination ($\delta^{13}C$) of grape musts is a reliable tool for zoning and the physiological ground-truthing of sensor maps in precision viticulture*. *Frontiers in Environmental Science* 8:561477. doi:10.3389/fenvs.2020.561477
8. Bois, B., Pauthier, B., **Brillante, L.**, Mathieu, O., Leveque, J., Van Leeuwen, C., Castel, T., Richard, Y. 2020. *Sensitivity of grapevine soil water balance to rainfall spatial variability at local scale level*. *Frontiers in Environmental Science* 8:110. doi: 10.3389/fenvs.2020.00110
9. Yu, R., **Brillante, L.**, Martinez-Lusher, J., Kurtural, S.K. 2020. *Spatial Variability of Soil and Plant Water Status and their Cascading Effects on Grapevine Physiology are linked to Berry and Wine Chemistry*, *Frontiers in Plant Science*, 11, 790
10. Martinez-Lusher, J., Plank, C. M., **Brillante, L.**, Yu, R., AlRwahnih, M., Cooper, M. L., Smith, R., Girardello, R., Oberholster, A., Kurtural, S. K. 2019. *Grapevine red blotch virus may reduce carbon translocation leading to impaired grape berry ripening*. *Journal of Agricultural and Food Chemistry*, 67, 9, 2437-2448

11. Martinez-Luscher, J., **Brillante, L.**, Kurtural, S. K. 2019. *Flavonol profile is a reliable indicator to assess canopy architecture and the exposure of red wine grapes to solar radiation*. *Frontiers in Plant Science*, doi.org/10.3389/fpls.2019.00010
12. **Brillante, L.**, Martinez-Luscher, J., Kurtural, S.K. 2018. *Applied water and mechanical canopy management affect berry and wine phenolic and aroma composition of grapevine (Vitis vinifera L., cv. Syrah) in Central California*. *Scientia Horticulturae*, 227(3), 261-271
13. **Brillante, L.**, De Rosso, M., Dalla Vedova, A., Maoz, I., Flamini, R., Tomasi, D. 2018. *Insights on the stilbenes in Raboso Piave grape (Vitis vinifera L.) as a consequence of postharvest vs on-vine dehydration*. *Journal of Agricultural and Food Science*
14. **Brillante, L.**, Mathieu, O., Lévêque, J., Van Leeuwen, C., Bois, B. 2018. *Water status and must composition in grapevine cv. Chardonnay with different soils and topography and a mini meta-analysis of the $\delta^{13}C$ /water potential correlation*. *Journal of the Science of Food and Agriculture*, 98, 691-697
15. Martinez-Luscher, J., **Brillante, L.**, Nelson, C., Al-Kereamy, A.M., Zhuang, S., Kurtural, S. K. 2017. *Precipitation before bud break and irrigation affect the response of grapevine "Zinfandel" yields and berry skin composition to training systems*. *Scientia Horticulturae*, 227(3), 261-271
16. Martinez-Luscher, J., Chen, C.C., **Brillante, L.**, Kurtural, S. K. 2017. *Partial solar radiation exclusion with color shade nets reduces the degradation of organic acids and flavonoids of grape berry (Vitis vinifera L.)*. 2017. *Journal of Agricultural and Food Chemistry*, 65(49), 10693-10702
17. **Brillante, L.**, Martinez-Luscher, J., Yu, R., Plank, C., Sanchez, L.A., Bates, T., Breneman, C., Oberholster, A., Kurtural, S.K. 2017. *Assessing spatial variability of grape skin flavonoids at the vineyard scale based on plant water status mapping*. *Journal of Agricultural and Food Chemistry*, 65(49), 10693-10702.
18. **Brillante, L.**, Gaiotti, F., Lovat, L., Giacosa, S., Rio-Segade, S., Vincenzi, S., Torchio, F., Rolle, L., Tomasi, D. 2016. *Changes in texture analysis parameters of wine grape berries at two ripeness stages: a study on varietal effect*. *Italian Journal of Food Science*, 29(2). DOI:10.14674/1120-1770/ijfs.v623
19. **Brillante, L.**, Belfiore, B., Gaiotti, F., Lovat, L., Sansone, L., Poni, S., Tomasi, D. 2016. *Comparing kaolin and pinolene to improve sustainable grapevine production during drought*. *PLoS One*, 11(6). DOI: 10.1371/journal.pone.0156631
20. **Brillante, L.**, Mathieu, O., Lévêque, J., Bois, B. 2016. *Ecophysiological modelling of grapevine water stress in Burgundy terroirs by a machine-learning approach*. *Frontiers in Plant Science*, 7(796). DOI: 10.3389/fpls.2016.00796
21. **Brillante, L.**, Mathieu, O., Lévêque, J., Bois, B. 2016. *Variations in soil-water use by grapevine according to plant water status and soil physical-chemical characteristics. A 3D spatio-temporal analysis*. *European Journal of Agronomy*, 77:122-135
22. **Brillante, L.**, Bois, B., Mathieu, O., Lévêque, J. 2016. *Electrical imaging of soil water availability to grapevine. A benchmark experiment of several machine-learning techniques*. *Precision Agriculture*, 17(6):637-658.
23. **Brillante, L.**, Tomasi, D., Gaiotti, F., Giacosa, S., Torchio, F., Rio-Segade, S., Siret, R., Zouid, I., Rolle, L. 2015. *Relationships between skin flavonoid content and berry physical-mechanical properties in four red wine grape cultivars (Vitis vinifera L.)*. *Scientia Horticulturae*, 197:272-279

24. **Brillante, L.**, Gaiotti, F., Lovat, L., Vincenzi, S., Giacosa, S., Torchio, F., Rio-Segade, S., Rolle, L., Tomasi, D. 2015. *Investigating the use of gradient boosting machine, random forest and their ensemble to predict skin flavonoid content from berry physical-mechanical characteristics in wine grapes*. Computers and Electronics in Agriculture, 117:186-193
25. **Brillante, L.**, Mathieu, O., Bois, B., Van Leeuwen, C., Lévêque, J. 2015. *The use of soil electrical resistivity to monitor plant and soil water relationships in vineyards*. Soil 1:273-286
26. **Brillante, L.**, Bois, B., Mathieu, O., Bichet, V., Michot, D., Lévêque, J. 2014. *Monitoring soil volume wetness in heterogeneous soils by electrical resistivity. A field based pedo-transfer function*. Journal of Hydrology, 516:56-66

Outreach publications:

1. **Brillante, L.** Introducing $\delta^{13}\text{C}$: biochemical datalogger. Measuring water status during the ripening. American Vineyard Magazine, Jan 2019
2. **Brillante, L.**, Kurtural, K. Piu' fenoli gestendo la chioma e con stress idrici controllati. Vite & Vino, Dec., 2019
3. **Brillante, L.** Autonomous predictions of vineyard yield – Machine learning modeling of remote sensing and historical data assist at the block level. Progressive Crop Consultant, Sep/Oct 2020
4. **Brillante, L.**, Singh, K. Use of gypsum to reclaim salt problems in soils. Progressive Crop Consultant, Jan 2022
5. *Laroche Pinel, E., Cooper, M.L., Fuchs, M., **Brillante, L.** A new project on the application of smart technology to map red blotch virus and leafroll-associated viruses in vineyards. American Vineyard Magazine, April 2022

Scientific Conferences and Publications:

International conferences with peer-reviewed proceedings

1. *Sawyer, E., Fuchs M., Cooper M., *Corrales, B., *Singh K., *Frnzyan, T., *Vasquez, K., Laroche-Pinel, E., **Brillante, L.**, *Phenotyping of virus-infected grapevine leaves through hyperspectral imaging and machine-learning*. XI International Symposium on Grapevine Physiology and Biotechnology October 31 – November 5, 2021, Stellenbosch, South Africa.
2. **Brillante, L.**, *Use of electrical resistivity tomography in agriculture: from high throughput phenotyping to precision management*. I International Symposium on Precision Management of Orchards and Vineyards, Palermo, ITA, October 7-11, 2019
3. **Brillante, L.**, Sanchez, L., Martinez, J., Kurtural, S. K. *Can maps of plant water status assess variability in wine-grape composition and inform selective harvest decisions?* I International Symposium on Precision Management of Orchards and Vineyards, Palermo, ITA, October, 7-11, 2019
4. **Brillante, L.**, Mathieu, O., Lévêque, J., Van Leeuwen, C., Bois, B. *Soil and topography effects on water status and must composition of Chardonnay in Burgundy & a mini-meta-analysis of the $\delta^{13}\text{C}$ /water potentials correlation*, Proceedings of the 21st GiESCO International Meeting, Thessaloniki, GR, June 23-28, 2019
5. Martínez-Luscher, J., Cuntly, C., **Brillante, L.**, Yu, R., Gambetta, G., Kurtural, S.K. *Utility of leaf removal timing and irrigation amounts on grape berry flavonoids under*

climate change. Proceedings of the 21st GiESCO International Meeting, Thessaloniki, GR, June 23-28, 2019

6. Martínez-Luscher, J., **Brillante, L.**, Kurtural, S.K. *Changes in flavonol profile are a reliable indicator to assess the exposure of red grapes to solar radiation, cluster temperature gain and canopy architecture* Proceedings of the 21st GiESCO International Meeting, Thessaloniki, GR, June 23-28, 2019
7. Pauthier, B., **Brillante, L.**, Van Leeuwen, C., Bois, B. 2016. *Water status modelling: impact of local rainfall variability in Burgundy* Proceedings of the XI International Terroir Congress, Willamette Valley, OR, USA
8. **Brillante, L.**, Mathieu, O., Lévêque, J., Bois, B. 2015. *Ecophysiological modelling of Burgundy wine terroirs. Effect of climate and soil on plant water stress and fruit composition*. Proceedings of the 19th International Symposium GiESCO, Montpellier, FR
9. Decharerie, M., **Brillante, L.**, Michelin, F., Alexandre, H., Ballester, J., [...], Peyron, D., Gougeon, R. D., Monamy, C., Bois, B. 2015 *Response of Chardonnay B. grapevines to weak to moderate water deficit: vine growth and must composition* Proceedings of the 19th International Symposium GiESCO, Montpellier, FR
10. **Brillante, L.**, Mathieu, O., Lévêque, J., Van Leeuwen, C., Bois B. *Spatio-temporal visualisation and quantification of grapevine water absorption in hillslope vineyards*. 2015 Proceedings of the 19th International Symposium GiESCO, Montpellier, FR
11. **Keynote talk : Brillante, L.**, Mathieu, O., Lévêque, J., Bois, B. 2014. *Spatio-temporal analysis of grapevine water behaviour in hillslope vineyards. The example of Corton Hill, Burgundy* Proceedings of the X International Terroir Congress, Tokaj, HU
12. **Brillante, L.**, Mathieu, O., Lévêque, J., Bois, B. *Plant-soil water relationships in a hillslope vineyard. A time-lapse ERT 2D monitoring*. 2013. Proceedings of the 18th International Symposium GiESCO, Porto, PT
13. **Brillante, L.**, Bois, B., Mathieu, O., Lévêque, J. *Soil moisture dynamic in the root-zone revealed by time-lapse electrical resistivity tomography. Application to Corton Hill, Burgundy (France)*. 2012. Proceedings of the IX International Terroir Congress, Dijon-Reims, FR

International conferences with published abstracts/proceedings:

1. **Brillante, L.**, Jones, G., Tomasi, D. *Comparison of imputation methods in long and varied phenological series. Application to the Conegliano dataset, including observations from 1964 over 400 grape varieties*. Terclim2022 | XIVth International Terroir Congress + 2nd ClimWine Symposium July 3-8, 2022 | Bordeaux, France
2. **Brillante, L.**, Pedroza, M., *Singh, K., *Vasquez, K. *Late season canopy management practices to reduce sugar loading and improve color profile of Cabernet-Sauvignon grapes and wines in the high irradiance and hot conditions of California Central Valley*. Terclim2022 | XIVth International Terroir Congress + 2nd ClimWine Symposium July 3-8, 2022 | Bordeaux, France
3. **Brillante, L.**, 2020 *Within-vineyard variability in grape composition at the estate scale can be assessed through machine-learning modeling of plant water status in space and time. A case study from the hills of Adelaida District AVA, Paso Robles, CA, USA*. XI International Terroir Congress, Adelaide, 2021. IVES Conference Series, n.6686.

4. **Brillante, L.**, Bonfante, O., Priori, S. 2019 *Site-specific management in viticulture across space and time: from plant-environment interactions to the end product* Geophysical Research Abstracts Vol. 21, EGU2019-19141, 2019 EGU General Assembly 2019
5. **Brillante L.**, Walker, M.A., McElrone, A., Kurtural, S.K. *Rootstock differences in soil-water uptake during drying wetting cycles imaged with 3D electrical resistivity tomography*, Proceedings of the 21st GiESCO International Meeting, Thessaloniki, GR, June 23-28, 2019
6. **Brillante, L.**, Yu, R., Martinez-Lusher, J., Kurtural, S. Kaan. *Statewide relationships between water potentials, Gas Exchange and $\delta^{13}C$ of grape musts in California. Implications for use in precision viticulture.* Proceedings of the 21st GiESCO International Meeting, Thessaloniki, GR, June 23-28, 2019
7. **Brillante, L.**, Sanchez, L., Martinez-Lusher, J., Yu, R., Kurtural, S.K. *Mapping plant water status to indirectly assess variability in grape flavonoids and inform selective harvest decisions.* Proceedings of the 21st GiESCO International Meeting, Thessaloniki, GR, June 23-28, 2019
8. **Brillante, L.**, Martinez-Lusher, J., Kurtural, S. K. *Deficit irrigation and mechanical canopy management affect berry and wine phenolic and aroma composition of Syrah in Central California.* Proceedings of the 21st GiESCO International Meeting, Thessaloniki, GR, June 23-28, 2019
9. Yu, R., **Brillante, L.**, Martinez-Lusher, J., Kurtural, S. K. *Soil proximal sensing provides direction in delineating plant water status of 'Crimson Seedless' (Vitis vinifera, L.) vineyards.* Proceedings of the 21st GiESCO International Meeting, Thessaloniki, GR, June 23-28, 2019
10. Yu, R., **Brillante, L.**, Martinez-Lusher, J., Sanchez, L., Kurtural, S. K. *From plant water status to wine flavonoid composition: a precision viticulture approach in a Sonoma county vineyard.* Proceedings of the 21st GiESCO International Meeting, Thessaloniki, GR, June 23-28, 2019
11. **Brillante, L.**, Mathieu, O., Lévêque, J., Bois, B. 2015. *Grapevine water absorption in different soils. A spatio-temporal analysis.* Geophysical Research Abstracts Vol. 17, EGU2015-14423, 2015EGU General Assembly 2015
12. **Brillante, L.**, Mathieu, O., Lévêque, J., Bois, B. 2014. *Spatio-temporal effects of soil and bedrock variability on grapevine water status in hillslope vineyards* Geophysical Research Abstracts Vol. 16, EGU2014-14577, 2014EGU General Assembly 2014

International conferences:

1. *Laroche-Pinel, E., *Cianciola V., *Singh K., **Brillante L.** *Using Landsat 8 satellite images to measure variability in grapevine water status and berry composition.* FIRA-USA 2022, Fresno, October 18th, 2022
2. *Vasquez, K., *Laroche-Pinel E., *Partida, G., **Brillante L.** *An introduction to unmanned aircraft vehicle (UAV) based hyperspectral remote sensing of grapevine water status in a variably irrigated vineyard.* FIRA-USA 2022, Fresno, October 18th, 2022
3. Laroche-Pinel, E.*, Sawyer E.*, Corrales B.*, Singh K.*, Vasquez, K.*, Cooper, M. L., Fuchs M., Brillante L. *Vine viruses' detection with hyperspectral images of leaves and canopy using machine learning algorithms.* FIRA-USA 2022, Fresno, October 18th, 2022
4. Bhatia, A., Carpin, S., Laroche-Pinel, E.*, Brillante, L. *Partnership to advance robotics implementation in vineyards.* FIRA USA 2022, Fresno, CA, USA, October 18, 2022.

5. *Laroche-Pinel, *E., Sawyer, E., *Corrales, B., *Singh, K., *Vasquez, K., *Cooper, M., Fuchs, M., Brillante, L. *Identification of leafroll and red blotch viruses in grapevine leaves and canopy using VIS/NIR hyperspectral imagery*. IEEE-WHISPERS, Vegetation & Precision Farming session, September 13, 2022
6. **Brillante, L.**, Flamini, R., De Rosso, M., Dalla Vedova, A., Giacosa, S., Rolle, L., Tomasi, D. 2016. *On-vine vs warehouse dehydration of Corvina wine grapes. Differences in metabolomic and texture evolution with time*. 10th International Symposium on Grapevine Physiology and Biotechnology, Verona, IT
7. *Laroche-Pinel, E., Sawyer, E., Corrales, B., Singh, K., Vasquez, K., Cooper, M., Fuchs, M., Brillante, L., 2022. *Identification of leafroll and red blotch viruses in grapevine leaves and canopy using VIS/NIR hyperspectral imagery*, IEEE-WHISPERS, Vegetation & Precision Farming session.

National conferences with peer-reviewed proceedings:

1. **Brillante, L.**, Gaiotti, F., Lovat, L., Vincenzi, S., Giacosa, S., Torchio, F., Rio Segade, S., Rolle, L., Siret, R., Zouid, I., Tomasi, D. 2016. *Predire la quantita' di flavonoidi totali nella buccia utilizzando le proprieta' fisico-meccaniche dell'acino di uva da vino*. Acta Italus Hortus 19:105-106
2. **Brillante, L.**, Belfiore, N., Gaiotti, F., Lovat, L., Sansone, L., Poni, S., Tomasi, D. 2016. *Confronto tra caolino e pinolene per il miglioramento della produzione viticola sostenibile in condizioni di stress idrico*. Acta Italus Hortus 19:33-34

National conferences with abstracts published in indexed journals:

1. Martínez-Luscher, J., **Brillante, L.**, Kurtural, S.K *Flavonol profile of red grape (Vitis vinifera L.) berries is a reliable indicator to assess their exposure to solar radiation and study changes in their composition*. American Society for Horticultural Sciences Annual Conferences 2019, Las Vegas, NV, HortScience, vol. 54 (9), S55-56
2. Yu, R., **Brillante, L.**, Martinez-Luscher, J., Sanchez, L., Kurtural, K., *Assessing spatial variability in wine flavonoid composition based on vineyard plant water status mapping*. American Society for Horticultural Sciences Annual Conferences 2019, Las Vegas, NV, HortScience, vol. 54 (9), S312-313.

National conferences:

1. *Laroche-Pinel, E., *Corrales, B., *Singh, K., *Sawyer, E., Cooper, M. L., Fuchs, M., **Brillante, L.** *Identifying red blotch and leafroll viruses in VIS/NIR hyperspectral images acquired on the ground in the field*. 73rd ASEV National Conference, June 19-22, 2022 San Diego, CA, USA
2. *Partida, G., *Singh, K., *Vasquez, K., Pedroza, M., **Brillante, L.** *Late season source limitation practices to delay ripening and improve color profile of Cabernet-Sauvignon grapes and wines*. 73rd ASEV National Conference, June 19-22, 2022 San Diego, CA, USA
3. *Partida, G., *Singh, K., *Vasquez, K. R., Mercer, N. H., Daane, K. M., **Brillante L.** *Comparison of insecticides to control vine mealybugs (Planococcus ficus Signoret) in organic wine grape production*. 73rd ASEV National Conference, June 19-22, 2022 San Diego, CA, USA

4. *Sawyer, E., *Laroche-Pinel, E., Flasco, M., Cooper, M.L., Corrales, B., Fuchs, M., **Brillante L.** *Comparing machine-learning methods in classifying red blotch and leafroll viruses in VIS hyperspectral images of leaves.* 73rd ASEV National Conference, June 19-22, 2022 San Diego, CA, USA
5. *Singh, K., *Partida, G., **Brillante, L.** *Comparison of calcium-based amendments and their effects on vines and soils. A three-year study in a sodic soil in SJV.* 73rd ASEV National Conference, June 19-22, 2022 San Diego, CA, USA
6. *Vasquez, K. R., *Laroche-Pinel, E., **Brillante, L.** *Monitoring grapevine water status at the regional scale of the San Joaquin Valley using remotely sensed actual evapotranspiration.* 73rd ASEV National Conference, June 19-22, 2022 San Diego, CA, USA
7. Kurtural, S.K., Chen, C., Martinez-Luscher, J., Brillante, L. *Mitigating Heat Wave Damage to Cabernet Sauvignon Winegrape with Partial Shading under Two Irrigation Amounts.* 73rd ASEV National Conference, June 19-22, 2022 San Diego, CA, USA.
8. **Brillante, L.** *Assisting irrigation scheduling through machine-learning modeling of grapevine water status in space and time.* 72nd ASEV National Conference, June 21-24 2021
9. *De Censi, P., *Singh, K., *Sanjuan, A., **Brillante, L.** *Use of VIS-NIR Hyperspectral Imaging to Quantify Anthocyanins, Soluble Solids and Titratable Acidity in Grape Berries.* 72nd ASEV National Conference, June 21-24, 2021
10. *Singh, K., *De Censi, P., **Brillante, L.** *Monitoring Grapevine Response to Calcium Based Soil Amendments through Remote Sensing in San Joaquin Valley, California.* 72nd ASEV National Conference, June 21-24, 2021
11. *Singh, K., Daane, K., **Brillante, L.** *Control of Vine Mealybug (*Planococcus ficus* Signoret) in Organic Viticulture.* 72nd ASEV National Conference, June 21-24, 2021
12. *Vasquez, K., Fuchs M., Cooper, M., **Brillante, L.** *Remote Sensing-Assisted Scouting of Virus Infections in Vineyard.* 72nd ASEV National Conference, June 21-24, 2021
13. **Brillante, L.** *Weed Control in Vineyards : Sustainability and Consumer Perception.* 2020 Unified Wine & Grape Symposium
14. **Brillante, L.** *Autonomous predictions of vineyard yield through machine-learning modelling of remote-sensing and historical data.* 70th ASEV National Conference, Napa, CA, USA, June 17-20, 2019
15. **Brillante, L.**, Mathieu, O., Leveque, J., van Leeuwen C., Bois, B. *Effects of soil and topography on water status of chardonnay and meta-analysis of the $\delta^{13}C$ /water potentials correlation.* 70th ASEV National Conference, Napa, CA, USA, June 17-20, 2019
16. *Drake, C., *Ramagli, M., Chou, M-Y, **Brillante, L.**, Shrestha, A. *Potential Use of Remote Sensing in Vineyard Weed Management,* 70th ASEV National Conference, Napa, CA, USA, June 17-20 2019
17. *Ramagli, M., **Brillante, L.** *Meta-analysis of plant water relations in California vineyards* 70th ASEV National Conference, Napa, CA, USA, June 17-20, 2019
18. Yu, R., **Brillante, L.**, Martinez-Lusher, J., Sanchez, L., Kurtural, S. K. *Proximal soil sensing for vineyard management in Crimson Seedless table grape.* 69th ASEV National Conference, Monterey, CA, USA, June 18-21, 2018

19. Pierce, M.A., Cuntly, C., Martinez-Lusher, J., **Brillante, L.**, Kurtural, S.K. *Applied water amount, not timing of leaf removal, alters grapevine berry flavonoid content in Cabernet Sauvignon*. 69th ASEV National Conference, Monterey, CA, USA, June 18-21, 2018
20. Chen, C., Martinez-Lusher, J., **Brillante, L.**, Kurtural, S.K. *Partial solar radiation exclusion, not applied water amount, mitigates grape berry flavonoid concentration*. 69th ASEV National Conference, Monterey, CA, USA, June 18-21, 2018
21. **Brillante, L.**, Yu, R., Martinez-Lusher, J., Kurtural, S.K. *$\delta^{13}C$ in sugars as a proxy for photosynthesis and water stress in precision viticulture: a statewide study in California*. 69th ASEV National Conference, Monterey, CA, USA, June 18-21, 2018
22. **Brillante, L.**, Cheng, W.C., Walker, A., McElrone, A., Kurtural, S. K. *Differences in spatial water uptake by rootstocks 110R and 101-14Mg revealed by multidimensional ERT*. 69th ASEV National Conference, Monterey, CA, USA, June 18-21, 2018
23. **Brillante, L.**, Martinez-Lusher, J., Yu, R., Kurtural, S.K. *Assessing spatial variability of grape skin flavonoids at the vineyard scale based on plant water status mapping*. 69th ASEV National Conference, Monterey, CA, USA, June 18-21, 2018
24. Martinez-Lusher, J., **Brillante, L.**, Kurtural, S.K. *Changes in grape flavonoid composition driven by exposure to solar radiation: new view on an old topic*. 69th ASEV National Conference, Monterey, CA, USA, June 18-21, 2018
25. Martinez-Lusher, J., Pierce M. A., **Brillante, L.**, Kurtural, S.K. *Grape ripening through source-sink ratio manipulation*. 69th ASEV National Conference, Monterey, CA, USA, June 18-21, 2018
26. **Brillante, L.**, Martinez-Lusher, J., Yu, R., Smith, R., Bates, T. L., Kurtural S. K. *Assessing variability in the vineyard through a spatially explicit selective harvest approach based on plant water status mapping*. American Society for Horticultural Sciences Annual Conferences 2017, Kona, HI, US
27. Kurtural, S.K., Nelson, C., **Brillante, L.**, Zhuang, S. *Production systems and applied water amounts interact on productivity and berry composition of Zinfandel*. 68th ASEV National Conference, Bellevue, WA, USA, June 26-29, 2017
28. Martinez-Lusher, J., Chen, C. C., **Brillante, L.**, Kurtural S. K. *Partial solar radiation exclusion with color shade cloths may improve red wine grape composition*. 68th ASEV National Conference, Bellevue, WA, USA, June 26-29, 2017
29. Yu, R., **Brillante, L.**, Martinez-Lusher, J., Plank, C., Chen, C., Sanchez, L., Bates, T., Sams, B., Kurtural, S. K. *Proximal sensing and stratified sampling in vineyards provide directions in coalescing vineyard variability*. 68th ASEV National Conference, Bellevue, WA, USA, June 26-29 2017
30. **Brillante, L.**, Kurtural, K., Sanchez, L., Yu, R., Oberholster, A., Brennaman, C., Bates, T. *Assessing variability in the vineyard through a spatially explicit selective harvest approach*. 68th ASEV National Conference, Bellevue, WA, USA, June 26-29 2017
31. **Brillante, L.**, Bois, B., Mathieu, O., Lévêque, J. *Utilisation de la tomographie électrique pour l'analyse des sols et des sous-sols des climats de Bourgogne*. Journée Pari DINOS, Dijon, FR, 2011.

State conferences:

1. **Brillante, L.** *Identification of Leafroll and Red Blotch Viruses in Grapevine Leaves and Canopy Using VIS/NIR Hyperspectral Imagery*. 6th Annual ARI Principal Investigators Meeting, Sacramento, October 21st, 2022

2. *Laroche-Pinel, E., *Partida L., *Vasquez K., *Cianciola V., **Brillante L.** *On-The-Go Mapping of Grape Composition Through NIR Hyperspectral Imaging*. 6th Annual ARI Principal Investigators Meeting, Sacramento, October 21st, 2022
3. *Vasquez, K., *Laroche-Pinel, E., *Partida, L., *Cianciola, V., *Rico, A., **Brillante, L.** *UAV-based short-wave-infrared imagery to inform scheduling in variable-rate irrigated vineyards* 6th Annual ARI Principal Investigators Meeting, Sacramento, October 21st, 2022
4. *Laroche-Pinel, E., *Cianciola V., *Singh K., **Brillante L.** *Measuring Grapevine Water Status Using Landsat 8 Satellite Images*. Fall 2022 Fresno State Water Showcase: Imagine a Day Without Water, Fresno, October 20th, 2022.
5. *Vasquez, K., *Laroche-Pinel, E., *Partida L., **Brillante L.** *Remote Sensing of Grapevine Water Status Using Hyperspectral Camera Mounted on an Unmanned Aircraft Vehicle (UAV): Study Case in a Variably Irrigated Vineyard*. Fall 2022 Fresno State Water Showcase: Imagine a Day Without Water, Fresno, October 20th, 2022
6. *Singh, K., Sun, Q., **Brillante, L.**, *Physiological responses of grapevine to salt stress and remediation by CaSO₄ amendments in Central Valley of California*. California Plant and Soil Conference, February 4-5, 2020.
7. *Drake, C., **Brillante, L.**, Chou, M-Y, Shrestha, A. *Potential Use of Remote Sensing in Vineyard Weed Management*, California Plant and Soil Conference, February 5-6, 2019, Fresno
8. *Drake, C., **Brillante, L.**, Chou, M-Y, Shrestha, A. *Potential Use of Remote Sensing in Vineyard Weed Management*, 71st Annual Meeting of the California Weed Science Society, January 23-26, 2019, Sacramento

Invited talks & Professional Conferences:

1. 2022. Virus diseases in vineyards and new technology to deal with them. Sustainable and Organic Production Webinar, Organic Fertilizer Association of California. Online. December 1, 2022
2. 2022. Envisioning new technology for sustainable and resilient grape growing. Karen Ross Visit to Fresno State. November 21, 2022
3. 2022. Assessing Grapevine Behavior in Space-time for Precise Vineyard Management. Sustainable Ag Expo, San Luis Obispo, November 14, 2022
4. 2022. Canopy Management Techniques to Improve Wine Grapes in Hot Climates, Tree and Vine Expo, Turlock, November 8, 2022
5. -2022. Late Season Canopy Management to Improve Wine Grapes and Wine in a Changing Climate, Progressive Crop Consultant Conference, Visalia, Sept. 28, 2022
6. -2022. Toward a sensing system for autonomous mapping of infected vines. Fresno State Grapevine Viruses Symposium, Fresno. June 9, 2022
7. -2022. Artificial intelligence and remote sensing in irrigation scheduling. San Joaquin Valley Research Roadshow, Parlier. June 9, 2022.
8. -2022. Remote Sensing of Virus and Grape Quality. UC Vineyard IPM Meeting. June 2, 2022.
9. -2022. Digital Viticulture at Fresno State. California State University Fresno, Vit/Enol Spring Seminar Series
10. -2022. Digital Viticulture at Fresno State. Merced, University of California Merced, Feb 25, 2022.

11. -2021. Early detection of leafroll and red blotch affected grapevines with new technologies. Online – Organic Fertilizer Association of California. December 2, 2021.
12. -2021. Drought irrigation scheduling with machine-learning technology. Tree & Vine Expo, Turlock, November 9, 2021
13. -2021. Grapevine yield prediction with machine-learning. Crop Consultant Conference, Visalia, September 16, 2021.
14. -2021. Comparison of calcium-based amendments and their effects on plants and soils. A viticulture case of study. Organic Fertilizer Association, Tulare August 12, 2021
15. -2021. Remote sensing of virus infections through hyperspectral imagery. San Joaquin Valley Wine Growers Association. June 23, 2021
16. -2021. The HYPERVID project, hyperspectral virus identification and detection. Napa Valley Wine Tech Group, April 26, 2021.
17. -2020. Grapevine responses to water deficit and heat stress. Tree & Vine Expo, Virtual, November 11, 2020.
18. -2020. Vineyard soil reclamation by different forms and doses of CaSO₄ amendments in the San Joaquin Valley of California. November 5, 2020. Universidad Autonoma de Baja California, Facultad de Enologia y Gastronomía.
19. -2020. Reclaiming sodic soils with different forms of calcium sulfate in San Joaquin Valley vineyards. Sustainable & Organic Production Webinar - Organic Fertilizer Association of California, August 6, 2020.
20. -2020. Vineyard soil reclamation by different forms and doses of CaSO₄ Amendments in the San Joaquin Valley of California, Fresno State Grape Day, August 4, 2020
21. -2020. Remote sensing in viticulture. San Joaquin Valley Winegrowers Association Research Roadshow. June 4th, 2020
22. -2020. Informed selective harvest decisions from management zones obtained by mapping plant water status. March 2, 2020, California State University, Fresno
23. -2020. Vineyard soils, soil water content, pedology and zoning using plant based measurements in a precision viticulture context. Advanced Grapevine Irrigation Scheduling and Management, UC Davis, March 4, 2020.
24. -2020. Exploring Methods of AI and Machine Learning in Agriculture. Paso Robles Vintage Report, Feb 25, 2020.
25. -2020. Digital Viticulture. World Ag Expo, Tulare, Feb 18, 2020
26. -2020. Grapevine Red Blotch Associated Virus. World Ag Expo, Tulare, Feb 18, 2020
27. -2020. Physiological responses of grapevine to salt stress and remediation by CaSO₄ amendments in Central Valley of California. Current Wine and Wine Grape Research, UC Davis, Feb 11, 2020.
28. -2020. Exploring Methods of AI in Agriculture, A Panel Discussion. Napa Valley Vintage Report, Jan 29, 2020.
29. -2019. Protecting grapes from hot weather with kaolin clay. 2019 Tree and Vine Expo, Turlock, November 12th, 2019
30. -2019. Precision viticulture and implementation of variable rate and site-specific management approaches, 20th Annual Sustainable Winegrowing Field Day, July 26th 2019
31. -2019 Esperienze di ricerca e gestione degli stress climatici nei vigneti californiani. In : Cambiamenti climatici e viticoltura : stato dell'arte in regione Campania e prospettive di adattamento – National Research Council, CNR-ISAFOM, Naples, IT, July, 2nd 2019

32. -2019. Site-specific management in viticulture. Innovating tradition. Research that will change the way you are making wine. Wine Business Innovation + Quality, Napa, May 22, 2019
33. -2019. Vineyard Mechanization demo. Leaf removal. California State University Fresno, May 21, 2019
34. -2019. Vineyard Mechanization demo. Mechanical desuckering and cultivation. April 11, 2019
35. -2019. Effects of sun radiation and temperature on grape composition. Implications for vineyard management. Vintage Report Sonoma 2018, March 22, 2019
36. -2019. It's Hot! How Central Coast leaders are adapting to raising temperatures. WiVi Central Coast, Paso Robles, March 13, 2019
37. -2019. Plant-soil water relationships in vineyards. Southern Oregon Grape Symposium, Medford, Oregon State 2018, March 12, 2019
38. -2019 Rootstock Differences in Soil-Water Uptake During Drying-Wetting Cycles Imaged with 3D Electrical Resistivity Tomography, Current Wine and Wine Grape Research, UC Davis, February 27, 2019
39. -2019. Site-selection and pre-plant amendments. UC Davis and UC ANR Wine Grape Short Course, Napa, February 13, 2019
40. -2019. Environmental variability affect grapevine composition and yield: experiences of monitoring and management in Paso vineyards. 2018 Vintage Report Paso Robles, January 16, 2019
41. -2019. Vineyard Mechanization demo. Mechanical pruning, January 24, 2019
42. -2018. Grapevine red blotch alters berry ripening of Cabernet Sauvignon. Central Coast Grape Expo, Paso Robles, CA, November 09, 2018
43. -2018. Grapevine mechanical canopy management in SJV. Tree and Vine Expo, Turlock, CA, November 06, 2019
44. -2018. Principles of vineyard mechanization. Sonoma grape days, Santa Rosa, CA,
45. -2018. The use of soil electrical resistivity to monitor plant and soil water relationships in vineyards. Current Advances in Viticulture Research, UC Davis, Davis, CA
46. -2017. La viticoltura di precisione nella prospettiva americana. Innovazione in campo: soluzioni tecnologiche per il futuro dell'agricoltura salentina, Coldiretti Lecce, Lecce, IT
47. -2017. Introduction to precision viticulture. Pete Christensen Short Course, UC Davis, CA
48. -2017. The use of kaolin to improve sustainable grapevine production during drought. Central Coast Grapevine Physiology Seminar, UC Davis, San Luis Obispo, CA
49. -2017. Introduction to precision viticulture. Central Coast Grapevine Physiology Seminar, UC Davis, San Luis Obispo, CA
50. -2017. New tools to assess water status in the vineyard. Oakville Seminars Series, UC Davis, Oakville CA
51. -2017. Terrain and Water-Status Modeling in Vineyards. Current issue in harvest logistic, UC Davis, Oakville, CA
52. -2017. Assessing spatial variability in the vineyard through a spatially explicit selective harvest approach. A case study in Sonoma. Sonoma Grape days, Santa Rosa, CA
53. -2017. From site-specific relationship to variable rate management in precision viticulture. Napa Fruition Vintage Conference, Napa, CA

54. -2017. Assessing spatial variability in the vineyard through a spatially explicit selective harvest approach. A case study in Sonoma. Sonoma Fruition Vintage Conference, Santa Rosa, CA
55. -2017. Assessing spatial variability in the vineyard through a spatially explicit selective harvest approach. A case study in Sonoma. Recent Advances in Viticulture and Enology, UC Davis, Davis, CA
56. -2016. The use of soil electrical resistivity to monitor plant and soil water relationships in vineyard. Oakville Seminars Series, UC Davis, Oakville, CA
57. -2016. Principles of vineyard mechanization. UC Davis on the Road, Madera, CA
58. -2013. Variabilite' spatio-temporelle du regime hydrique de la vigne en situation de coteau. Association Terroir de Corton, Burgundy, France

TEACHING

| | |
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| California State University – Fresno, Department of Viticulture and Enology | |
| General Viticulture, VIT 101 | 2018/19-Present |
| Mechanized and Precision Viticulture, VIT 160 | 2018/19-Present |
| Viticulture Fall Seminar Series, VIT 199 | 2019 - Present |
| Enology Fall Seminar Series, ENOL 199 | 2019 – Present |
| Data analysis and predictive modeling with R, VEN 250T | 2018/2019 |

Students and advised in research activity:

Post-docs and lecturers: Dr. Eve Laroche Pinel, Dr. Abiodun E. Abioye, Erica Sawyer

Graduate Students:

Main advisor: Khushwinder Singh, Kaylah Vasquez, Carlos Acosta

Committee Member: Kori Munk, Robert Herrell, Antonios Marinos, Mauricio Soriano

Graduate Research Assistants: Angela Sun, Eric Kor, Christopher O' Brien, Paolo De Censi, Tiffany Frnzyan, Vincenzo Cianciola (visiting).

Undergraduate Research Assistants:

Alvaro Sanjuan, Anais Rico, Benjamin Corrales, Chihaig Zhou, Faeth Anderson, Jennifer Valdez, Lupita Partida, Matteo Ramagli, Ryan Storm, Salvador Pineda, Shilo Martella, Violeta Minjares

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| University of Burgundy, Dijon, FR | 2011-2014 |
| 103 teaching hours as teaching assistant in viticulture, agronomy, climatology, soil science, plant pathology, statistical analysis, geophysics, hydrology | |

ORGANIZATIONAL EFFORTS (EVENTS AND ACTIVITIES ORGANIZED):

- Fresno State Grapevine Viruses Symposium, June 9, 2022
- Viticulture & Enology Seminar Series, Spring 2022;
- Viticulture & Enology Seminar Series, Fall 2021;
- Viticulture & Enology Seminar Series, Spring 2021;
- Viticulture & Enology Seminar Series, Fall 2020;

- Managing Water and Fruit Quality in Vineyards and Orchards Under Climate Change, March 2020, with speakers Antonello Bonfante, CNR-ISAFOM, Alessandro Vivaldi, UniBa, Runze Cliff Yu, UC Davis, Brent Sams, E&J Gallo and myself.
- Vinifera Euro-Master – Seminar to Students - V. Novello, University of Torino and E. Peterlunger, University of Udine, ITA. Spring 2020
- Sprayer Calibration – with P. Ako Larbi UC ANR
- Fresno-State and E &J Gallo Vineyard Mechanization Series. Part 3. Mechanical leaf removal. May 21, 2019
- Fresno-State and E &J Gallo Vineyard Mechanization Series. Part 2. Mechanical desuckering and cultivation. April 11, 2019
- Fresno-State and E&J Gallo Vineyard Mechanization Series. Part 1. Mechanical pruning. January 24, 2019

ACADEMIC SERVICE

California State University Fresno:

Within the Department of Viticulture and Enology

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| Graduate Students Coordinator, M.S. Viticulture and Enology | 2018 – Present |
| Search Committee Chair – Assistant Professor Viticulture | 2020-2021 |
| Assessment Coordinator – BS in Viticulture | 2018 – Present |
| Assessment Coordinator – MS in Viticulture & Enology | 2018 – Present |
| Scholarship Committee | 2018 – Present |
| Graduate Program Committee | 2018 – Present |

Within the Jordan College of Agricultural Science and Technology

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| Research, Scholarship and Creative Activities | 2019 – Present |
| University Agricultural Laboratory Committee | 2018 – 2019 |

Within the California State University Fresno

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| Academic Senate | 2020 - Present |
| Equal Employment Opportunity Designee | 2019 – Present |
| Online blended education Subcommittee | 2020 – 2021 |
| Open Educational Resources Task force | 2018 – 2020 |

SCIENTIFIC SERVICE:

Scientific societies:

1. International Viticulture & Enology Society – Board of Directors
2. American Society for Enology and Viticulture – Mentorship committee member
3. European Geoscience Union, Member
4. GiESCO, Group of International Experts of Vitivinicultural Systems for Cooperation, Member
5. International Society for Horticultural Sciences, Member
6. SOI, Italian Society of Horticulture (Societa' di Ortoflorofrutticoltura Italiana), Member

Scientific Committees in International Meetings:

1. Scientific Committee, XXIInd International Symposium GiESCO, 2023, Ithaca, NY, USA (Group of International Experts for Cooperation on Vitivincultural Systems)
2. Scientific Committee, IInd ISHS – Precision Management of Vineyards and Orchards, 2023, Tatura, AU
3. Scientific Committee, TerClim International Conference (XIVth International Terroir congress and the IInd ClimWine symposium), 2022, Bordeaux, FR
4. Scientific Committee, XIIIth International Terroir Congress, 15th-20th November 2020, Adelaide, Australia

Editorial Boards of Scientific Journals:

1. Associate Editor for OENO One – 2021 - to present
2. Associate Editor for Sustainability – Section Sustainable Agriculture, 2020 – to Present
3. Guest Editor for Special Issue: Adaptations to Climate Change in Agricultural Systems, MDPI Agronomy, 2022– to Present
4. Guest Editor for Special Issue: Sustainable Vineyard Management, MDPI Sustainability, 2020
5. Guest Associate Editor for Special issue: Biogeosciences and wine, the management and environmental processes that regulate the terroir effect in space and time. Frontiers in Environmental Sciences/Frontiers in Earth Sciences/Frontiers in Plant Sciences, 2019-2020
6. Review Editor in Plant Biophysics and Modeling on Frontiers in Plant Science, 2018– to Present
 - Reviewer Board Member on Plants, 2020– to Present

Reviewer in Scientific Journals:

- 58 ad-hoc peer-reviews on 19 different journals: Precision Agriculture, Sensors, International Journal of Machine Learning and Cybernetic, Computers and electronics in Agriculture, Frontiers in Plant Science, Hydrology and Earth System Sciences, Plos One, Scientia Horticulturae, Soil, Agronomy, Arabian Journal of Geosciences, Food Quality and Preference, Horticulturae, Functional Plant Biology, American Journal of Enology and Viticulture, Remote Sensing of Environment, International Journal of Molecular Sciences, Journal of Hydrology, Plant Physiology and Biochemistry; Pedosphere
- Certificate of Outstanding Contribution in Reviewing. Scientia Horticulturae. November 2016.

Grant Proposal Reviews:

- USDA SBIR, 2018
- LabExCote (FR), 2017

Scientific Advisor to International Projects:

- Board of Advisors TEBAKA Project, (~\$6M funded by the European Union)

INDUSTRY SERVICE:

- National Grape Research Alliance – Research Committee Member
- Vintage Report - Board of Advisors
- Research Oenovation Collective – Honorary Member

COMMUNITY SERVICE:

- Huron Elementary School Career Day: 3rd-5th graders, Huron, CA, April 12, 2019
- Future Farmers of America, High School Vine judging contest, April 13, 2019
- Sons In Retirement – Monthly meeting - July 25, 2019

PROFESSIONAL DEVELOPMENT ACTIVITIES:

- California State University *STEAM - Developing Course Based Undergraduate Student Research Experiences* June 2021
- California State University *Introduction to teaching online using QLT Training* May 2020
- Fresno State DiscoverE program. *Professional Development in Active Learning. DiscoverE program.* May 20 to May 24, 2019
- Center for Faculty Excellence professional Development in Open Educational Resources (OER). May 29, 2019.
- Division of Research and Graduate Studies *Compliance, Integrity and Good Research Practices* workshop, on September 10, 2018.
- Division of Research and Graduate Studies - Research and Sponsored Programs' *GrantLaunch* workshop, on September 5, 2018.
- Division of Research and Graduate Studies - Research and Sponsored Programs' *US Department of Agriculture (USDA)* workshop, on September 13, 2018.
- Division of Research and Graduate Studies - Research and Sponsored Programs' *Serving Community Needs - Contracts & Other Partnerships* workshop September 18, 2018
- Division of Research and Graduate Studies - Research and Sponsored Programs' *How to Develop Budgets* workshop, on September 24, 2018.
- Dean of Jordan College of Agricultural Resources and Technology – *Jordan College 101* 2018/19
- Division of Research and Graduate Studies and the Center for Faculty Excellence at CSU Fresno, 2019 – *Completion of the Grantsmanship program.*
- CSU Fresno, Office of Faculty Affairs. *Training for Equal Employment Opportunity Designee.* September, 13, 2019

MEDIA COVERAGE:

1. Fresno State researchers speed up grape composition/maturity monitoring process. American Vineyard Magazine (Sep. 10, 2022)

- <https://americanvineyardmagazine.com/fresno-state-researchers-speed-up-grape-composition-maturity-monitoring-process/>
2. Whole orchard recycling, crop consultant conference preview: heat stress in viticulture. My Ag Life – Daily News Report. Episode 416
<https://dailynews.myaglife.com/podcast/episode-416-whole-orchard-recycling-crop-consultant-conference-preview-heat-stress-in-viticulture/>
 3. Using hyperspectral imaging to detect grapevine water stress American Vineyard Magazine (Sept. 9, 2022) <https://americanvineyardmagazine.com/using-hyperspectral-imaging-to-detect-grapevine-water-stress/>
 4. Fresno State's grape day event showcases future of vineyard, winery practices. (Sept. 9, 2022) FOX 26. <https://kmpfh.com/news/local/fresno-states-grape-day-event-showcases-future-of-vineyard-winery-practices;>
 5. FOX26, Instagram Channel :
<https://www.instagram.com/tv/ChDXkZOFjHw/?igshid=YmMyMTA2M2Y%3D>
 6. Fresno State Grape Day spotlights ag innovations. KSEE24/CBS47. (August 17, 2022)
 7. <https://www.yourcentralvalley.com/eye-on-ag/fresno-state-grape-day-spotlights-ag-innovations/>
 8. By hand or machine? By Jo Cowderoy - Vineyard magazine – UK – June 2022
 9. A look inside the Fresno State Winery - KSEE24/CBS47. (May 4, 2022)
<https://www.yourcentralvalley.com/news/local-news/a-look-inside-the-fresno-state-winery/>
 10. Mitigate Soil Salinity in Vineyards with Gypsum – My AgLife – Daily news report - Episode 250, 2022
 11. Kudos to campus employees, Fresno State Campus News, November 15th, 2021
 12. Expert in the news, Fresno State Campus News August 30th, 2021
 13. The financial case for organic, by Pam Strayer, August 24th, 2021 Beverage Media Group <https://www.beveragemedia.com/2021/08/24/financial-case-organic/>
 14. Por qué la vitivinicultura orgánica puede ser más rentable que la convencional, Negocios Líquidos, August 16th, 2021 <https://negociosliquidos.com.ar/por-que-la-vitivinicultura-organica-puede-ser-mas-rentable-que-la-convencional/>
 15. Expert in the news, Fresno State Campus news August 16th, 2021
 16. Why Organic Winegrowing Can Be More Profitable Than Conventional by Pam Strayer on SevenFiftyDaily August 9th, 2021.
 17. Ag Alert – California Farm Bureau, Imaging offers benefits for vineyard management by Dennis Pollock, July 14th, 2021
 18. My Ag Life – Episode 69, May 6, 2021 – Tech Thursday. May 6, 2021.
 19. Fresno State – Campus News. Experts in the News. March 22, 2021.
 20. Three ways to improve color in red wine grapes, March 12, 2021, American Vineyard Magazine – Online Video.
 21. Autonomous predictions of vineyard yield: machine-learning modeling of remote sensing and historical data assiste at the block level. My Ag Life, podcast. September 2020.
 22. Fresno State Continues Grape Day Tradition. University delivers vital info via webinar format. American Vineyard Magazine Vol. 29, Issue 9, Sep 2020 by Dan Clarke

23. Grapevine Virus and Vector Management, Update on new tools, resources and research. Ted Rieger, in The Crush Vol. 47, Issue 9, Sep 2020
24. Weed control in the vineyard. Getting the job done while satisfying consumer perception. American Vineyard Magazine, Dan Clarke, June 2020
25. New tool for more accurately predicting vineyard crop yield, California Ag Network and the American Vineyard Magazine, Oct 2019
26. Management solution through digital viticulture, Sustainable Winegrowing Podcast
27. Recent study shows all around benefits of mechanized vineyard canopy management. California Ag Network and the American Vineyard Magazine, July 2019
28. Smoke taint and site-specificity hot topics at Wine Business IQ. by Jess Lander on SevenFiftyDaily May 24th, 2019
29. Fresno State appoints new faculty for its Department of Viticulture and Enology, Wine Business Monthly, August, 09th, 2018

HONORS & AWARDS:

- Central Valley 40 under 40 leaders, Class of 2022. Business Leaders with Lance Cardoza, KMPH FOX 26
- Department of Viticulture and Enology, nomination to Outstanding Research and Scholarly Activity Award (College award), 2019,2020,2021,2022
- Department of Viticulture and Enology, nomination to Promising New Faculty (Provost Award), 2021