

Message from the Director

The summer field season may be over, but VitisGen3 researchers are keeping busy this fall! We're grateful to those of you who took time out from an important harvest week to attend our virtual End-of-Year meeting, as well as those who were supporting us offline. We received excellent feedback that will inform the topics we cover during our Annual Meeting (please remember to register by December 11, 2023!) We look forward to welcoming you to San Diego, CA this January for two days of talks, workshops, and community building.

~Matt Clark



Important Info for the VG3 Annual Meeting

Meeting Dates: January 11-12, 2024 in San Diego, CA

<u>Please RSVP for the meeting by December 11th, 2023</u> by filling the Annual Meeting '24 RSVP form:

Click here for a link to the Google form

<u>or</u>

Click here for the PDF form

(please complete all fields and email to fessl023@umn.edu)

To book your discounted room at the Doubletree Hilton on Hotel Circle, click here to be taken directly to the booking page

This meeting will include:

- Breakfast, lunch, and snacks on both Thursday and Friday
- International guest speaker Oliver Trapp of the Julius Kühn-Institut
- Y2 planning sessions
 - Co-PIs should plan to submit Y2 work plan updates to their objective lead by December 11th
- · Workshops, working groups, and advisory board forum
- Friday night dinner at Casa Guadalajara!

If you would like to bring students to the meeting, **submit an inquiry to Kate at fessl023@umn.edu by October 9, 2023.** Funds
are limited and advisors must agree to cover the remainder of
student travel costs.

Questions about upcoming meetings? Email Kate at fessl023@umn.edu

Social media roundup

Click on an image to open the post!

















Announcements

Contact Kate Fessler at fessl023@umn.edu to add announcements to this newsletter

Dr. Dario Cantu is soliciting abstracts to present during the Grape Session at the Plant and Animal Genome Conference which follows out annual meeting. Please email him at dacantu@ucdavis.edu

The North Dakota State University Grape Germplasm Enhancement Project, a VG3 participating program, <a href="https://doi.org/na.2016/n

Dr. Madeline Oravec has accepted a position as the new grape breeder at Cornell University. She begins on 1 July, 2024. Welcome to the VG3 team, Maddie!

VG3 postcards have been printed. Send your mailing address to fessl023@umn.edu to receive a set to hand out at your next event.

Student Spotlight: Avery Shikanai



PhD student in Grape Breeding at North Dakota State University Advisor: Harlene Hatterman-Valenti I do grape breeding at North Dakota State University working on cultivar development. Specifically I'm working to combine extreme cold hardiness, fruit quality, and disease resistance through conventional breeding and marker assisted selection. My favorite thing about my role in *Vitis*Gen3 has been the interactions with everyone involved in the project. Everyone has been very eager to share their expertise and ideas - it's a very collaborative atmosphere.

Faculty Spotlight: Garrett Steede



Associate Professor in the University of Minnesota Department of Agricultural Education, Communication and Marketing

My role within the VitisGen research team is in understanding how potential consumers feel about disease resistant and hybrid wine grapes. Using focus groups, we are better understanding the roles public opinion, communication, and marketing play in taking these grapes to consumers. My favorite thing about my position is getting to work on this very interdisciplinary team!

Upcoming Conferences

Click on underlined text for more information about each event

National Association of Grape Breeders Conference October 3-4th at the University of Arkansas in Fayetteville, AK

V International Symposium on Biotechnology and Molecular
Breeding in Horticultural Species October 18-21 in Nanjing, China

Il International Congress on Grapevine and Wine Sciences
November 8-10, 2023 in Logroño, La Rioja, Spain

Northwest Center for Small Fruits Research Annual
Conference November 13-15, 2023 in Corvallis, OR

Grape Day at UC Davis November 16, 2023 at the UC Davis Conference Center in Davis, CA

<u>Washington State Grape Society Annual Meeting</u> **November 16-17, 2023 in Grandview, WA**

SITEVI November 28-30, 2023 in Montpellier, France

North Coast Wine Industry Expo November 30, 2023 in Santa Rosa, CA

Il International Symposium on Precision Management of Orchards and Vineyards December 3-8 in Tatura, Victoria, Australia

VitisGen3 Annual Meeting January 11-12, 2024 in San Diego, CA

Southeast Regional Fruit and Vegetable Conference, January 11-14, 2024 in Savannah, GA

Recent papers from VG3 PIs and Collaborators

- Aziz A., Perazzolli M., Gramaje D., Zyprian E. M., and <u>Cantu D.</u> (2020) Editorial: Recent Advances on Grapevine-Microbe Interactions: From Signal Perception to Resistance Response. Front. PlantSci. 11:1164. doi:10.3389/fpls.2020.01164
- Bell, R. L., Schupp, J. R., <u>Dardick, C.</u>, Demuth, M., & Gottschalk, C. (2023). 'Bell' Pear, *HortScience*, 58(8), 832-835. Retrieved Jul 3, 2023, from https://doi.org/10.21273/HORTSCI17113-23
- Bhattarai G, Giannopoulos O, Corn RN, McAvoy CEE, Deltsidis A, <u>Worthington ML</u>, Conner PJ. Analysis of the Aroma Volatile Profile of Muscadine Grape Germplasm by Headspace Solid-Phase Microextraction Coupled with Gas Chromatography-Mass Spectrometry. *Horticulturae*. 2023; 9(9):1054. https://doi.org/10.3390/horticulturae9091054
- Brooke, M.J., Svyantek, A.W., Stenger, J., Auwarter, C., <u>Hatterman-Valenti, H</u>. Influence of 'Atlantic' and 'Dakota Pearl' Mother Plants Exposed to Sublethal Glyphosate and Dicamba on Daughter Plants. *Am. J. Potato Res.* (2023). https://doi.org/10.1007/s12230-023-09921-7
- Chintha, P., Sarkar, D., Pecota, K., Dogramaci, M., <u>Hatterman-Valenti, H.</u>, Shetty, K. Phenolic bioactive-linked antioxidant, anti-hyperglycemic, and antihypertensive properties of sweet potato cultivars with different flesh color. *Hortic. Environ. Biotechnol.* (2023). https://doi.org/10.1007/s13580-023-00515-0
 - Chizk, T. M., Lee, J. A., Clark, J. R., & <u>Worthington, M. L.</u> (2023). ShinyFruit: Interactive Fruit Phenotyping Software and its Application in Blackberry. *Frontiers in Plant Science*, *14*, 1182819. https://doi.org/10.3389/fpls.2023.1182819
- Elmenofy, H. M., <u>Hatterman-Valenti, H. M.</u>, Hassan, I. F., & Mahmoud, M. M. A. (2023). Effects of Deficit Irrigation and Anti-Stressors on Water Productivity, and Fruit Quality at Harvest and Stored 'Murcott' Mandarin. *Horticulturae*, *9*(7), 787. MDPI AG. Retrieved from http://dx.doi.org/10.3390/horticulturae9070787
- Gambhir, N., Paul, A., Qiu, T., <u>Combs, D.</u>, Hosseinzadeh, S., <u>Underhill, A., Cadle-Davidson, L., Jiang, Y., & Gold, K. M.</u> (2023). Non-destructive monitoring of foliar fungicide efficacy with hyperspectral sensing in grapevine. *Phytopathology*, 10.1094/PHYTO-02-23-0061-R. Advance online publication. https://doi.org/10.1094/PHYTO-02-23-0061-R
- Liu, E., Romero Galvan, F. E., <u>Combs, D., Kanaley, K.</u>, Pavlick, R., <u>Gold, K. M., & Jiang, Y.</u> (n.d.). Autonomous Detection and Severity Estimation of Grapevine Leafroll Disease in the Vineyard. *American Society of Agricultural and Biological Engineers*. 2023 ASABE Annual International Meeting. Retrieved July 3, 2023, from https://doi.org/10.13031/aim.202300630
- Maguvu, T.E., Travadon, R., <u>Cantu, D.</u> et al. Whole genome sequencing and analysis of multiple isolates of *Ceratocystis destructans*, the causal agent of Ceratocystis canker of almond in California. *Sci Rep* 13, 14873 (2023). https://doi.org/10.1038/s41598-023-41746-6

- Mcdaniel, A., Mireles, M., Gadoury, D., & Moyer, M. (2023). Managing Grapevine Powdery Mildew with Ultraviolet-C Light in Washington State. GiESCO, Ithaca NY.
- Naik, S., Banerjee, K., & <u>Dhekney, S. A.</u> (2023). Quality Planting Material of Grape: Need to Develop Plant Certification Standards for the Indian Grape and Wine Industry. *International Journal of Agriculture Innovations and Research 12*(1).
- Nigar, Q., <u>Cadle-Davidson, L., Gadoury, D. M.</u>, & Hassan, M. U. (2022). First Report of *Colletotrichum fioriniae* Causing Grapevine Anthracnose in New York. *Plant disease*, 10.1094/PDIS-03-22-0604-PDN. Advance online publication. https://doi.org/10.1094/PDIS-03-22-0604-PDN
- Prasad Shah, B., Prakash Vaddevolu, U. B., Jia, X., <u>Hatterman Valenti, H.</u>, & Scherer, T. F. (n.d.). Yield Responses of Watermelon, Muskmelon, and Squash to Different Irrigation Treatments in a Mulched Sandy Soil. *American Society of Agricultural and Biological Engineers*. 2023 ASABE Annual International Meeting. Retrieved July 3, 2023, from https://doi.org/10.13031/aim.202300630
- Torrez, V. C., B. Beauzay, P., McGinnis, E. E., Knudson, A. H., Laschkewitsch, B., <u>Hatterman-Valenti, H.</u>, & Knodel, J. J. (2023). Pollinators and Other Insect Visitations on Native and Ornamental Perennials in Two Landscapes. *HortScience*, 58(8), 922-934. Retrieved Jul 24, 2023, from https://doi.org/10.21273/HORTSCI17146-23
- Qiao, Y., Valente, J., <u>Jiang, Y.</u>, Zhang, Z., He, D., Su., D., eds. (2023). Al, sensors and robotics in plant phenotyping and precision agriculture, volume II. Lausanne: Frontiers Media SA. doi: 10.3389/978-2-8325-2745-0
 - Wang, Y., Yue, C., Watkins, E., & Straw, C. (2023). How Do Risk Preferences Affect Golf Course Superintendents' Adoption of Precision Irrigation Technologies? Implications from Prospect Theory. Journal of Agricultural and Applied Economics, 1-20. doi:10.1017/aae.2023.28
- Yannuzzi, I., <u>Gadoury, D.</u>, Davidson, A., & Cox, K. D. (2023). Applications of Germicidal Ultraviolet Light as A Tool for Fire Blight Management (*Erwinia amylovora*) in Apple. *Phytopathology*, 10.1094/PHYTO-05-23-0151-SA. Advance online publication. https://doi.org/10.1094/PHYTO-05-23-0151-SA
- Yu, Y., Hu, H., <u>Voytas, D. F.</u>, Doust, A. N., & Kellogg, E. A. (2023). The YABBY gene SHATTERING1 controls activation rather than patterning of the abscission zone in Setaria viridis. *The New phytologist*, 10.1111/nph.19157. Advance online publication. https://doi.org/10.1111/nph.19157
- Zhang, C., Dai, Z., Ferrier, T., Orduña, L., Santiago, A., Peris, A., Wong, D. C. J., Kappel, C., Savoi, S., Loyola, R., Amato, A., Kozak, B., Li, M., Liang, A., Carrasco, D., Meyer-Regueiro, C., Espinoza, C., Hilbert, G., Figueroa-Balderas, R., Cantu, D., ... Matus, J. T. (2023). MYB24 orchestrates terpene and flavonol metabolism as light responses to anthocyanin depletion in variegated grape berries. The Plant cell, koad228. Advance online publication. https://doi.org/10.1093/plcell/koad228
- Zhao, L., Huang, J., Gu, H., <u>Yue, C., Parasuram, U.</u>, & Ahlstrom, D. (2023). Consumers' risk perception and willingness to pay for abnormally shaped vegetables in China. *International Food and Agribusiness Management Review* (published online ahead of print 2023). https://doi.org/10.22434/ifamr2022.0068

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New to VG3? Click here to submit a profile for the website

Call for website contributions!

Do you have a research update to share? Some cool photos to show off? A student looking to add a byline to their CV? Email Kate Fessler at VitisGen3@umn.edu or fessl023@umn.edu









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vitisgen3@umn.edu vitisgen3.umn.edu

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