



# VitisGen III

Quarterly Newsletter, October 2024

## Message from the Director

**Whether your grapes are way ahead of schedule or lagging behind in ripeness, there's no doubt that harvest season is in full swing! Days are shortening, temperatures are dropping, and across our participating institutions, a slew of data is being collected in the field, greenhouse, and laboratory. New graduate students are matriculating, and we are excited to host many of them at this year's Annual Meeting, which will take place in San Diego this coming January (more details below). We're looking forward to seeing all of you in person to share our latest project updates, and to welcome not one, but two international keynote speakers!**

~Matt Clark



Photos by Allcia McCann

## Meeting Information

### Annual Meeting:

This year's meeting will feature keynote talks from the two Project Directors of the new EU Horizon grant programs: [Dr. Komlan Avia](#) of [GrapeBreed4IPM](#) and [Dr. Giorgio Gambino](#) of [Shield4Grape!](#)

**Dates:** Thursday, January 9-Friday, January 10

**Location:** Doubletree Hilton Hotel Circle in San Diego CA

**Hotel booking:** [Click here to book with our discounted rate.](#)

Deadline to book is December 9, 2024.

**Registration:** [Click here to register for the meeting.](#) Deadline to register is December 9, 2024.

**Reminder:** Deadline to inquire about bringing a graduate student to the meeting is October 4th, 2024.

**Multi-State Trial Workshop Save the Date:** Wednesday, March 5-Friday, Thursday 6 in conjunction with BEV NY 2025 in Canandaigua, NY.

Our End of Year meeting took place on Friday, September 6th. [Click here to view the recording of the meeting.](#)

Questions about upcoming meetings? Email Kate at [fessl023@umn.edu](mailto:fessl023@umn.edu)

## VitisGen3 Genotyping Workshop

**We are announcing an exciting opportunity for new breeders, industry partners, and rhAmpSeq users!**

Get experience with:

- [rhAmpSeq and phenotyping data](#)
- [QTL mapping](#)
- [Fine mapping and marker assisted selection](#)

Through a combination of lectures and hands-on projects!

The VitisGen3 genotyping team's new **VitisGen3 Genetics Workshop** will be available **online from October 14<sup>th</sup>**.

### **To Register:**

- [A Cornell BioHPC account is required!](#) Please request a new account via the following link: [New User Request](#)
- In the New User Request comment field, write "Register for the Vitisgen3 workshop. I am from [insert your PI's name]'s group"
- Once your BioHPC account is approved, you can register for the workshop via the following link: [VitisGen3 Genetics Workshop Registration](#)

### **Once Registered:**

- Lecture videos and hands-on instructions will be released to registrants by October 14th.
- Three office hours will be available in October and November to help registrants complete the hands-on projects. These dates will be published later in October.

**A big thank you to Drs. Qi Sun, Cheng Zou, and Dustin Wilkerson for all of their hard work creating this community resource!**

## New Project Spotlight: *Vitis* x *Muscadinia*



Drs. Margaret Worthington (left) and Renee Threlfall (right), co-directors of the new *Vitis* x *Muscadinia* grant program. (U of A System Division of Agriculture photo by Paden Johnson)

An exciting new project is going nationwide this fall, with the funding of the *Vitis* x *Muscadinia* project, supported by a \$7 million grant from USDA NIFA's Specialty Crop Research Initiative. Its project directors are Dr. Renee Threlfall and Dr. Margaret Worthington of University of Arkansas, the latter of whom is a valued member of the *Vitis*Gen3 breeding team. Dr. Worthington has worked for years to develop muscadine cultivars with broad appeal to growers and consumers.

To read more about the VxM project, visit the following link to the University of Arkansas' article: [Vitis Vinifera and Muscadines: Grape Breeders Seek the Best of Both Grapes](#)

## Announcements & Reminders

Contact Kate Fessler at [fessler023@umn.edu](mailto:fessler023@umn.edu) to add announcements to this newsletter

Breeding programs: Please remember to send any updated selection names to the database team at Cornell so they can maintain the most up-to-date version for ease of data access.

Coloring book pages (appropriate for ages 2+) and grape breeding comics (ages 5+) are now available in the VG3 Resource Drive Extension Folder! Feel free to print a stack for any and all outreach events at your institution.

VG3 postcards have been printed. Send your mailing address to [fessler023@umn.edu](mailto:fessler023@umn.edu) to receive a set to hand out at your next event.

## Upcoming Conferences

Click on underlined text for more information about each event

Texas Wine & Grape Growers Association's Grape Camp 2024,  
**October 8-9, 2024 in Lubbock, TX**

ASEV Hang Time Webinar: "Trellis Design and Pruning Choice: Cane vs. Spur", **October 10, 2024, Virtual**

Whole Vine Festival, **October 19-20, 2024 in Fresno, CA**

FIRA USA, OC

Sustainable Ag Expo, **November 12-13, 2024 in San Luis Obispo, CA**

ASEV Hang Time Webinar: "Research Update: Frost Protection Products and Technologies", **November 14, 2024, Virtual**

Northwest Center for Small Fruits Research Conference,  
**November 18-20, 2024 in Boise, ID**

International Conference on Grapevine Physiology and Biotechnology, **December 18-19, 2024 in Barcelona, Spain**

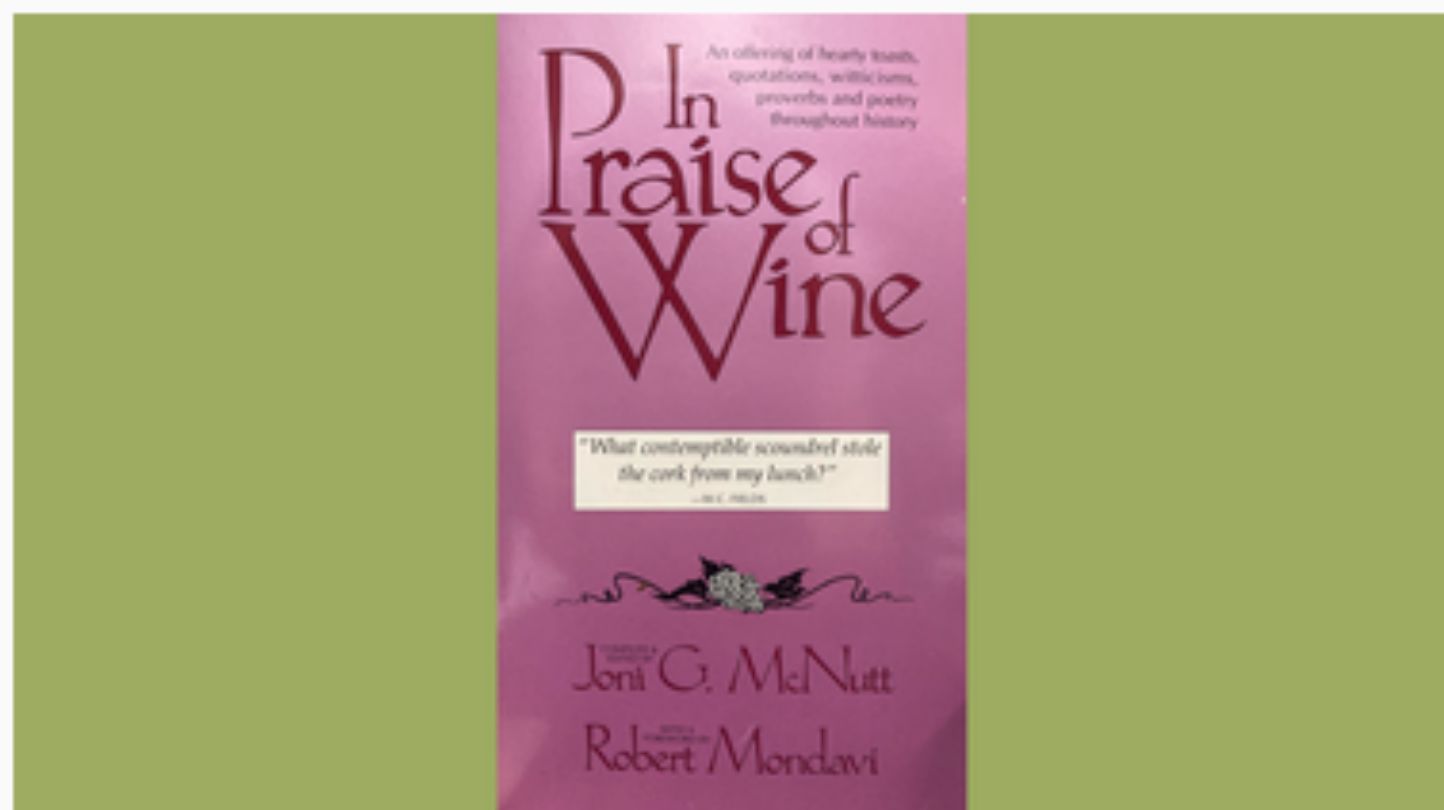
VitisGen3 Annual Meeting, **January 9-10, 2025 in San Diego, CA**

VitisGen3 Multi-State Field Trial Workshop, **March 4-6, 2025 in Canandaigua, NY**

Unified Wine & Grape Symposium, **January 28-30, 2025 in Sacramento, CA**

ASEV National Conference, **June 16-19, 2025 in Monterey, CA**

## Quarterly Wine Quote



Kate recently found a copy of Joni G. McNutt's *In Praise of Wine* at a secondhand shop! Please enjoy a selection from within:

"I rather like bad wine; one gets so bored with good wine."

—Benjamin Disraeli, *Sybil*

English statesman and novelist 1804-81

Recent papers from VG3 PIs and Collaborators

Canales, E., Gallardo, R. K., Iorizzo, M., Munoz, P., Ferrão, L. F., Luby, C., Bassil, N., Pottorff, M., Perkins-Veazle, P., Sandefur, P., Colonna, A., & Sims, C. (2024). Willingness to Pay for Blueberries: Sensory Attributes, Fruit Quality Traits, and Consumers' Characteristics. *HortScience*, 59(8), 1207–1218. <https://doi.org/10.21273/HORTSCI17947-24>

Clark, J. R., & Worthington, M. L. (2024). Nectarine Tree Named 'A-783CN.' <https://scholarworks.uark.edu/pat/480>

Cui, M., Yue, C., Treiber, E., & Clark, M. (2024, July 28). Willingness to pay with reference-dependent preferences: A comparative analysis of attribute-based and alternative-based approach. 2024 Agricultural & Applied Economics Association Annual Meeting, New Orleans, LA.

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- Edger, P., Ehlenfeldt, M. K., Hancock, J., Finn, C., Iorizzo, M., Mackey, T., ... Hulse-Kemp, A. M. (2024). A Blueberry (*Vaccinium* L.) Crop Ontology to Enable Standardized Phenotyping for Blueberry Breeding and Research. *HortScience*, 59(10), 1433–1442. <https://doi.org/10.21273/HORTSCI17676-23>
- Lin, Y., Underhill, A., Cadle-Davison, L., Jimenez, A., Riaz, S., & Jiang, Y. (2024). Effective integration of vision foundational models for semantic segmentation to quantify grape foliage powdery mildew infection. *2024 Anaheim, California July 28-31, 2024*. 2024 Anaheim, California July 28-31, 2024. <https://doi.org/10.13031/alm.202401108>
- Liu, D., Ellison, E. E., Myers, E. A., Donahue, L. I., Xuan, S., Swanson, R., Qi, S., Prichard, L. E., Starker, C. G., & Voytas, D. F. (2024). Heritable gene editing in tomato through viral delivery of isopentenyl transferase and single-guide RNAs to latent axillary meristematic cells. *Proceedings of the National Academy of Sciences*, 121(39), e2406486121. <https://doi.org/10.1073/pnas.2406486121>
- Liu, E., Gold, K. M., Combs, D., Cadle-Davidson, L., & Jiang, Y. (2022). Deep semantic segmentation for the quantification of grape foliar diseases in the vineyard. *Frontiers in Plant Science*, 13, 978761. <https://doi.org/10.3389/fpls.2022.978761>
- Lopez-Moreno, H., Phillips, M., Diaz-Garcia, L., Torres-Meraz, M., Jarquin, D., Loarca, J., Ikeda, S., Glongo, L., Grygleski, E., Iorizzo, M., & Zalapa, J. (2024). Multiparametric Cranberry (*Vaccinium macrocarpon* Alt.) Fruit Textural Trait Development for Harvest and Postharvest Evaluation in Representative Cultivars. *Journal of Texture Studies*, 55(5), e12866. <https://doi.org/10.1111/jtxs.12866>
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<https://doi.org/10.20870/oenone.2024.58.2.7735>

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Sharma, P., Thilakarathna, L., & Fennell, A. (2024). Hyperspectral imaging and artificial intelligence enhance remote phenotyping of grapevine rootstock Influence on whole vine photosynthesis. *Frontiers in Plant Science*, 15. <https://doi.org/10.3389/fpls.2024.1409821>

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UAV Remote Sensing for Blackberry Flower Intensity Assessment. (n.d.). Retrieved July 19, 2024, from <https://doi.org/10.13031/alm.202401265>

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Xie, P., Ma, Z., Du, R., Yang, X., Jiang, Y., & Haiyan, C. (2024). An unmanned ground

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

Note: Due to privacy policies at the University of Minnesota, we are no longer able to publish student profiles on our website. Thank you for your understanding about this policy change!

## 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](mailto:VitisGen3@umn.edu) or [fessl023@umn.edu](mailto:fessl023@umn.edu)



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