Virginia Wine Board Grant Final Report

05/21/2025

Primary Investigator: Emily Hodson

Organization: Winemaker's Research Exchange 325 Winding River Lane, Charlottesville, VA. 22911

Title: National Grape Research Alliance, Travel and Time: Fiscal year 2023-2024

Proposal Number: [Proposal Number]

Project Type:X Research ☐ Education ☐ Marketing

Is this a multi-year grant? ☐ Yes XNo

If yes, which year does this report address? This grant is renewed every year and this is currently the sixth year Ms. Hodson has served as Primary Investigator on this grant.

Original Funding Amount: \$16,600 with an adjusted term of June 1, 2024 to May 31, 2025 on 4/5/24.

Remaining Balance: \$28.99

Objectives and Results:

The main objective of this grant is for Ms. Hodson to travel to the three yearly NGRA board meetings to represent the VWB interests and report back to the Board. This objective was completed for FY 24-25. Project lead has also completed requirements to present a summary report after every NGRA meeting to the Wine Board in person.

Overall Benefit for Virginia Wine Industry:

The overall benefit for the Virginia wine industry is having representation and reporting in all National conversations regarding research and education in the grape and wine sector.

Publications and Activities Associated with Project:

Activities Associated with the project include

Meeting/ Location	Report to the Wine Board	
First of Year Meeting- January 2024/ Sacramento, CA	March 25th, 2024	
Mid Year Meeting- May 2024/ Winters, CA	May 14th and August 20th, 2024	
End of Year Meeting- November 2024/ Corvallis, OR	December 9th, 2024	
Annual Meeting and First of Year Board of Directors Meeting- January 2025/ Sacramento, CA	March 19th, 2025	
Executive Board Meeting- April 2025/ Modesto, CA	To be reported August 5th, 2025	
Mid Year Board Meeting and Hi-Res Vineyard Nutrition Meeting- May 2025/ Portland, NY	To be reported August 5th, 2025	

Future Work:

Principle Investigator has been elected as Vice Chair and will continue to serve the VWB as their NGRA representative in FY 25-26. The budget for the upcoming fiscal year is \$10,000.00, with \$3,200 in personnel and \$6,800 in travel.

Final Budget and Justification:

Item Type	Original Awarded Amount	Final Amount Spent
Personnel	\$4,600.00	\$5,000
Fringe	[\$0.00]	[\$0.00]
Travel	\$12,000.00	\$11,571.01
Supplies & Materials	[\$0.00]	[\$0.00]
Contractual	[\$0.00]	[\$0.00]
Other	[\$0.00]	[\$0.00]
Total	\$16,600.00	\$16,571.01

With the amended budget for FY23-24 and the new budget for FY24-25 this budget had a term of agreement from June 1, 2023 to May 31st, 2025. Personnel costs and Travel expenses were within the existing budget.

References: No references, submitted reports attached below.

Report for the Virginia Wine Board on the National Grape Research Alliance 2024 First of Year Board of Directors Meeting- *Gearing Up For Growth*

I have been on the board of the NGRA since December of 2018, and have attended 18 meetings as a representative of the Virginia Wine Board.

Annual Election of Board Directors and Officers Slate of officers:

Chair: Jessica Youngblood, Youngblood Winery

Vice Chair: Rich Schaefers, Silverado Premium Properties

Secretary: Emily Hodson, Virginia Wine Board

Treasurer: Dan Martinez, Martinez Orchards and Nursery

Board directors

Commodity Representatives:

Juice Grapes- Mark Amidon, Welch's

Wine Grapes- Rich Schaefers, Silverado Premium Properties

Table Grapes- Franka Gabler, California Table Grapes Commission

Native/Hybrid Species Representative: Dennis Rak, Double A Vineyards Rootstock/Nursery Representative: Dustin Hooper, Sunridge Nurseries Vinifera Species Representative: Andrew Zaninovich, Sunview Vineyards

At-Large Representatives:

Nick Dokoozlian, E. & J. Gallo Winery

Jennifer Montgomery, Arizona Wine Growers Association

Jason Saling, Rodney Strong Wine Estates

Stephanie Bolton, Lodi Winegrape Commision

Anji Perry, J. Lohr Vineyards and Wines

Melissa Hansen, Washington State Wine Commision

Randy Heinzen, Vineyard Professional Services

Regional Representatives:

Northeast- John Martini, Anthony Road Wine Company

California- Keith Streigler, E & J Gallo

Northwest- Chad Vargas, Atlas Vineyard Management

Southeast- Emily Hodson, Virginia Wine Board

Southwest- Andrew Post, Arkansas Wine Producers Council

Midwest- Jessica Youngblood, Youngblood Winery

Guest Presentation and Demonstration – Brian Bailey, UC Davis Introducing the Helios Modeling Platform and Its Applications in Grape Individual virtual reality demos with goggles

Helios is a new three-dimensional (3D) plant and environmental modeling framework, designed to provide maximum flexibility in integrating and running arbitrary 3D environmental system models. Users interact with Helios through a well-documented open-source C++ API. Version

1.0 comes with model plug-ins for radiation transport, the surface energy balance, stomatal conductance, photosynthesis, solar position, and procedural tree generation.

Science Advisory Council – Bruce Reisch

NGIC is at 100% design phase and they are starting to do demolition work on campus. Move in date for the facility is in late 2026 and the expected budget is \$60 million.

Special Report – Dan Martinez Grapevine nursery initiative

Nursery meeting on a research and promotion program to look at the fundamentals of grapevine genomic research for primarily plant health, but also to look at issues that we deal with every day but no one is doing any of the game changing research. The basic premise is that there are approximately 30 nurseries or stakeholders in the United states with an industry grossing about \$120 million per year. The challenge we have today is if the EU accepts GM grapes how many genes do we have to work with? Very few compared to other countries and even fewer if you look at the work done in corn. We as an industry definitely need a plan and focus for this type of work. Also Geneva is opening a grape genetics unit and this is critical funding to advance the state of the industry to start to define strategic research outcomes that we desire.

NGRA Supported Project submitted in 2023 totaled \$21 million over 5 projects and four funding agencies (NASA, AFRI, USDA-SCRI, USDA-ARS)

NGRA Strategic Plan 2023-2026

The Second Horizon: Expand Membership and Engagement (2024-2026) Actively, confidently grow support/membership and operational scale and scope, and revenue.

Although NGRA has more members than ever, the annual revenue has declined significantly since 2017. Why do we need more revenue?

The Research Fund—an important proof point of our research mission—is funded by carryover contributions from NGRA's annual budget. There may be other exciting research opportunities that NGRA could support with greater Research Fund reserves. Administering the operations of a national organization of any significance is more than a one-person job. NGRA would benefit from a portfolio of robust marketing and development, and PR materials.

Newsletter sponsorship: Supporter contributions: Enable anyone who would like to make a contribution to NGRA to easily do so by mail or online. Developing a platform to connect to a "donate now" button on the NGRA website and in our newsletter.

Report for the Virginia Wine Board on the National Grape Research Alliance 2024 Mid-Year Board Meeting- Winters CA: Resiliency and Sustainability

I have been on the board of the NGRA since December of 2018, and have attended 19 meetings over 6 years as a representative of the Virginia Wine Board.

Research Update

- Climate Change Mitigation & Adaptation: A Predictive Analysis for the Grape Wine Industry
- 2. Mealybug Mating Disruption 2.0
- 3. Genetics of Production Efficiency

Fundraising

Newsletter sponsorship for NGRA members only
One time \$1,500, 3 month, \$2,400, 6 month, \$4,000
Supporter Contributions

Join us to help solve the grape and wine industry's most pressing collective needs

Wolfskill Repository- (plant breeding and Cultivar evaluation) and Martinez Nurseries

Guest Presentation and Demonstration – Peter Bretting, USDA-ARS: Repository Refresh: USDA's National Strategic Germplasm and Cultivar Collection Assessment and Utilization Plan. 22 Gene banks in the National Plant Germplasm system. Genotyping the 600,000 accessions at a cost of \$57MM.

Dario Cantu, VitisGen3: Focusing on low cost DNA platform tools for grape researchers and breeders.

Special Report – Dan Martinez Grapevine Nursery Initiative

Nursery meeting on a research and promotion program to look at the fundamentals of grapevine genomic research for primarily plant health, but also to look at issues that we deal with every day but no one is doing any of the game changing research. The basic premise is that there are approximately 30 nurseries or stakeholders in the United states with an industry grossing about \$120 million per year. This will develop a dedicated source of long term funding for Genetic/Genomic research for grapevines.

Next Meeting

Year End Board Meeting

November 6-7, 2024 in Corvallis Oregon.

USDA-ARS Horticultural Crops Disease and Pest Management Research Unit and Oregon Wine Research Institute.

Report for the Virginia Wine Board on the National Grape Research Alliance 2024 End of Year Board Meeting- Oregon State University, Corvallis, OR

I have been on the board of the NGRA since December of 2018, I serve as Secretary on the Executive Board, and have attended 20 meetings over 6 years as a representative of the Virginia Wine Board.

USDA-ARS Workshop:

Smoke Signals: Elucidating the Future of Smoke Exposure Research Followed by a Board tour of Oregon Wine Research Institute and USDA-ARS Horticultural Crops Disease and Pest Management Research Unit in Corvallis.

Board Updates

My term on the Executive Board expires at the end of this year and I was asked to renew as Vice-Chair of the Executive Board.

The Raisin sector Representative position was filled by Jenna Smiley, Sun Maid Growers of California.

Research Update

SLF Field Trip October 2-3

Vineyard of the Future Project Updates

- 1. Climate Change Mapping & Mitigation: A Predictive Analysis for the Grape Wine Industry (Steve Ostoja, USDA-ARS California Climate Hub).
- Mealybug Mating Disruption 2.0- Exploitation of Insect Sex Pheromone Receptors as Targets in the development of next generation pest control tools (PI Jacob Corcoran, USDA-ARS, Columbia, MO)
- 3. Genetics of Production Efficiency- Understanding genetics of polygenic traits to improve breeding efficiency of table and raisin grapes (PI Summaira Riaz, USDA-ARS, Parlier, CA). Genetic characterization and development of mechanization traits in grapevine (PI Gan-Yuan Zhong, USDA-ARS, Geneva, NY)

Guest Presentation and Demonstration

Patty Skinkis, Oregon State University: HiRes Vineyard Nutrition, an NGRA Initiated project

Regional and Sector Reports

Juice Sector- Mark Amidon (Welch's) -Native/Hybrid Species- Dennis Rak (Double A Vineyards) Raisin Sector- Jenna Smiley (Sunmaid) California- Keith Strieglern (Gallo) Northwest Region-Chad Vargas (Atlas Vineyards)

Next Meeting

January 27th, 2024 in Sacramento, CA. Followed by Unified Wine Symposium

Report for the Virginia Wine Board on the National Grape Research Alliance 2025 Beginning of Year Board Meeting- Sacramento, CA

Since December of 2018, I have represented the VWB at all NGRA meetings. I currently serve on the Executive Board, and have attended 21 meetings over 7 years.

Board Updates

I have been elected for a third term on the Executive Board as new Vice Chair and would be honored to continue to serve the VWB as their NGRA representative in FY 25-26.

Guest Presentation and Demonstration

Julie Urban, Penn State University Reducing the Threat Posed to Grapevines as Spotted Lanternfly Expands Its Range in the U.S.

NGRA Fellow Abby Hammermeister, UC Davis Final Fellowship Report: Dialing in Grapevine Water Stress Indicators to Better Reflect Holistic Stress Responses

Regional and Sector Reports

Northeast Region- John Martini, New York, Southeast Region- Emily Hodson, Virginia, Southwest Region- Dennis Wiederkehr Arkansas, Vinifera Species- Andrew Zaninovich, Sunview Vineyards, California.

Next Meeting

May 28th, 2025 in Portland NY. Followed by Hi-Res Vineyard Nutrition Annual Meeting