# **Justine Vanden Heuvel**

**Professor, Cornell University** 

## **Employment**

Professor (2020-present), Associate Professor (2012 - 2019), Assistant Professor (2007 –2012)

Chair of Horticulture (2021-2024)

Cornell University, College of Agriculture and Life Sciences, School of Integrative Plant Science

Appointment: 50% research, 40% teaching, 10% extension

Extension Assistant Professor (2002 –2006)

University of Massachusetts Amherst, Cranberry Experiment Station

Appointment: 50% research, 50% extension

#### **Education**

**Doctor of Philosophy (2002)** 

Department of Plant Agriculture, University of Guelph

Master of Science (1999)

Department of Horticulture, University of Guelph

**Bachelor of Science (Agriculture) (1996)** 

University of Guelph

Major: Horticultural Science and Business (Co-operative Education Program)

Minor: International Agriculture

# **Global Engagement**

Visiting Hebrew University of Jerusalem (2019)

**Professor** 

Invited University of Montpellier, France (2021, 2022)

Speaker Israel Wine Producers Association, Israel (2019)

Organic Winegrowers of New Zealand (2017)

University of Melbourne, Australia (2024)

**External** University of Melbourne, Australia (202 **Examiner** University of Adelaide, Australia (2022)

Universidad Pública de Navarra, Spain (2021) University of Montpellier, France (2021) Geisenheim University, Germany (2021) Brock University, Canada (2016)

Ongoing

INRAE, France

collaborations University of Adelaide, Australia Wine Innovation Center, England

Leadership roles,

Groupe International d'Experts en Systèmes vitivinicoles pour la Coopération,

Convenor of 2023 Congress

International Organizations

Australian Society of Viticulture and Oenology, Editorial Board

#### **Publications**

# Submitted Manuscripts

- Wang, Y, H.J. Williams, B. Yuan, M. Gomez, J. Vanden Heuvel, and K.M. Zhang. Bringing solar to agriculture: Design and analysis of a Concord grape agrivoltaics system. Submitted to Applied Energy, November 2024
- Trivedi, M.B., T.R. Bates, J. M. Meyers, N. Shcherbatyuk, P. Davadant, R. Chancia, R.B. Lohman, and J.E. Vanden Heuvel. Box sampling: A new spatial sampling method for grapevine macronutrients using Sentinel-1 and Sentinel-2 satellite images. Submitted to Precision Agriculture, October 2024. <a href="Preprint available">Preprint available</a>
- Jaramillo, J., J.E. Vanden Heuvel, and K. Petersen. Towards estimation of crop coefficient in vineyards using a smartphone camera. Submitted to American Journal of Enology and Viticulture, October 2024
- Berdeja, M.P., N.K. Reynolds, T Pawlowska, and J. Vanden Heuvel. Commercial bioinoculants improve colonization but do not alter the arbuscular mycorrhizal fungal community of greenhouse-grown grapevines. Submitted to Environmental Microbiome, September 2024

# Publications in Refereed Journals

- Chock, C.K.K., M.B. Trivedi, and J.E. Vanden Heuvel. 2024. Spatial sampling of fruit maturity reduces sampling costs for wine grapes in California and New York. Amer. J. Enol. Vitic. <a href="https://doi.org/10.5344/ajev.2024.23057">https://doi.org/10.5344/ajev.2024.23057</a>
- Jaramillo, J., A. Wilhelm, N. Napp, J. Vanden Heuvel, K. Petersen. 2024. Inexpensive, automated pruning weight estimation in vineyards. IEEE Robotics and Automation. <a href="https://doi.org/10.1109/ICRA57147.2024.10610164">https://doi.org/10.1109/ICRA57147.2024.10610164</a>

- Trivedi, M.B., Y. Zhou, J.H. Moon, J.M. Meyers, Y. Jiang, G. Lu, and J.E. Vanden Heuvel. 2023. A preliminary method for tracking in-season grapevine cluster closure using image segmentation and image thresholding. Aust. J. of Grape and Wine Res. <a href="https://doi.org/10.1155/2023/3923839">https://doi.org/10.1155/2023/3923839</a>.
- Karl, A.D., I Bulaieva, H. Walter-Peterson, T. Bates, and J. Vanden Heuvel. 2023. Phenological stage and tissue type of grapevines impact concentrations and variability of mineral nutrients. Amer. J. Enol. Vitic. DOI: <a href="https://doi.org/10.5344/ajev.2023.22052">https://doi.org/10.5344/ajev.2023.22052</a>
- Berdeja, M., Q. Ye, T. Bauerle, and J.E. Vanden Heuvel. 2023. Commercial bioinoculants increase root length colonization and improve nutrient concentration of field-grown grapevines. HortTechnology 33(1) https://doi.org/10.21273/HORTTECH05110-22
- Liu, Y., J. Kuo, K. Cox, J. Vanden Heuvel, K. Petersen and A. Lal. Imaging and Detection of Botrytis Cinerea with Gigahertz Ultrasonic Imager. 2021 IEEE International Ultrasonics Symposium (IUS), pp. 1-4, doi: 10.1109/IUS52206.2021.9593815
- Chancia, R., T.R. Bates, J.E. Vanden Heuvel, and J. van Aardt. 2021. Assessing grapevine nutrient status from unmanned aerial system (UAS) hyperspectral imagery. Remote Sensing, 13(21) <a href="https://doi.org/10.3390/rs13214489">https://doi.org/10.3390/rs13214489</a>
- Vanden Heuvel, J.E. and M.Z. Centinari. 2021. Under-vine vegetation mitigates the impacts of excessive precipitation in vineyards. Front. Plant Sci. https://doi.org/10.3389/fpls.2021.713135
- Kearney Logan, A., J. France, J. Meyers, and J.E. Vanden Heuvel. 2021. Modifying shoot tip management to reduce cluster compactness and lateral emergence in Cabernet franc grapevines. HortScience. <a href="https://doi.org/10.21273/HORTSCI15705-21">https://doi.org/10.21273/HORTSCI15705-21</a>
- Jaramillo, J., J. Vanden Heuvel, and K. Petersen. 2021. Low-cost, computer vision-based, prebloom yield prediction in vineyards. Front. Agron. 3. https://doi.org/10.3389/fagro.2021.648080
- Meyers, J.M., N. Dokoozlian, C. Ryan, C. Bioni, and J.E. Vanden Heuvel. 2020. A new, satellite NDVI-based sampling protocol for grape maturation monitoring. Remote Sens. 12 (7), 1159. <a href="https://doi.org/10.3390/rs12071159">https://doi.org/10.3390/rs12071159</a>
- Harner, A.D., J.E. Vanden Heuvel, R. Marini, R. J. Elias, and M. Centinari. 2019. Modeling the impacts of weather and cultural factors on rotundone concentration in cool-climate Noiret wine grapes. Front. Plant Sci., 15 October. https://doi.org/10.3389/fpls.2019.01255

- Chou, M. and J. E. Vanden Heuvel. 2019. Under-vine cover crops reduce vine vigor without reducing yield in Cabernet Franc. Amer. J. Enol. Vitic. 70(1):98-108. https://doi.org/10.5344/ajev.2018.18037
- France, J.A., M. Chou, and J.E. Vanden Heuvel. 2018. Palissage reduces cluster zone lateral shoots compared to hedging. American Journal of Enology and Viticulture Catalyst: Discovery Into Practice 2(2): 50-58. <a href="https://doi.org/10.5344/catalyst.2018.17010">https://doi.org/10.5344/catalyst.2018.17010</a>
- Chou, M., J. E. Vanden Heuvel, T. H. Bell, K. Panke-Buisse, and J. Kao-Kniffen. 2018. Vineyard under-vine floor management alters soil microbial composition, while the fruit microbiome shows no corresponding shifts. Scientific Reports 8: 11039, https://doi.org/10.1038/s41598-018-29346-1
- Jha, U.K., P. Bajorski, E. Fokoue, J. Vanden Heuvel, J. van Aardt, and G. Anderson,2017. Dimensionality Reduction of High-Dimensional Highly CorrelatedMultivariate Grapevine Dataset. Open J. Stats. 7: 702-717
- Homlich, L, R. Elias, J. Vanden Heuvel, and M. Centinari. 2017. Intensity of Fruit-Zone Sunlight Exposure Impacts Rotundone Concentration in Noiret Grapes and Wine. Amer. J. Enol. Vitic. 68(4): 447-457
- Karl, A.D., I.M. Merwin, M.G. Brown, R. Hervieux, and J.E. Vanden Heuvel. 2016.

  Under-vine management impacts soil properties and leachate composition in a New York State Vineyard. HortScience 51: 941-949
- Karl, A.D., I.M. Merwin, M.G. Brown, R. Hervieux, and J.E. Vanden Heuvel. 2016.
  Impact of Under-Vine Management on Vine Growth, Yield, Fruit Composition, and Wine Sensory Analyses of Cabernet franc. Amer. J. Enol. Vitic. 67: 269-280
- Jordan, L.M., T.J. Bjorkman, and J.E. Vanden Heuvel. 2016. Using under-vine cover crops did not impact vine growth or fruit composition of mature cool climate 'Riesling' grapevines. HortTech 26: 36-45
- Centinari, M., J.E. Vanden Heuvel, M. Goebel, T.L. Bauerle. 2016. Root-zone management practices impact above and below-ground growth in Cabernet Franc grapevines. Aust. J. Grape and Wine Res. 22(1): 137-148
- Sandler, H.A., C.J. DeMoranville, F.L. Caruso, M.M. Sylvia, A.L. Averill, and J.E. Vanden Heuvel. 2014. Increasing sustainability of Massachusetts cranberry production through cultural management of the vine canopy. Acta. Hort. 1017: 479-485

- Meyers, J.M. and J.E. Vanden Heuvel. 2014. Using NDVI images to optimize sampling protocols. Amer. J. Enol. Vitic. 65:250-253
- Meyers, J.M., G.L. Sacks, and J.E. Vanden Heuvel. 2013. Glycosylated aroma compound responses in 'Riesling' grapes to cluster exposure and vine yield. HortTech 23(5): 581-588
- Vanden Heuvel, J.E., S.D. Lerch, C. Coquard Lenerz, James. M. Meyers, and Anna Katharine Mansfield. 2013. Training system and vine spacing impact vine growth, yield, and fruit composition in a vigorous young Noiret vineyard. HortTech 23(4): 505-510
- Preszler, T.L., T.M.Schmit, and J.E. Vanden Heuvel. 2013. Cluster thinning reduces the economic sustainability of Riesling production. Amer. J. Enol. Vitic 64(3): 333-341
- Meyers, J.M., G.L. Sacks, and J.E. Vanden Heuvel. 2012. A computational approach for balancing competing objectives in winegrape production. Amer. J. Enol. Vitic. 63(2): 296-300
- Sun, Q.L., G.L. Sacks, S.D. Lerch, and J.E. Vanden Heuvel. 2012. Shoot thinning and cluster thinning impact yield, fruit composition, and wine quality of Corot noir. Amer. J. Enol. Vitic. 63(1): 49-56
- Scheiner, J.J., J.E. Vanden Heuvel, B. Pan, and G.L. Sacks. 2012. Modelling impacts of viticultural and environmental factors on 3-isobutyl-2-methoxypyrazine in Cabernet franc grapes. Amer. J. Enol. Vitic. 63(1): 94-105
- Berkey, T.G., A.K. Mansfield, S.D. Lerch, J.M. Meyers, and J.E. Vanden Heuvel. 2011. Cropload adjustment in Seyval blanc: Impacts on yield components, fruit composition, consumer wine preferences, and economics of production. HortTechnology 21(5): 593-598
- Meyers, J.M., G.L. Sacks, H. van Es, and J.E. Vanden Heuvel. 2011. Improving vineyard sampling efficiency via dynamic spatially explicit optimization. Aust. J. Grape and Wine Res. 17(3): 306-315
- Sun, Q.L., G.L. Sacks, S.D. Lerch, and J.E. Vanden Heuvel. 2011. Canopy microclimate and time of harvest impacts fruit composition and wine quality of Marechal Foch. Amer. J. Enol. Vitic. 62(1): 32-41
- Neto, C.C., C.A. Dao, M.R. Salvas, W.R. Autio, and J.E. Vanden Heuvel. 2010. Variation in concentration of phenolic acid derivatives and quercetin glycosides in foliage of cranberry that may play a role in pest resistance. J. Amer. Soc. Hort.

- Kwasniewski, M.T., J.E. Vanden Heuvel, B. Pan, and G.L. Sacks. 2010. Timing of cluster light environment manipulation during grape development affects C13 norisoprenoid and carotenoid concentration of Riesling. J. Agr. Food. Chem. 58(11): 6841-6849
- Scheiner, J.J., G.L. Sacks, B. Pan, S. Ennahli, L. Tarleton, A. Wise, S.D. Lerch, and J.E. Vanden Heuvel. 2010. Impact of severity and timing of leaf removal on 3-isobutyl-2-methoxypyrazine concentrations in red wine grapes. Amer. J. Enol. Vitic. 61(3): 358-364
- Preszler, T.L., T.M. Schmit, and J.E. Vanden Heuvel. 2010. A model to establish economically sustainable cluster thinning practices. Amer. J. Enol. Vitic. 61(1): 140-146
- Suhayda, B., C.J. DeMoranville, H.A. Sandler, W.R. Autio, and J.E. Vanden Heuvel. 2009. Effects of sanding and pruning on yield and canopy microclimate of 'Stevens' cranberry. HortTechnology 19(4): 796-802
- Reynolds, A.G. and J.E. Vanden Heuvel. 2009. Influence of grapevine training systems on vine growth and fruit composition: A review. Amer. J. Enol. Vitic. 60(3): 251-268
- Sandler, H.A., P.E. Brock II, and J.E. Vanden Heuvel. 2009. Effects of three reflective mulches on yield and fruit composition of coastal New England wine grapes. Amer. J. Enol. Vitic. 60(3): 332-338
- Vanden Heuvel, J.E. and C.J. DeMoranville. 2009. Competition between vegetative and reproductive growth in cranberry. HortScience 44(2): 322-327
- Meyers, J.M. and J.E. Vanden Heuvel. 2008. Enhancing the precision and spatial acuity of point quadrat analysis via calibrated exposure mapping. Amer. J. Enol. Vitic. 59(4): 425-431
- Vanden Heuvel, J.E. and W. R. Autio. 2008. Early season air temperature affects phenolic production in 'Early Black' cranberries. HortScience 43(6): 1737-1741
- Vanden Heuvel, J.E. and M.C. Goffinet. 2008. The effects of flood initiation timing and water temperature during flooding on non-structural carbohydrate concentration and anatomy of cranberry. HortScience 43(2): 338-345
- Vanden Heuvel, J.E. and J.R. Davenport. 2006. Growth and carbon partitioning in cranberry uprights as influenced by nitrogen supply. HortScience 41(7): 1552-

- Onayemi, O.O, C.C. Neto, and J.E. Vanden Heuvel. 2006. The effect of partial defoliation on vine carbohydrate concentration and flavonoid production in cranberry fruit. HortScience 41(3): 607-611
- Botelho, M.R. and J.E. Vanden Heuvel. 2006. Preliminary assessment of the impact of current flooding practices on non-structural carbohydrate concentrations of cranberry. HortTech. 16(2): 277-285
- Vanden Heuvel, J.E. and J.R. Davenport. 2005. Effects of light, temperature, defoliation and fruiting on carbon assimilation and partitioning in potted cranberry. HortScience 40(6): 1699-1704
- Vanden Heuvel, J.E., J.L. Robidoux, W.R. Autio, and C.C. Neto. 2005. Timing of partial defoliation affects carbohydrate concentration of vegetative tissues and concentration of phenolics in berries of potted 'De Chaunac' (*Vitis* sp.) grapevines. Can. J. Plant Sci. 85(3): 703-708
- Botelho, M.R. and J.E. Vanden Heuvel. 2005. High dissolved oxygen concentration of floodwater reduces carbohydrate concentration of cranberry uprights during flooding. HortScience 40(3): 569-573
- Vanden Heuvel, J.E. and J.A. Sullivan. 2005. The effect of V-trellising on primocane-fruiting raspberries (*Rubus idaeus* L.). Small Fruits Rev. 4(3): 109-116
- Vanden Heuvel, J.E., J.T.A. Proctor, J.A. Sullivan, and K.H. Fisher. 2004. Influence of training/trellising system and rootstock selection on productivity and fruit composition of 'Chardonnay' and 'Cabernet franc' grapevines in Ontario, Canada. Amer. J. Enol. Vitic. 55(3): 253-264
- Vanden Heuvel, J.E., K.H. Fisher, J.T.A. Proctor and J. A. Sullivan. 2004. Shading affects morphology, dry-matter partitioning, and photosynthetic response of greenhouse-grown 'Chardonnay' grapevines (*Vitis vinifera* L.). HortScience 39(1):65-70
- Vanden Heuvel, J.E., E.D. Leonardos, K.H. Fisher, J.T.A. Proctor, and J.A. Sullivan. 2002. Translocation and partitioning patterns of <sup>14</sup>C photoassimilate from light- and shade-adapted shoots in greenhouse-grown 'Chardonnay' grapevines (*Vitis vinifera* L.). J. Amer. Soc. Hort. Sci. 127(6):912-918
- Vanden Heuvel, J.E., J. A. Sullivan, and J.T.A. Proctor. 2000. Trellising system and cane density affect yield and fruit quality of red raspberry. HortScience 35(7): 1215-1219

Vanden Heuvel, J.E., J. A. Sullivan, and J.T.A. Proctor. 2000. Cane stabilization improves yield in red raspberry. HortScience 35(2): 181-183

## Invited Peer-Reviewed Book Reviews

Fontaine, M. and J.E. Vanden Heuvel. 2017. Book review: Vine and Wine in the Ancient Greek World. Bryn Mawr Classical Review. http://www.bmcreview.org/2017/07/20170748.html

Vanden Heuvel, J.E., 2009. Book review: Grapes. HortScience 44(5): 1510

## Invited Book Chapter

Vanden Heuvel, J.E. and P.S. Cousins. 2015. Disorders caused by abiotic stressors. In: Compendium of Grape Diseases, Disorders, and Pests. Editors: Wilcox, W.F., W.D. Gubler and J.K. Uyemoto. APS Press, St. Paul, MN

#### Trade Journals

- Geffroy, O., F. Cheriet, C. Chervin, H. Hannin, V. Olivier, A. Samson, and J. Vanden Heuvel. 2024. Leviers et freins à l'adoption des nouvelles variétés de vigne par les producteurs. Revue des Oenologues et des Techniques Vitivinicoles et Oenologiques 190. Pg 17-20
- Vanden Heuvel, J.E. 2018. Tips for under-vine cover crop adoption. Growing Produce.

  March edition
- Vanden Heuvel, J.E. 2016. Under-vine cover crops as an alternative to herbicide. Wine and Viticulture Journal (Australia) 31: 60-63
- Vanden Heuvel, J.E. 2015. Palissage: An alternative to mechanical hedging. Wines & Vines magazine, March edition
- Vanden Heuvel, J.E. and T.L. Preszler, 2014. Cluster thinning in Late Harvest Riesling:
  Does it pay? Wines and Vines Magazine, May issue:
  http://www.winesandvines.com/template.cfm?section=features&content=13
  2044&ftitle=Cluster%20Thinning%20in%20LateHarvest%20Riesling%3A%20Does%20it%20Pay%3F
- Vanden Heuvel, J.E. 2013. Establishing a Noiret Vineyard. Wines and Vines Magazine, October issue: 90-95
- Meyers, J.M. and J.E. Vanden Heuvel. 2010. Determining optimal cluster exposure in your vineyard. Practical Winery and Vineyard Magazine, May/June issue: 15-25, 58
- Scheiner, J.J., G.L. Sacks, and J.E. Vanden Heuvel. 2009. Viticultural factors affecting methoxypyrazines in grapes and wine. Wines and Vines Magazine, November issue

- Vanden Heuvel, J.E., T.R. Roper and J. Altweis. 2006. Winter flooding of cranberry vines. The Fruit Grower News 45(12): 9-11
- Botelho, M. and J.E. Vanden Heuvel. 2006. Floodwater's dissolved oxygen concentration could damage vines. The Fruit Growers News 45(8): 10
- Vanden Heuvel, J.E. 2003. Determination of high-stress periods in Massachusetts cranberry through growth analysis. Cranberries 67(11): 12-13
- Roper, T.R., D. Bauman, and J.E. Vanden Heuvel. 2003. Relationship between light exposure, carbon resources and nitrogen assimilation in cranberry Cranberries. 67(10):10-11
- Vanden Heuvel, J.E. 2002. Trellising systems to maximize yield and fruit composition in winegrapes. American Wine Society Journal 34:133-135
- Vanden Heuvel, J.E. 1996. Raspberry trellising holds great opportunity. The Grower 47(3):15

#### Newsletter Articles

- Vanden Heuvel, J.E. and S.D. Lerch. 2024. Integrating grazing into vineyard operations. In Gerling, C. (Ed.). Veraison to Harvest newsletter
- Vanden Heuvel, J.E., A. Wise, A. Gardner. 2024. Testing Bioinoculants in Finger Lakes and Long Island Vineyards. In Gerling, C. (Ed.). <u>Veraison to Harvest</u> newsletter
- Vanden Heuvel, J.E., Q. Ye, and M. Berdeja. 2020. Enhancing vine health with commercial arbuscular mycorrhizal inoculants. In Martinson, T. (Ed.). Appellation Cornell (December edition), Cornell AgriTech, Geneva, NY
- Vanden Heuvel, J.E., Q. Ye, and M. Berdeja. 2020. Enhancing Vine Health with Commercial Arbuscular Mycorrhizal Inoculants in Vineyards. In Martinson, T. (Ed.). <u>Veraison to Harvest</u> newsletter
- Vanden Heuvel, J.E. 2017. Adopting under-vine cover crops in vinifera vineyards. In Martinson, T. (Ed.). Appellation Cornell (March edition), NYSAES, Geneva, NY
- Martinson, T. and J.E. Vanden Heuvel. 2015. Vanden Heuvel research program works with cooperating vineyards. In Martinson, T. and C. Gerling (Ed.). Veraison to Harvest (4th ed. Vol 2008, 3 pp.) NYSAES, Geneva, NY: Statewide viticulture extension program
- Martinson, T. and J.E. Vanden Heuvel. 2008. Sampling focus: 'Corot noir', canopy management and differences in vine size. In Martinson, T. and C. Gerling (Ed.).

- Veraison to Harvest (8<sup>th</sup> ed. Vol 2015, 3 pp.) NYSAES, Geneva, NY: Statewide viticulture extension program
- Martinson, T. and J.E. Vanden Heuvel. 2008. Shoot density and canopy management for hybrids. Finger Lakes Vineyard Notes/Lake Erie Vineyard Notes/Hudson Valley Grape Newsletter (ed. Vol. Various, 4 pp.). Penn Yan, Fredonia, and Highland NY: Cornell Cooperative Extension (3 regional extension newsletters)
- Salvas, M. and J.E. Vanden Heuvel. 2006. Yield and fruit composition of 'Early Black' and 'Stevens' cranberry following sand application. UMass Cranberry Station Newsletter, December 2006
- Vanden Heuvel, J.E. 2006. Tips for reducing vine stress during harvest floods. UMass Cranberry Station Newsletter, November 2006
- Vanden Heuvel, J.E. 2006. Are you interested in holding late water this year? UMass Cranberry Station Newsletter, April 2006
- Vanden Heuvel, J.E. 2005. Strategies for minimizing vine damage during harvest floods. UMass Cranberry Station Newsletter, September 2005
- Vanden Heuvel, J.E. and M. Sylvia. 2005. Flash floods for reduction of black-headed fireworm. UMass Cranberry Station Newsletter, April 2005
- Vanden Heuvel, J.E. 2005. Are you interested in holding late water this year? UMass Cranberry Station Newsletter, April 2005
- Vanden Heuvel, J.E. 2004. Physiology 101: Carbohydrates. UMass Cranberry Station Newsletter, November 2004
- Vanden Heuvel, J.E. 2002. Environmental Physiology Program. UMass Cranberry Station Newsletter, July 2002

#### **Mentorship**

## Current Graduate Students

Manushi Trivedi, Ph.D., Cornell University, anticipated completion date: May 2025

Hannah Frank, Ph.D., Cornell University, anticipated completion date: May 2026

Hans Walter-Peterson, Ph.D. (Employee degree program), Cornell University, anticipated completion date: May 2026

John Owens, M.S. (Employee degree program), Cornell University, anticipated completion date: May 2027

Angela Paul, Ph.D., Cornell University, anticipated completion date: December 2029.

Joshua Ploshay, MS/Ph.D., Cornell University, anticipated completion date: December 2030

# Past Graduate Students

Anne Kearney, Ph.D., Cornell University, 2023.

Thesis title: The impact of palissage on the dynamics of shoot and root growth in wine grapes.

Current position: Adjunct Professor, Gallaudet University

Ming-Yi Chou, Ph.D., Cornell University, 2018.

Thesis title: Vineyard floor management in the Finger Lakes region:

physiological and microbial perspectives.

Current position: Assistant Professor, Rutgers University

Trent Preszler, Ph.D., Cornell University, 2012.

Thesis title: Optimizing cropload in 'Riesling' grapevines Current position: Professor of Practice, Cornell University

Justin Scheiner, Ph.D., Cornell University, 2010.

Thesis title: Viticultural effects on methoxypyrazines in red wine grapes Current position: Associate Professor, Texas A&M University

Jim Meyers, Ph.D., Cornell University, 2010.

Thesis title: Computational spatiotemporal canopy models for precision measurement and management of grapevine performance Current position: Research Scientist, Bright Farms Hydroponics

Macie Milstein, M.S., Cornell University, 2024.

Thesis title: Quantifying the effect of arbuscular mycorrhizal fungi inoculation in wine grapes

Current position: Intern, Abeja Winery

Justin Jackson, M.S., Cornell University, 2021.

Thesis title: Grazing sheep in NY winegrape vineyards.

Current position: Director of Sustainability, New York Wine and Grape Foundation

Justin-Beban France, M.S., Cornell University, 2017.

Thesis title: Palissage as an alternative to hedging for vertically-shoot positioned wine grape canopies.

Current position: PhD Candidate, University of Auckland

Adam Karl, M.S., Cornell University, 2015.

Thesis title: Vineyard floor management to optimize vine balance, soil quality, and onsite retention of nutrients and agrochemicals.

Current position: Associate Scientist, Silvestrum Climate Associates

Lindsay Jordan, M.S., Cornell University, 2014.

Thesis title: Under-vine groundcovers to reduce vigor in 'Riesling' grapevines Current position: Viticulturist, Constellation Wines

Piero Spada, M.S., Cornell University, 2008.

Thesis title: The effect of cluster shading on phenolic production in red wine grapes.

Current position: Vineyard and Winery Consultant

Brett Suhayda, M.S., University of Massachusetts Amherst, 2008

Thesis title: A comparison of bog sanding and pruning on vine productivity and fruit quality of cranberry.

Current position: Head Soccer Coach, Waubonsee Community College

Michelle Botelho, M.S., University of Massachusetts Amherst, 2005.

Thesis title: The effect of flooding on the nonstructural carbohydrate concentration of cranberry uprights and roots.

Current position: Technician, Connecticut Agricultural Experiment Station

Don Caldwell, M.P.S., Cornell University, 2024

Coby Chock, M.P.S., Cornell University, 2024

Wanjia Ni, M.P.S., Cornell University, 2024.

Lloyd Jones, M.P.S., Cornell University, 2023

Kishun Ghalan, M.P.S., Cornell University, 2022

Raquel Kallas, M.P.S. Cornell University, 2017

Taylor Mattus, M.P.S., Cornell University, 2016

Rebecca Sirianni, M.P.S., Cornell University, 2012

Tyler Berkey, M.P.S., Cornell University, 2011

Visiting Scholars	Olivier Geffroy, Associate Professor, École d'ingénieurs en France (Purpan), France (April-May 2023)
	Marie Thiollet-Scholtus, Researcher, INRAE (Colmar), France (June-August 2022)
	Qiuhong Ye, PhD student, Northwest Agriculture & Forestry University, China (January 2018-December 2019)
	Sam Kowlowski, MS student, Geisenheim University, Germany (March-December 2018)
	Iuliia Bulaeiva, Ph.D. Fulbright Scholar from Odessa State Agrarian University, Ukraine (January – December 2017)
Post-Doctoral Supervision	Dr. Mariam Berdeja, July 2017 – October 2022.  Project: Mycorrhizae on grapevine roots.  Current position: Assistant Professor, Texas Tech University
	Dr. Jim Meyers, September 2010 – June 2017 (0.5 FTE).  Project: Optimizing winegrape production based on quantitative canopy targets.  Current position: Research Scientist, Bright Farms Hydroponics
	Dr. Said Ennahli, June 2007-August 2008.  Project: Viticultural effects on methoxypyrazine and phenolic production in 'Cabernet franc'.  Current position: Professor, National School of Agriculture, Morocco
Graduate	Guangxun Zhai, M.S. Student, Horticulture, Cornell University (2023-present)
Student Special Committees	Kathleen Kanaley, Ph.D., Plant Pathology and Plant-Microbe Biology, Cornell University (2021-present)
	Elizabeth Kehas-Dewaghe, M.S., Environmental and Forest Biology, SUNY-ESF (2020-present)
	Thomas Baerenzung dit Baron, Ph.D., Ecole d'Ingénieurs de Purpan, France (2020-2023)
	Jonathan Jaramillo, Ph.D., Electrical and Computer Engineering, Cornell University (2020-2023)
	Richard Gaisser, M.S., Horticulture, Cornell University (2021-2022)

- Ryan Fifield, M.S., Department of Food Science, Cornell University (2019-2021)
- Andrew Harner, M.S., Department of Plant Science, The Pennsylvania State University (2016-2019)
- Meghan Hall, Ph.D., Department of Plant Pathology and Plant-Microbe Biology, Cornell University (2013-2018)
- Seth Urbanek, M.S. Department of Food Science, Cornell University (2015-2017)
- Camila Martins Tahim, M.S. Department of Food Science, Cornell University (2014-2016)
- Alex Fredrickson, M.S., Department of Food Science, Cornell University (2013-2015)
- Qun Sun, Ph.D., Department of Food Science, Cornell University (2007-2011)
- Becky Nelson, M.S., Department of Food Science and Technology, Cornell University (2008-2010)
- Jon Parrot, Ph.D., Dept. of Plant and Soil Science, University of Massachusetts Amherst (2005-2008)
- Olanike Onayemi, M.S., Dept. of Chemistry, University of Massachusetts Dartmouth (2002-2004)

# External Examiner for Ph.D. Theses

- Yipeng Chen, Ph.D., University of Melbourne, Australia, 2024. Thesis: Interaction of rootstock and soil microbiome on grapevine stress response and grape metabolites in Vitis vinifera L. cv. Pinot noir
- Joseph Marks, Ph.D., University of Adelaide, Australia, 2022. Thesis: Cover crops, carbon dynamics, and the ecological intensification of vineyards
- Javier Abad, Ph.D., Universidad Pública de Navarra, Spain, 2021. Thesis: Under-vine cover crops in Mediterranean vineyards
- Cécile Laurent, Ph.D., University of Montpellier, France, 2021. Thesis: Forecasting yield at the field level using ancillary data in commercial vineyards
- Yvette Wohlfahrt, Ph.D., Geisenheim University, Germany, 2021. Thesis: Effects of elevated CO2 on physiology, yield, and fruit composition of Vitis vinifera L. cvs. Riesling and Cabernet Sauvignon

External
Examiner for
M.Sc. Theses

Elena Kotsaki, M.Sc., Brock University, Canada, 2016. Thesis: Utilization of proximal sensing technology to map variability in Ontario vineyards

### **Teaching Experience**

Undergraduate

Fall 2024

**Teaching** 

Advanced Viticulture (VINE 4460/5460), 2 credits, 7 students

Spring 2024

Science of Grapevines (VIEN 3300/5300), 2 credits, 20 students

Fall 2023

Wine culture (VIEN/CLASS 2810), co-taught with M. Fontaine, 36 students

Fall 2022

Co-taught Grapes to Wines (VIEN 2204/5204) with Kathy Arnink, 3 credits, 40 students

Spring 2022

Science of Grapevines (VIEN 3300/5300), 2 credits, 20 students.

Wines & Vines (VIEN 1104), co-taught with Kathy Arnink, 3 credits, 240 students

Spring 2021

Advanced Viticulture (VIEN 4460), 2 credits, 9 students

Spring 2020

Robots, Wine, and Food (VIEN 4940), 1 credit, co-taught with K. Petersen, 28 students

Wine Culture (VIEN/CLASS 2810), 2 credits, co-taught with M. Fontaine, 35 students

Fall 2019

Science of Grapevines (VIEN 3300), 2 credits, 8 students

Spring 2019

Advanced Viticulture (VIEN 4460), 2 credits, 10 students

Spring 2018

Wines and Vines (VIEN/FDSC/HORT 1104), 3 credits, co-taught with K. Arnink, 240 students

Wine Culture (VIEN/CLASS 2810), 2 credits, co-taught with M. Fontaine, 68 students

#### Fall 2017

Wines and Vines (VIEN/FDSC/HORT 1104), 3 credits, co-taught with K. Arnink, 240 students

Grapes to Wines (VIEN/FDSC/HORT 2204), 3 credits, co-taught with K. Arnink, 26 students

#### Spring 2017

Wines and Vines (VIEN/FDSC/HORT 1104), 3 credits, co-taught with K. Arnink, 240 students

#### Fall 2016

Wines and Vines (VIEN/FDSC/HORT 1104), 3 credits, co-taught with K. Arnink, 204 students

Grapes to Wines (VIEN/FDSC/HORT 2204), 3 credits, co-taught with K. Arnink, 25 students

#### Spring 2016

Wines and Vines (VIEN/FDSC/HORT 1104), 3 credits, co-taught with K. Arnink, 209 students

Wine Culture (UNIV/VIEN/CLASS 2810), 2 credits, co-taught with M. Fontaine, 84 students

#### Fall 2015

Wines and Vines (VIEN/FDSC/HORT 1104), 3 credits, co-taught with K. Arnink, 153 students

Grapes to Wines (VIEN/FDSC/HORT 2204), 3 credits, co-taught with K. Arnink, 24 students

Grapes to Wines Lab (VIEN/FDSC/HORT 2205), co-taught with K. Arnink, 2 credits, 19 students

#### Fall 2014

Wines and Vines (VIEN/FDSC/HORT 1104), 3 credits, co-taught with K. Arnink, 102 students

Grapes to Wines (VIEN/FDSC/HORT 2204), 3 credits, co-taught with K. Arnink, 25 students

Grapes to Wines Lab (VIEN/FDSC/HORT 2205), co-taught with K. Arnink, 2 credits, 19 students

# Spring 2015

Sabbatical

#### Fall 2014

- Wines and Vines (VIEN/FDSC/HORT 1104), 3 credits, co-taught with K. Arnink, 102 students
- Grapes to Wines (VIEN/FDSC/HORT 2204), 3 credits, co-taught with K. Arnink, 25 students
- Grapes to Wines Lab (VIEN/FDSC/HORT 2205), co-taught with K. Arnink, 2 credits, 19 students
- Books about Wine (HORT 4940), 1 credit, 21 students (Learning Where You Live Class)

#### Spring 2014

- Wines and Vines (VIEN/FDSC/HORT 1104), 3 credits, co-taught with K. Arnink, 240 students
- Books about Wine (HORT 4940), 1 credit, 12 students (Learning Where You Live Class)

#### Fall 2013

- Wines and Vines (VIEN/FDSC/HORT 1104), 3 credits, co-taught with K. Arnink, 99 students
- Grapes to Wines (VIEN/FDSC/HORT 2204), 3 credits, co-taught with K. Arnink, 32 students
- Grapes to Wines Lab (VIEN/FDSC/HORT 2205), co-taught with K. Arnink, 2 credits, 22 students

#### Spring 2013

Viticulture and Vineyard Management (VIEN/HORT 3440), 3 credits, 11 students

#### Fall 2012

Grapes to Wines (VIEN/HORT/FDSC 2204/2205), 5 credits, co-taught with K. Arnink, 21 students in 2204, 15 students in 2205

#### Fall 2011

Grapes to Wines (VIEN/HORT/FDSC 2204), 4 credits, co-taught with K. Arnink, 15 students

#### Spring 2011

Viticulture and Vineyard Management (VIEN/HORT 3440), 3 credits, 26 students Organic and Sustainable Grape Growing and Winemaking I (VIEN/HORT 3120), 2 credits, co-taught with K. Arnink, 10 students

#### Fall 2010

Grapes to Wines (VIEN/HORT/FDSC 2204), 4 credits, co-taught with K. Arnink, 31 students

Fall 2009

Viticulture and Vineyard Management I (VIEN/HORT 4430), 3 credits, 15 students

Spring 2009

Viticulture and Vineyard Management II (VIEN/HORT 4440), 3 credits, 8 students

Fall 2008

Viticulture and Vineyard Management I (VIEN 4430/HORT 4430), 3 credits, 11 students

Spring 2008

Viticulture and Vineyard Management II (HORT 444), 3 credits, 9 students

Fall 2007

Viticulture and Vineyard Management I (HORT 443), 3 credits, 19 students

Spring 2007

Viticulture and Vineyard Management II (HORT 444), 3 credits, co-taught with A. Lakso, 4 students

New Courses Developed

Science of Grapevines, 2019, 2 credits

Advanced Viticulture Topics, 2019, 2 credits

Wine Culture (cross-listed with Dept. Classics), 2016, 2 credits

Books about Wine (Learning Where you Live Class), 2014, 1 credit

Grapes to Wine, 2010, 5 credits

Organic and Sustainable Grape Growing and Winemaking, 2011, 2 credits

#### **Presentations**

# Invited Presentations

Vanden Heuvel, J.E., M. Trivedi, J. Meyers, R. Chancia, R. Lohman, and T. Bates. 2024. A new spatial sampling method for grapevine macronutrients using Sentinel-1 and Sentinel-2 satellite images. NASA Space4Ag, Portland, NY, August 21.

Vanden Heuvel, J.E. 2023. Improving soil health in New York vineyards. NYWGF Business, Enology, and Viticulture Conference. March 28.

- Vanden Heuvel, J.E. 2023. New developments in Precision Viticulture. Prince Edward County Winegrowers Conference. March 24.
- Vanden Heuvel, J.E. and M. Berdeja. 2023. AMF in vineyards. LERGP Winter Grower Conference. February 2.
- Vanden Heuvel, J.E., J. Jackson, T. Schmit, M. Niles, and S. Lerch. 2023. Sheep grazing in cool climate vineyards. Wisconsin Fresh Fruit and Vegetable Conference, January 31.
- Vanden Heuvel, J.E., M. Trivedi, J. M. Meyers, and T.R. Bates. 2022. Developing a satellite image-based sampling protocol for nutrient monitoring in New York & Washington vineyards. Montpellier Wine & Vines Sciences International Seminar. October 13.
- Vanden Heuvel, J.E., J.M. Meyers, M. Trivedi. 2021. Using satellite images to develop efficient, spatially-explicit fruit and nutrient sampling protocols in U.S. vineyards. Montpellier Wine & Vine Sciences International Webinar Series. June 15.
- Vanden Heuvel, J.E. 2021. Improving soil health in cool climate vineyards. OMAFRA seminar, Ontario, Canada.
- Vanden Heuvel, J.E., M. Berdeja, Q. Ye. 2021. Inoculating grapevines with mycorrhizal fungi. OMAFRA seminar, Ontario, Canada.
- Vanden Heuvel, J.E. 2021. Under-vine cover crops to eliminate herbicide use in cool climate vineyards. Rutgers University Plant Biology Seminar series. March 12.
- Vanden Heuvel, J.E. 2021. Under-vine cover crops to eliminate herbicide use in cool climate vineyards. California State University at Fresno, Viticulture and Enology Seminar Series. March 3.
- Vanden Heuvel, J.E., 2020. Under-vine cover crops for cool climate vineyards.

  Wisconsin Fruit and Vegetable Growers Association Conference, January 27.
- Vanden Heuvel, J.E. 2019. Viticulture in the Northeastern U.S. Presentation to Israeli winegrowers, organized by the Hebrew University of Jerusalem, May 21.
- Vanden Heuvel, J.E. 2019. The physiology of vine balance. Digital Viticulture Symposium, July 18.

- Vanden Heuvel, J.E. 2019. Carbon production and partitioning in grapevine. Business, Enology, and Viticulture conference NY, March 1.
- Vanden Heuvel, J.E. 2018. What is NDVI? Business, Enology, and Viticulture conference NY, March 2.
- Vanden Heuvel, J.E. 2017. Under-vine cover crops: Above ground impacts. Organic Winegrowers of New Zealand Conference, June 27.
- Vanden Heuvel, J.E. 2017. Under-vine cover crops: Below ground impacts. Organic Winegrowers of New Zealand Conference, June 27.
- Vanden Heuvel, J.E. 2017. Under-vine cover crops to reduce herbicide use in vineyards. Ontario Fruit and Vegetable Conference, Feb. 23.
- Vanden Heuvel, J.E. 2017. The economics of yield and canopy management. Texas Wine and Grape Growers Association Annual Conference, Feb. 16.
- Vanden Heuvel, J.E. 2017. Flavor and aroma development in the vineyard. Texas Wine and Grape Growers Association Annual Conference, Feb. 16.
- Vanden Heuvel, J.E. 2016. Palissage: An alternative to hedging? Business, Enology, and Viticulture conference NY, March 5.
- Vanden Heuvel, J.E. 2016. Road map to style for cool climate whites. Insight Wine Conference, March 1.
- Vanden Heuvel, J.E. 2016. Cropload adjustment: Does it really pay? Craft Beverages East, Feb. 12.
- Vanden Heuvel, J.E. 2016. Vineyard management practices to improve fruit ripening. Craft Beverages East, Feb. 11.
- Vanden Heuvel, J.E. and G. Buckland. 2015. Roadmap to wine style. Napa Valley Grape Growers' Rootstock Event. November 12.
- Vanden Heuvel, J.E. 2015. Impacts of vineyard management practices on water quality. NY Chapter of the American Society of Landscape Architects Annual Meeting, June 12.
- Vanden Heuvel, J.E. 2015. Optimizing flavors and aromas in winegrapes: A case study of Riesling. French Wine Society Webinar. May 6.
- Vanden Heuvel, J.E. 2015. Under-vine cover crops for vinifera vineyards. Business

- Enology and Viticulture NY, Feb 28.
- Vanden Heuvel, J.E. 2015. Farming for Flavor. Oregon Wine Symposium, February 25.
- Karl, A., Vanden Heuvel, J.E., S. Lerch, R. Sirianni, M. Brown, and I. Merwin. 2015.

  Under-trellis cover crops as alternatives to herbicides. NY Fruit and Vegetable Expo, January 21.
- Vanden Heuvel, J.E., S. Lerch, R. Sirianni, A.Karl, M. Brown, and I. Merwin. 2014.

  Impact of under-vine cover crops in Finger Lakes vineyards. Business, Enology, and Viticulture Conference, February 1.
- Vanden Heuvel, J.E., S. Lerch, R. Sirianni, A.Karl, M. Brown, and I. Merwin. 2014. Impact of under-vine cover crops in Finger Lakes vineyards. Virginia Vintners Association, February 1.
- Vanden Heuvel, J.E., S. Lerch, R. Sirianni, A.Karl, M. Brown, and I. Merwin. 2014. Impact of under-vine cover crops in Finger Lakes vineyards. North Carolina Winegrower's Association, February 2.
- Vanden Heuvel, J.E., T.L. Preszler, G.L. Sacks, T.E. Martinson, and T. Berkey. 2013.

  Adjusting cropload in winegrapes: Does it really pay? Penn State Wine

  Marketing and Research Board Symposium, State College, PA. May 21.
- Preszler, T.L and J.E. Vanden Heuvel. 2013. The economic sustainability of Riesling production. Viticulture 2013, February 6.
- Vanden Heuvel, J.E. and T.E. Martinson. 2013. Adjusting cropload in hybrids: Does it pay? Viticulture 2013, February 6.
- Sacks, G.L., J.E. Vanden Heuvel, B. Pan, J. Scheiner, I. Ryona, S. Harris. 2012.

  Understanding factors that influence synthesis and degradation of the herbaceous-smelling alkylmethoxypyrazines in winegrapes. Washington Area Wine Grape Growers Association Annual Meeting, Kennewick, WA Feb. 10.
- Sacks, G.L., J.E. Vanden Heuvel, B. Pan, J. Scheiner, I. Ryona, S. Harris. 2011.

  Methoxypyrazines: After three decades, what's left to explore? In Vino Analytica Scientia, 21-23 July, Graz, Austria
- Vanden Heuvel, J.E. 2011. Managing hybrid cultivars in cool climates. Connecticut Wine Council, June 9.
- Vanden Heuvel, J.E. 2011. Canopy and cropload management for new Cornell

- winegrape cultivars. Massachusetts Grape and Wine Council, June 8.
- Vanden Heuvel, J.E. and T.E. Martinson. 2011. Selecting a good vineyard site. Vermont Grape and Wine Council Annual Conference, June 7.
- Vanden Heuvel, J.E. 2011. Managing hybrid cultivars in cool climates. Vermont Grape and Wine Council Annual Conference, June 7.
- Vanden Heuvel, J.E., Q. Sun, S.D. Lerch, and G.L. Sacks. 2011. Canopy and cropload management for Corot noir and Noiret. Finger Lakes Grape Growers Conference, March 4.
- Vanden Heuvel, J.E., S.D. Lerch, A.K. Mansfield, G.L. Sacks, T.E. Martinson, and T. Schmit. 2011. Impact of canopy management practices on yield, fruit composition, wine quality, and consumer willingness-to-pay for Riesling wines. Finger Lakes Grape Growers Conference, March 4.
- Vanden Heuvel, J.E., J.J. Scheiner, and G.L. Sacks. 2011. Viticultural impacts on herbaceous aromas in red wine grapes. Midwest Grape and Wine Conference, Feb. 5.
- Vanden Heuvel, J.E., Q. Sun, S.D. Lerch, and G.L. Sacks. 2011. Canopy and cropload management for Corot noir and Noiret. Midwest Grape and Wine Conference, Feb. 5.
- Vanden Heuvel, J.E., Q. Sun and G.L. Sacks. 2011. Canopy and cropload management in hybrids. Wisconsin Fruit and Vegetable Conference, Jan. 3.
- Sacks, G.L., T.E. Acree, J.E. Vanden Heuvel, M.T. Kwasniewski, B.S. Pan, J.M. Meyers, 2010. The aroma chemistry of Riesling. International Cool Climate Symposium, June 22.
- Vanden Heuvel, J.E. and J.M. Meyers, 2010. Creating canopy exposure maps to predict fruit and wine quality. President's Council of Cornell Women Annual Meeting, April 30.
- Scheiner, J.J., G.L. Sacks, and J.E. Vanden Heuvel. 2010. Canopy management for reducing green flavors and aromas in 'Cabernet franc'. Long Island Ag Forum, January 15.
- Scheiner, J.J., G.L. Sacks, and J.E. Vanden Heuvel. Reducing Green Flavors in the Vineyard. Ontario Fruit and Vegetable Conference. St.Catherines, Ontario. February 25.

- Scheiner, J.J., Q. Sun, T. Preszler, T. Martinson, G.L. Sacks, and J.E. Vanden Heuvel. 2009. Impact of canopy management on hybrid wine quality. New England Fruit and Vegetable Growers' Conference, Dec.17.
- Vanden Heuvel, J.E., J.J. Scheiner, and G.L. Sacks. 2009. Viticultural impacts on green aromas in red wine grapes. Ohio State University Fall Viticulture Conference, Nov. 6.
- Vanden Heuvel, J.E., Q. Sun, T. Preszler, T. Martinson, J. Meyers, and G.L. Sacks. 2009. Impact of canopy management on hybrid wine quality. Ohio State University Fall Viticulture Conference, Nov. 6.
- Vanden Heuvel, J.E. 2009. Crop control and canopy management for hybrids. University of Vermont Cold Climate Workshop, July 19.
- Scheiner, J.J., G.L. Sacks, and J.E. Vanden Heuvel. 2009. Canopy management for reducing green flavors and aromas in 'Cabernet franc'. Pennsylvania Association of Winegrowers meeting, Aug 11.
- Meyers, J.M. and J.E. Vanden Heuvel. 2009. Computational canopy management. Sonoma County Vineyard Technical Group, July 17.
- Scheiner, J.J., G.L. Sacks, A.N. Lakso, and J.E. Vanden Heuvel. 2009. Reducing methoxypyrazines in the vineyard. Wineries Unlimited, King of Prussia, PA, March 13.
- Vanden Heuvel, J.E., J.J. Scheiner, Q. Sun, and G.L. Sacks. 2009. Influence of canopy management on fruit and wine quality. Finger Lakes Grape Growers' Meeting, Waterloo, NY, March 6.
- Meyers, J.M. and J.E. Vanden Heuvel. 2009. Cluster exposure mapping in grapevine canopies. Finger Lakes Grape Growers' Meeting, Waterloo, NY, March 6.
- Vanden Heuvel, J.E., J. Scheiner, G. Sacks, I. Ryona, and B. Pan. 2009. Managing methoxypyrazines in 'Cabernet franc' grapevines in New York State.

  Washington Area Wine Grape Growers Association Annual Meeting, Kennewick, WA Feb. 4.
- Vanden Heuvel, J.E. and J.M. Meyers. 2009. The basics of canopy measurements. Washington Area Wine Grape Growers Association Annual Meeting, Kennewick, WA Feb. 5.
- Vanden Heuvel, J.E. 2008. Canopy management for hybrids. New England Wine Grape Growers Workshop, Belchertown, MA June 3.

- Vanden Heuvel, J.E. and G.L. Sacks. 2008. Herbaceousness in the vineyard and winery. NY Wine Industry Workshop, Geneva, NY March 28.
- Vanden Heuvel, J.E. 2008. Principles of training and canopy management. Lake Erie Grape Growers Meeting, Fredonia, NY March 27.
- Vanden Heuvel, J.E. 2008. Panelist, Impacts of climate change on viticultural practices discussion. Finger Lakes Grape Growers Meeting, Waterloo, NY, March 14.
- Vanden Heuvel, J.E. and G.L. Sacks. 2008. Herbaceousness in the vineyard and winery. Maryland Grape Growers Association/Maryland Wineries Association Annual Meeting, Ellicott City, MD, March 1.
- Vanden Heuvel, J.E. 2008. The impact of flooding on cranberry vines. UMass Amherst, Cranberry Management Update, Plymouth, MA. Jan 25.
- Vanden Heuvel, J.E. 2007. Phenolic production in cranberries. Cornell University Dept. of Food Science and Technology Seminar Series, May 2.
- Vanden Heuvel, J.E., C.C. Neto, H.A. Sandler, and A. Liberty. 2007. Improving phenolic composition of wine grapes using reflective mulches. Viticulture 2007, Rochester, NY. Feb. 9.
- Vanden Heuvel, J.E. 2006. Raspberries as an opportunity for diversification. Cape Cod Cranberry Grower's Diversification Seminar, E. Wareham, MA
- Sandler, H.A., J.E. Vanden Heuvel, C. Neto, B. Periera, S. Schloemann, and W. Coli. 2006. Use of reflective mulch in New England winegrapes. New England Fruit and Vegetable Grower's Association Annual Conference, Manchester, NH
- Vanden Heuvel, J.E. 2005. Carbon production and partitioning in cranberry. UMass Amherst Plant Biology Faculty Seminar Series, Amherst, MA
- Vanden Heuvel, J.E. 2005. The effect of flooding on cranberry vine physiology:
  Strategies for minimizing vine damage. American Cranberry Grower's
  Association Annual Summer Meeting, P.E. Marucci Center for Blueberry and
  Cranberry Research and Extension, Rutgers University, Chatsworth, NJ
- Vanden Heuvel, J.E. 2004. The job search, interview, and negotiation process. Joint meeting of the North Eastern Section of the American Society for Horticultural Science, and the North Eastern Section of the Weed Science Society, Graduate Student Seminar. Cambridge, MA

- Vanden Heuvel, J.E. 2004. Improving phenolic production in cranberries. Cranberry Institute Health Researchers Conference. Lake Geneva, WI
- Vanden Heuvel, J.E. 2003. Building a better berry Investigating resource allocation towards phenolic production in cranberries. University of Massachusetts Dartmouth Cranberry Research Symposium. N. Dartmouth, MA
- Vanden Heuvel, J.E. 2002. Investigating resource allocation towards phenolic production in cranberries. Cranberry Institute Health Researchers Conference. Brewster, MA
- Vanden Heuvel, J.E. 2002. Photosynthetic capacity and carbon partitioning of lightand shade-adapted leaves in grapevine. Department of Plant and Soil Sciences Seminar Series, University of Massachusetts Amherst, MA
- Vanden Heuvel, J.E., J.A. Sullivan, K.H. Fisher, and J.T.A. Proctor. 2001. Trellising system affects yield components and must quality of *Vitis vinifera* L. American Wine Society Annual Conference. Hilton Head Island, SC

## Academic Conference Presentations

- Thiollet-Scholtus, M., A.C.M. Gaudin, and J.E. Vanden Heuvel. 2024. Challenges and opportunities for increasing organic carbon in vineyard soils. European Society Agronomy Congress, Rennes, France
- Berdeja, M. N. Reynolds, T. Pawlowska, J. Vanden Heuvel. 2023. Identification of arbuscular mycorrhizal fungi species preferentially associated with grapevine roots inoculated with commercial bioinoculants. Giesco (Group of international Experts for Cooperation on Vitivinicultural Systems), Ithaca, NY
- Trivedi, M. T. Bates, J. Meyers, J. Vanden Heuvel. 2023. New satellite-based sampling protocols for grapevine nutrient monitoring. Giesco (Group of international Experts for Cooperation on Vitivinicultural Systems), Ithaca, NY
- Zhai, G., J. Vanden Heuvel, S. Lerch, Y. Jiang. 2023. Active thermography to determine grape bud mortality: system design and feasibility. Giesco (Group of international Experts for Cooperation on Vitivinicultural Systems), Ithaca, NY
- Berdeja, M., Q. Ye, T. Bauerle, and J. Vanden Heuvel. 2021. Commercial mycorrhizal inoculants induce changes in grapevine root morphology. International Symposium on Grapevine Physiology and Biotechnology, Stellenbosch, South Africa (online conference)
- Meyers, J., N. Dokoozlian, C. Ryan, C. Bioni, J.E. Vanden Heuvel. 2019. Improved vineyard sampling efficiency using aerial NDVI. Giesco (Group of international

- Experts for Cooperation on Vitivinicultural Systems), Thessaloniki, Greece
- Kallas, R., T. Mattus, J. France, M. Chou, A. Karl, and J. Vanden Heuvel. 2018.
  Under-vine cover crops reduce the growth of Noiret in a drought year.
  American Society of Enology and Viticulture Eastern Section, King of Prussia, PA
- Kearney, A. and J.E. Vanden Heuvel. 2018. Palissage reduces cluster compaction in Cabernet Franc wine grapes. American Society of Enology and Viticulture Eastern Section, King of Prussia, PA
- Harner, A., M. Centinari, R. Elias, B. Hed, and J.E. Vanden Heuvel. 2018. Do climatic and viticultural factors influence rotundone accumulation in Noiret wine grapes? American Society of Enology and Viticulture Eastern Section, King of Prussia, PA
- Vanden Heuvel, J.E. 2017. The potential for using under-vine cover crops as an alternative to herbicides in cool climate vineyards. Giesco (Group of international Experts for Cooperation on Vitivinicultural Systems), Mendoza, Argentina
- Chou, M.Y., T. Bell, J. Kao-Kniffin and J.E. Vanden Heuvel. 2017. Under-vine floor management impacts the fungal communities of soil but not grapes or wine. American Society of Enology and Viticulture Eastern Section, Charlottesville, VA
- Chou, M.Y. and J.E. Vanden Heuvel. 2017. Under-vine cover crops mitigate excessive vine vigor and improve soil health in a cool climate Cabernet Franc vineyard.

  American Society of Enology and Viticulture, Bellevue, WA
- Meyers, J.M, A.K. Mansfield, D. Manns, G.L. Sacks, and J.E. Vanden Heuvel. 2017.

  Quantitative light response curves for wine active compounds in Riesling and Cabernet Franc. Wine Active Compounds Conference, Beaune, France
- Homich, L., R. Elias, J. Vanden Heuvel, and M. Centinari. 2016. Effect of Leaf Removal Timing and Duration on Rotundone Content in Noiret Grapes and Wine.

  American Society of Enology and Viticulture Eastern Section, St. Louis, MO
- Chou, M., T. Bell, A.K. Mansfield, J. Kao-Kniffen, and J.E. Vanden Heuvel. 2016.

  Vineyard Floor Management Impacts Soil and Grape Microbial Communities in a New York State Riesling Vineyard. American Society of Enology and Viticulture Eastern Section, St. Louis, MO
- Anderson, G., J. van Aart, P. Bajorksi, and J.E. Vanden Heuvel. 2016. Detection of

- wine grape nutrient levels using visible and near infrared 1nm spectral resolution remote sensing. Proc. SPIE 9866, Autonomous Air and Ground Sensing Systems for Agricultural Optimization and Phenotyping, Baltimore, MD
- Vanden Heuvel, J.E., A.D. Karl, I. Merwin, R. Herveiux, M. Brown. 2015. Under-vine management in a Finger Lakes Vineyard. American Society of Enology and Viticulture Eastern Section, Portland, NY
- Karl, A., Vanden Heuvel, J.E., S. Lerch, R. Sirianni, M. Brown, and I. Merwin. 2014.

  Under-trellis management impacts agrochemical and nutrient leaching in a Finger Lakes vineyard. American Society of Enology and Viticulture presentation, June 25, 100 participants, contact hours = 25
- Meyers, J.M. A.K. Mansfield, D. Manns, and J. E Vanden Heuvel. 2014. Response of phenolic compounds to sunlight intensity in cool climate Cabernet Franc. American Society of Enology and Viticulture, July 24-27, Austin, TX
- Jordan, L.M. T. Bjorkman, and J.E. Vanden Heuvel. 2014. Evaluating buckwheat and chicory as under-vine cover crops in Northeastern Riesling. American Society of Enology and Viticulture, July 24-27, Austin, TX
- Karl, A.D., I. Merwin, M. Brown, R. Sirianni, S. Lerch, and J.E. Vanden Heuvel. 2014. Under-trellis management impacts agrochemical and nutrient leaching in a Finger Lakes Vineyard. American Society of Enology and Viticulture, July 24-27, Austin, TX
- Vanden Heuvel, J.E., S.D. Lerch, and J.M Meyers. 2013. Training system and rootstock impact yield and fruit composition of Arandell. American Society of Enology and Viticulture Eastern Section, July 16-18, Winston-Salem, NC
- Jordan, L., T. Bjorkman, A.K. Mansfield, and J.E. Vanden Heuvel. 2013. Using undervine groundcovers as a sustainable alternative to herbicide in cool climate Riesling. American Society of Enology and Viticulture Eastern Section, July 16-18, Winston-Salem, NC
- Meyers, J.M. and J.E. Vanden Heuvel. 2013. Using NDVI images to reduce required sample sizes in a vineyard. American Society of Enology and Viticulture Eastern Section, July 16-18, Winston-Salem, NC
- Jordan, L.M., T. Bjorkman, and J. Vanden Heuvel. 2013. Undervine cover crops reduce titratable acidity without affecting vine growth in cool-climate Riesling. American Society of Enology and Viticulture, June 24-28, Monterey, CA

- Centinari, M., J. Vanden Heuvel, A.K. Mansfield, and T. Bauerle. 2012. Cabernet franc grapevine response to root-zone management. American Society of Enology and Viticulture Eastern Section, July 16-19, Traverse City, MI
- Vanden Heuvel, J.E., Gavin L. Sacks, Jim M. Meyers, Timothy E. Martinson, Todd M. Shmitt, and Anna Katharine Mansfield. 2011. Impact of canopy/cropload management practices on yield, fruit compostion, wine quality, and consumer willingness-to-pay for wines. American Society of Enology and Viticulture Eastern Section, July 13-15, Baltimore, MD
- Meyers, J.M., G.L. Sacks, and J.E. Vanden Heuvel. 2011. Fruit zone light response curves for organoleptic compounds in Riesling. American Society of Enology and Viticulture Eastern Section, July 13-15, Baltimore, MD
- Preszler, T.L. and J.E. Vanden Heuvel. 2011. Cluster thinning affects fruit composition and economic sustainability of Riesling. American Society of Enology and Viticulture Eastern Section, July 13-15, Baltimore, MD
- Mansfield, A.K., G.L. Sacks, T.E. Acree, and J.E. Vanden Heuvel. 2011. "Defining Typicity in Cool Climate Riesling," U Bourgogne/UNESCO Chair "Culture et Traditions du Vin", March 24, Beaune, Burgundy, France
- Meyers, J.M. and J.E. Vanden Heuvel. 2010. Balancing competing fruit production goals via quantitatively optimized canopy architecture targets. American Society of Enology and Viticulture Eastern Section, July 12-14, Geneva, NY
- Meyers, J.M., G.L. Sacks, and J.E. Vanden Heuvel. 2010. Seasonal stability of architecture-dependent microclimatic spatial patterns. American Society of Enology and Viticulture Eastern Section, July 12-14, Geneva, NY
- Nelson, R.E., J.E. Vanden Heuvel, and A.K. Mansfield. 2010. The impact of terroir on Finger Lakes Riesling typicity. American Society of Enology and Viticulture Eastern Section, July 12-14, Geneva, NY
- Sun, Q., G.L. Sacks, S.D. Lerch, and J.E. Vanden Heuvel. 2010. Impacts of shoot thinning and harvest date on the polyphenol and volatile composition of Marechal Foch. American Society of Enology and Viticulture Eastern Section, July 12-14, Geneva, NY
- Merwin, I.A., M.G. Brown, and J.E. Vanden Heuvel. 2010. Irrigation and drainage effects on Riesling survival, growth, productivity, and fruit composition in the Finger Lakes Region. American Society of Enology and Viticulture Eastern Section, July 12-14, Geneva, NY

- Meyers, J.M., G.L. Sacks, H. van Es, and J.E. Vanden Heuvel. 2010. Improving efficiency of research and vineyard operations via spatially-explicit sampling protocols.

  American Society of Enology and Viticulture Conference, June 20-24, Seattle, WA
- Meyers, J.M., G.L. Sacks, H. van Es, and J.E. Vanden Heuvel. 2010. Improving efficiency of research and vineyard operations via spatially-explicit sampling protocols. American Society of Enology and Viticulture Conference, June 20-24, Seattle, WA
- Meyers, J.M., G.L. Sacks, H. van Es, and J.E. Vanden Heuvel. 2010. Improving efficiency of research and vineyard operations via spatially-explicit sampling protocols. American Society of Enology and Viticulture Conference, June 20-24, Seattle, WA
- Neto, C.C., F.L. Caruso, and J.E. Vanden Heuvel. 2009. Variation in phytochemical composition between cranberry cultivars: Is there a relationship to fungal pathogen and insect resistance? North American Cranberry Research and Extension Workers Conference. August 10-12, Moncton NB
- DeMoranville, C.J., B. Suhayda, H.A. Sandler, W.R. Autio, and J.E. Vanden Heuvel. 2009. Sanding and pruning differentially impact cranberry yield and canopy characteristics. North American Cranberry Research and Extension Workers Conference. August 10-12, Moncton NB
- Dao, C., M. Botelho, J.E. Vanden Heuvel, and C.C. Neto. 2009. Hydroxycinnamic acid derivatives from foliage of 'Early Black' cranberry, a pest-resistant cultivar.

  North American Cranberry Research and Extension Workers Conference.

  August 10-12, Moncton NB
- Dao, C., M. Botelho, J.E. Vanden Heuvel, and C.C. Neto. 2009. Hydroxycinnamic acid derivatives from foliage of 'Early Black' cranberry, a pest-resistant cultivar. American Society of Pharmocognosy, June 27 July 1, Honalulu, HI
- Sun, Q.S., J.E. Vanden Heuvel, E.H. Lavin, T.E. Acree, and G.L. Sacks. 2009. Aroma composition of red interspecific grape variety Marechal Foch by SPME-GC/O/MS. American Chemical Society National Meeting, August 16-20, Washington, DC
- Suhayda, B., C.J. DeMoranville, H.A. Sandler, W.R. Autio, and J.E. Vanden Heuvel. 2009. Severity of sanding or pruning impacts yield and microclimate of cranberry vines. American Society for Horticultural Science Annual Meeting, July 24-28, St. Louis, MO

- Meyers, J.M., G.L. Sacks, and J.E. Vanden Heuvel. 2009. Naturally occurring spatial variability in canopy biomass impacts flavor and aroma compounds in 'Riesling'. American Society of Enology and Viticulture National Meeting, June 23-26, Napa, CA
- Scheiner, J.J., L. Tarleton, A. Wise, G.L. Sacks, and J.E. Vanden Heuvel. 2009. Impact of basal leaf removal on methoxypyrazine concentration of 'Cabernet franc' and 'Merlot'. American Society of Enology and Viticulture National Meeting, June 23-26, Napa, CA
- Scheiner, J.J., G.L. Sacks, and J.E. Vanden Heuvel. 2009. Multivariate analysis of viticultural impacts on methoxypyrazines in Vitis vinifera cv. 'Cabernet franc' grape berries. American Society of Enology and Viticulture Eastern Section, July 20-22, Painsville, OH
- Kwasniewski, M.T., G.L. Sacks, B.S. Pan, K.J. Arnink, and J.E. Vanden Heuvel. 2009. Leaf removal timing effect on TDN (1,1,6-trimethyl 1-1,2-dihydronaphthalene) potential in 'Riesling' juice. American Society of Enology and Viticulture Eastern Section, July 20-22, Painsville, OH
- Preszler, T.L., T.M. Schmit, and J.E. Vanden Heuvel. 2009. A model to establish economically sustainable cluster thinning practices. American Society of Enology and Viticulture Eastern Section, July 20-22, Painsville, OH
- Meyers, J.M. and J.E. Vanden Heuvel. 2009. Spatial correlation in vine biomass density suggests need for new design and sampling protocols. American Society of Enology and Viticulture Eastern Section, July 20-22, Painsville, OH
- Dao, C., M. Botelho, J. Vanden Heuvel, and C. Neto. 2008. Phenolic compounds with pest-deterrent properties from leaves of 'Early Black' cranberry cultivar (*Vaccinium macrocarpon*). American Chemical Society, August 17-21, Philadelphia, PA
- Meyers, J.M., S.D. Lerch, and J.E. Vanden Heuvel. 2008. Effects of shoot thinning and hedging on yield and fruit composition of 'Vignoles' (*Vitis* sp.). American Society of Enology and Viticulture Eastern Section, July 14-16, St. Catherine's, ON
- Meyers, J.M. and J.E. Vanden Heuvel. 2008. Enhancing the precision and spatial acuity of point quadrat analyses. American Society of Enology and Viticulture Eastern Section, July 14-16, St. Catherine's, ON
- Ennahli, S., P.A. Spada, S.D. Lerch, G.L. Sacks, and J.E. Vanden Heuvel. 2008. The impact on timing and severity of leaf removal on production of phenolics and

- methoxypyrazines in 'Cabernet franc'. American Society of Enology and Viticulture Eastern Section, July 14-16, St. Catherine's, ON
- Riccardi, B.M., S.D. Lerch, K.J. Arnink, and J.E. Vanden Heuvel. 2008. The effect of shoot thinning and basal leaf removal on yield and fruit composition of Noiret. American Society of Enology and Viticulture Eastern Section, July 14-16, St. Catherine's, ON
- Spada, P.A., C.C. Neto, and J.E. Vanden Heuvel. 2008. Cluster shading affects composition but not concentration of anthocyanins in mature DeChaunac grapes. American Society of Enology and Viticulture Eastern Section, July 14-16, St. Catherine's, ON
- Meyers, J.M and J.E. Vanden Heuvel. 2008. Creating canopy exposure maps using new metrics for point quadrat analyses. American Society of Enology and Viticulture, June 17-20, Portland, OR
- Dao, C., M. Botelho, J. Vanden Heuvel, and C. Neto. 2007. Phenolic compounds with pest-deterrent properties from leaves of 'Early Black' cranberry cultivar (*Vaccinium macrocarpon*). American Society of Pharmacognosy, July 14-18, Portland, ME
- Vanden Heuvel, J.E., C.C. Neto, H.A. Sandler, A. Liberty, and P. Brock. 2007. Improving the phenolic composition of wine grapes using reflective mulches. National Viticulture Research Conference. July 18-20, Davis, CA
- Spada, P.A., C.C. Neto, and J.E. Vanden Heuvel. 2007. The effect of light timing and intensity on the flavonoid composition of 'DeChaunac' (*Vitis* sp.) grapes.

  American Society of Enology and Viticulture, Eastern Section. July 16-17, Lehigh, PA
- Dao, C., C. Neto, J. Vanden Heuvel and M. Botelho. 2007. Foliage composition of 'Early Black' cranberry cultivar may influence pest deterrent properties. Sigma Xi Research Exhibit, UMass Dartmouth
- Suhayda, B., J. Vanden Heuvel, C. DeMoranville, and W. Autio. 2007. The effects of sanding and pruning on the canopy microclimate and yield of 'Stevens' cranberry. NorthEastern Section of the American Society for Horticultural Science. College Park, MD
- Parrot, J., W. Autio, J. Vanden Heuvel, and J. Bailey. 2006. Non-structural carbohydrate components of post-colonial Ponderosa pine in Northern Arizona. Society of American Foresters International Convention, Pittsburgh, PA

- Vanden Heuvel, J.E. and C.J. DeMoranville. 2006. Competition between vegetative and reproductive growth in cranberry. American Society for Horticultural Science. New Orleans, LA
- Vanden Heuvel, J.E. and J.R. Davenport. 2006. The impact of nitrogen application on nonstructural carbohydrate production in cranberry leaves. American Society for Horticultural Science. New Orleans, LA
- Vanden Heuvel, J.E. and C.C. Neto. 2006. Improving phenolic composition of Merlot using reflective mulches. American Society for Enology and Viticulture Eastern Section, Rochester, NY
- Vanden Heuvel, J.E. 2005. The effect of flood water temperature on cranberry uprights and roots during spring and fall floods. NorthEastern Section of the American Society for Horticultural Science. Ithaca, NY
- Vanden Heuvel, J.E. 2005. Floodwater temperature and duration affect non-structural carbohydrate concentration of cranberry uprights and roots. American Society for Horticultural Science. Las Vegas, NV
- Onayemi, O., B. Pereira, A. Liberty, C. Neto, J. Vanden Heuvel, and H. Sandler. 2005. Effects of field treatments on content of phenolics in grapes and cranberry. NorthEast Regional Meeting of the American Chemical Society. Fairfield, CT
- Botelho, M. and J.E. Vanden Heuvel. 2005. Harvest flooding affects seasonal pattern of carbohydrate accumulation in cranberry uprights. NorthEastern Section of the American Society for Horticultural Science. Washington, DC
- Vanden Heuvel, J.E. and M. Botelho. 2005. Flooding effects on cranberry uprights vary by season. NorthEastern Section of the American Society for Horticultural Science. Washington, DC
- Vanden Heuvel, J.E., J.L. Robidoux, and C.C. Neto. 2004. Leaf carbohydrate concentration may affect development of phenolic compounds in grape berries. American Society for Horticultural Science. Austin, TX
- Vanden Heuvel, J.E. 2004. Source-sink relationships in cranberry: Effects on carbohydrate production and partitioning. American Society for Horticultural Science. Austin, TX
- Vanden Heuvel, J.E. 2004. Source-sink relationships in cranberry: Effect on leaf photosynthesis. NorthEastern Section of the American Society for Horticultural Science. Cambridge, MA

- Botelho, M. and J.E. Vanden Heuvel. 2004. The effect of dissolved oxygen level on carbohydrate concentrations of greenhouse-grown cranberry vines during flooding. NorthEastern Section of the American Society for Horticultural Science. Cambridge, MA
- Vanden Heuvel, J.E. 2003. Harvest flooding reduces carbohydrate concentrations in cranberry uprights and roots. North American Cranberry Research and Extension Worker's Conference. E. Wareham, MA
- Vanden Heuvel, J.E., J.T.A. Proctor, J.A. Sullivan, and K.H. Fisher. 2003. Trellising system affects yield and fruit composition of 'Cabernet franc' and Chardonnay grapevines. NorthEastern Section of the American Society for Horticultural Science. Baltimore, MD
- Vanden Heuvel, J.E., K.H. Fisher, and J.A. Sullivan. 2001. Is pruning weight an accurate expression of vine size? Agricultural Institute of Canada: Canadian Society for Horticultural Science. Guelph, ON
- Vanden Heuvel, J.E., K.H. Fisher, J. A. Sullivan, and J.T.A. Proctor. 2001. Trellising system affects yield components and must quality of *Vitis vinifera* L. cvs. 'Chardonnay' and 'Cabernet franc'. American Society for Enology and Viticulture, Eastern Section. Niagara Falls, ON
- Vanden Heuvel, J.E., K.H. Fisher, J. A. Sullivan, and J.T.A. Proctor. 2001. Shading affects leaf anatomy, morphology, and whole-vine net carbon exchange rate of greenhouse-grown Chardonnay grapevines. American Society for Horticultural Science. Sacramento, CA
- Vanden Heuvel, J.E., K.H. Fisher, and J.A. Sullivan. 2000. Alternative expressions of vine size in *Vitis vinifera* L. American Society for Enology and Viticulture, Eastern Section. Ithaca, NY
- Vanden Heuvel, J.E., K.H. Fisher, J. A. Sullivan, and J.T.A. Proctor. 2000. The influence of shading level on dry-matter partitioning of potted grapevines. International Symposium on Grapevine Physiology and Biotechnology. Heraklion, Greece
- Vanden Heuvel, J.E., J. A. Sullivan, and J.T.A. Proctor. 1999. A comparison of trellising system and cane density on productivity in red raspberry. American Society for Horticultural Science. Minneapolis, MN

#### Outreach Presentations

- Vanden Heuvel, J.E. and M. Berdeja. 2020. Mycorrhizal Inoculations of grapevines.

  Virtual twilight meeting for the Finger Lakes Grape Growers Program. May 17, participants
- Vanden Heuvel, J.E. 2018. A touch-based, yield-estimating robot for winegrape vineyards. Entrepreneurship at Cornell presentation and panel discussion. April 20, 50 participants
- Vanden Heuvel, J.E. 2017. A touch-based, yield-estimating robot for winegrape vineyards. CALS Advisory Council presentation. November 13, 100 participants
- Vanden Heuvel, J.E. 2017. Palissage as a tool for managing vigorous canopies. Finger Lakes Grape Growers Twilight Meeting, July 18, 30 participants = 15 contact hours
- Vanden Heuvel, J.E. 2015. Under-vine cover crops to reduce vine vigor in vineyards. Finger Lakes Grape Growers Twilight Meeting, August 25, 30 participants, contact hours = 15
- Vanden Heuvel, J.E. 2015. Palissage as a canopy management tool. Finger Lakes Grape Growers Twilight Meeting, August 25, 30 participants, contact hours = 15
- Vanden Heuvel, J.E. 2014. Cranberry research at Cornell. Cornell Small Fruit Days, October 3, 40 participants, contact hours = 20
- Vanden Heuvel, J.E., S. Lerch, R. Sirianni, A.Karl, M. Brown, and I. Merwin. 2014. Impact of under-vine cover crops in Finger Lakes vineyards. Webinar for Suffolk County CCE, April 4, 25 participants
- Vanden Heuvel, J.E. 2013. Evaluating annual under-vine cover crops to reduce vegetative vigor and improve wine quality of Riesling and Cabernet franc. Northern Grapes Program Webinar, February 12. 40 participants
- Vanden Heuvel, J.E. 2011. Under-vine cover crops to reduce leaching of nitrates in winegrape production. Lodi, NY, August 18, 45 participants
- Vanden Heuvel, J.E. 2010. Managing new Cornell breeding selections. Geneva NY, August 26, 20 participants
- Vanden Heuvel, J.E. and T.E. Martinson. 2010. Comparing canopy management

- treatments via sensory analysis of wines. Geneva NY, August 3, 25 participants
- Vanden Heuvel, J.E. 2010. Coordinated wine grape variety trials in the Eastern US. Fruit Field Days, Geneva NY, July 28, 100 participants
- Martinson, T.E. and J.E. Vanden Heuvel. 2010. Comparing canopy management treatments via sensory analysis of wines. Talk at Fredonia NY, June 21, 9 participants
- Vanden Heuvel, J.E. 2009. Canopy management for high-quality 'Riesling'. Vineyard talk at White Springs vineyard, Geneva NY. August 24, 42 participants
- Vanden Heuvel, J.E. 2009. Managing vigorous canopies. Vineyard talk at Peconic Bay Winery, Cutchogue, NY. August 19, 8 participants
- Vanden Heuvel, J.E. 2009. Crop control and canopy management in hybrid grapes.

  Vineyard talk at Cornell Cooperative Extension Willsboro vineyard. July 18, 30 participants
- Vanden Heuvel, J.E. 2009. Canopy management in hybrid grapes. Vineyard talk at Oak Summit Vineyards in Willsboro, NY, June 25, 18 participants
- Vanden Heuvel, J.E. 2009. Canopy management in hybrid grapes. Seminar (via polycom) to North Country growers, March 28, 11 participants
- Vanden Heuvel, J.E. and T.L. Preszler. 2009. Canopy management in hybrid grapes. Seminar at West Lake Fire House for Finger Lakes growers, Geneva, NY, May 12, 25 participants
- Vanden Heuvel, J.E. and T.L. Preszler. 2009. Canopy management in hybrid grapes. Seminar at Freedom Run Winery for WNY growers, Lockport, NY, May 5, 15 participants
- Meyers, J.M. and J.E. Vanden Heuvel. 2008. Building canopy exposure maps. Cornell Recent Advances in Viticulture and Enology, Ithaca, NY. November 11, 30 participants
- Sun, Q.S., J.E. Vanden Heuvel, and G.L. Sacks. 2008. Determining hybrid aromas in Marechal Foch. Cornell Recent Advances in Viticulture and Enology, Ithaca, NY November 11, 30 participants
- Meyers, J.M. and J.E. Vanden Heuvel. 2008. Canopy exposure mapping as a predictor of wine quality, Finger Lakes Grape Program, Penn Yan, NY. August 11, 18

#### participants

- Meyers, J.M. and J.E. Vanden Heuvel. 2008. Canopy exposure mapping as a predictor of wine quality, Finger Lakes Grape Program, Branchport, NY. August 20, 20 participants
- Meyers, J.M. and J.E. Vanden Heuvel. 2008. Canopy exposure mapping as a predictor of wine quality, Lake Erie Grape Program, Westfield, NY. Sept 4, 5 participants
- Vanden Heuvel, J.E. and T.E. Martinson, 2008. Canopy management in hybrid grapes. Seminar via polycom at Cornell Cooperative Extension of Duchess County, May 8, 8 participants
- Vanden Heuvel, J.E. and T.E. Martinson, 2008. Canopy management in hybrid grapes. Seminar for Finger Lakes growers, Branchport, NY, May 1, 25 participants
- Vanden Heuvel, J.E. and T.E. Martinson, 2008. Canopy management in hybrid grapes. Seminar at Liberty Vineyards for Lake Erie region growers, Westfield, NY, April 24, 15 participants
- Vanden Heuvel, J.E. 2007. New research in viticulture. Cornell Recent Advances in Viticulture and Enology (CRAVE) conference, Nov. 15, Ithaca, NY, 30 participants
- Vanden Heuvel, J.E. 2007. Training and spacing experiments with new hybrid cultivars. NYSAES Fruit Day, July 25, Geneva, NY, 50 participants
- Vanden Heuvel, J.E. 2006. Vine training and canopy management. New Grape Grower's Workshop, Sandown, NH
- Vanden Heuvel, J.E. and C.C. Neto. 2006. Improving phenolic composition of Merlot using reflective mulches. New England Grape Grower's Workshop, Sakonnet, MA
- De Moranville, C.J., H.A. Sandler, J.E. Vanden Heuvel, M. Sylvia, and F. Caruso. 2006. The sanding, pruning, and irrigation management project. UMass Amherst Cranberry Management Update Meeting, Plymouth, MA
- Vanden Heuvel, J.E. 2006. Strategies for minimizing vine damage during flooding.

  UMass Amherst Cranberry Management Update Meeting, Plymouth, MA.
- Vanden Heuvel, J.E., H.A. Sandler, and C. Neto. 2005. Using reflective mulches to improve wine grape composition in New England. New England Grape Grower's Spring Workshop, Westport, MA

- Coli, W., S. Schloemann, H.A. Sandler, and J. Vanden Heuvel. 2005. The New England wine grape grower survey. New England Grape Grower's Spring Workshop, Westport, MA
- Vanden Heuvel, J.E. 2005. Flooding effects on cranberry uprights. UMass Amherst Cranberry Management Update Meeting, Plymouth, MA
- Vanden Heuvel, J.E. 2004. Seasonal growth of cranberry vines. UMass Amherst Cranberry Management Update Meeting, Plymouth, MA
- Vanden Heuvel, J.E. 2003. Flooding and carbohydrate stress in cranberry. UMass Amherst Cranberry Management Update Meeting, Plymouth, MA.
- Vanden Heuvel, J.E. 2002. The new physiology program at the Cranberry Station.

  UMass Amherst Cranberry Management Update Meeting, Plymouth, MA
- Vanden Heuvel, J.E., and J.A. Sullivan. 2001. Trellising and cane density in red raspberry. North American Berry Growers Association Annual Conference. Niagara Falls, ON
- Vanden Heuvel, J.E., and J.A. Sullivan. 1999. Trellising of 'Titan' red raspberries.

  Ontario Berry Grower=s Annual Conference. Collingwood, ON
- Vanden Heuvel, J.E., and J.A. Sullivan. 1998. Our first year with the shift-trellis. Ontario Berry Grower=s Annual Conference. Chatham, ON

# **Research Grants and Funding (Recent)**

# Pending Proposals

Vanden Heuvel, J., M. Oravec, and K. Cox. Advancing grapevine disease resistance through genetic control of cluster closure. USDA NIFA Physiology of Agricultural Plants Program. \$650,000. Submitted August 2024.

Vanden Heuvel, J., G. Peck, A. Gaudin, C. Schmidt, C. Hickey, K. Brignac, J. Scheiner, S. Krishna Kumar, C. Lazcano, M. Centinari, G. Hu, C. Grebitus, S. Church, T. Bradshaw, J. Alvez. 2024. Adding value and sustainability to specialty crop production systems by integrating grazing. \$7,000,000. Submitted November 2024.

Vanden Heuvel, J. Integrating geese grazing into New York State vineyards. New York Farm Viability Institute, \$100,000. Submitted November 2024.

# Proposals Awarded (Recent)

Lal, A., K. Cox, K. Petersen and J. Vanden Heuvel. 2023. Real-time monitoring of vineyard fungal spore populations using GHz ultrasonic imagers. Cornell Institute of Digital Agriculture, \$150,000

Vanden Heuvel, J. 2023. Determining efficient and effective inoculation methods for soil microbial stimulators in NY vineyards. New York Farm Viability Institute. \$100,000

Vanden Heuvel, J. and T. Bates. 2023. Building cluster counting into my efficient vineyard to aid yield prediction. PA Liquor Control Board. \$54,107

Goldfarb, J., H. Kress-Gazit, T. Schryver, J. Suarez, D. Bailey, Y. Luo, J. Vanden Heuvel and others. 2023. NSF Engines: Type 1, Upstate 2.0 a Bioeconomy & Climate Tech Innovation Cluster. NSF. \$1,000,000

Vanden Heuvel, J. and Y. Jiang. 2022. Determining bud mortality via thermal and multispectral imaging to guide pruning practices. New York Wine and Grape Foundation. \$19,622

Tako, E. and J. Vanden Heuvel. 2022. Grape pomace as a natural and sustainable source of phytonutrients. New York Wine and Grape Foundation. \$25,000

Vanden Heuvel, J. 2022. Inoculating grapevine replants with arbuscular mycorrhizal fungi. New York Farm Viability Institute. \$91,938

Vanden Heuvel, J. and Y. Jiang. 2021. Determining bud mortality via thermal and multispectral imaging to guide pruning practices. New York Wine and Grape Foundation. \$18,600

Keller, M., T.R. Bates, J.E. Vanden Heuvel and others. 2020. High-resolution vineyard nutrient management. SCRI – subcontract from WSU, \$626,051. Total award: \$5.5 million

# **Leadership and Service**

#### **Professional**

Member, Scientific Committee, GiESCO Congress, 2025

Convenor and Chair of Organizing Committee, GiESCO Congress, 2023

Member, New York Wine and Grape Foundation Technical Advisory Committee (2021-present)

Member, Scientific Committee, XI International symposium on grapevine physiology and biotechnology (2021)

Associate Editor, Australian Journal of Grape and Wine Research (2021-present)

Member, Editorial Board of the Australian Journal of Grape and Wine Research (2021-present)

Member, Cornell Cooperative Extension FLGP Administrative Management Group (2019-present)

Program Reviewer, Oenology & Viticulture major, Brock University (2019)

Member, Finger Lakes Community College Viticulture and Enology Advisory Board (2009 - present)

Member, ASHS Annual Conference Technical Program Committee (2017-present)

Member, NE-SARE Technical Committee (2015-2017)

Proposal Reviewer, Canadian National Grape and Wine Research Cluster (2017)

Proposal Reviewer, Canadian Organic Science Cluster III (2017)

Member, Project Advisory Committee, SCRI Northern Grapes Project (2013-2016)

Book Reviewer, Oxford University Press (2016)

Book Reviewer, University of California Press (2014)

Proposal Reviewer, Viticulture Consortium East (2006-2009)

Proposal Reviewer, American Vineyard Foundation, Breeding panel (2008-2009)

Proposal Reviewer, Viticulture Consortium West, Cultural Practices panel (2007, 2009, 2011)

Proposal Reviewer, U.S. Civilian Research and Development Foundation (2008)

Proposal Reviewer, American Vineyard Foundation, Extension panel (2006-2008)

Co-Organizer and Moderator, Viticulture and Small Fruit & Fruit Breeding working groups joint workshop, ASHS (2006)

Member, Graduate Student Awards Committee, NEASHS (2006)

Chair, Viticulture and Small Fruit Working Group, American Society for Horticultural Science (2005-2006)

Secretary, Viticulture and Small Fruit Working Group, American Society for Horticultural Science (2004-2005)

Member, Fruit Publications Award Committee, American Society for Horticultural Science (2004-2007)

Coordinator, North American Cranberry Research and Extension Worker's Conference, E. Wareham, MA (2003)

Leader, American Society for Horticultural Science Vineyard and Winery Tour, Providence, RI (2003)

#### University

Faculty Fellow, Cornell Institute of Digital Agriculture (2019-present)

Faculty Advisor, Cornell Curling Club (2018-2024)

Member, University Assembly Campus Welfare Committee (2021-2023)

Judge, CIDA Hackathon (2021)

Faculty House Fellow, William H. Keeton House, West Campus (2013-2018)

Co-Curator, Bacchus to Burgundy Exhibition, Herbert F. Johnson Museum of Art (2016, 2018)

Panelist, Rose-Becker Café Series, Flora Rose House, (2015)

Panelist, Engaging students panel, CALS Teaching Experience (2015)

Judge, Cornell Mathematical Contest in Modelling for Vineyards (2014)

Facilitator, New Student Reading Project, Cornell (2008 - 2014)

Reviewer, Innovation in Teaching grants, Cornell (2008)

Rep, Organizing Committee for UMass Dartmouth Cranberry Research Symposium (2005)

Faculty Rep, Search Committee for UMass Dartmouth Physiology Technician (2003) Faculty Rep, Search Committee for Cranberry Station Director, UMass Amherst (2002)

College

Member, CALS Task Force on Evaluation of Service (2024)

Chair, Horticulture Section, School of Integrative Plant Science (2021-2024)

Member, Endowed Chair in Digital Agriculture Faculty Search Committee (2024)

Advisor, Lake Erie Regional Grape Extension Program (2022-present)

Advisor, Eastern New York Regional Horticulture Extension Program (2022-present)

Chair, Viticulture Lecturer Search Committee, (2022)

Reviewer, TW Turner Fellowship Applications (2022)

Member, CALS DEI Cohort Faculty Search Committee (2021-2022)

Chair, SIPS DEI Cohort Faculty Search Committee (2022)

Member, Digital Agronomy Faculty Search Committee (2018-2019)

Member, Cornell Orchards Leadership Committee (2018-present)

Director of Undergraduate Studies, Viticulture & Enology Major (2017-2021)

Member, CALS Diversity and Inclusion Committee (2017-2020)

Member, CALS Farm Advisory Committee (2017-present)

Director, Cornell Orchards Internship Program (2014-2020)

Member, Appellation Cornell Editorial Board (2013-present)

Member, Introductory Biology for Non-Life Science Students New Course Committee (2008 - present)

Advisor, Cornell Cooperative Extension Finger Lakes Grape Program (2008 - present)

Member, Ad Hoc Committee for promotion to Associate Professor with Tenure (2018)

Member, Grape Pathologist Faculty Search Committee (2018)

Member, Cornell Orchards Steering Committee (2007 - 2017)

Member, Search Committee for Wine Microbiology Position (2016)

Member, Wine Microbiology Faculty Search Committee (2016)

Chair, Cornell Orchards Steering Committee (2014-15)

Member, Search Committee for Enology Lecturer Position (2014)

Chair, Search Committee for Viticulture/Pomology Faculty Position (2013-2014)

Viticulture and Enology Rep, CALS Curriculum Committee (2008 - 2011)

Presenter, Fun Faculty Series (transfer student orientation) (2008, 2009)

Fresenter, run racuity Series (transfer student offentation) (2008, 2009)

Advisor, Cornell University Viticulture and Enology Club (2007-2010)

School/
Department

Member, School of Integrative Plant Science promotion and tenure committee (2024 present)

Member, Long Island Horticultural Research and Extension Center Director Search Committee (2024)

Chair, School of Integrative Plant Science Cohort Search Committee (2021-2022)

Member, School of Integrative Plant Science promotion and tenure committee (2020-

2021)

Member, SIPS Faculty Renewal Committee (2018-2020)

Alternate Senator for the University Faculty Senate, Horticulture Section (2017-2023)

Member, Horticulture Section Awards Committee (2014-2015)

Member, Departmental Business Administrator Search Committee (2012)

Executive Committee member, Horticulture Dept. (2011 - 2014)

Extension Faculty Rep, Plant, Soil and Insect Sciences Search Committee (Tenure-track

turf position), UMass Amherst (2005-2006)

Member, UMass Amherst Cranberry Station Personnel Committee (2002-2006)

Supervisor, Science Fair Student, Department of Plant and Soil Sciences, UMass

Amherst (2002)

#### **Distinctions and Affiliations**

Professional Australian Society of Viticulture and Oenology
Affiliations American Society for Horticultural Science

American Society of Enology and Viticulture

American Society of Enology and Viticulture Eastern Section

Groupe International d'Experts en Systèmes vitivinicoles pour la Coopération (GiESCO)

**Honors and** 

**Awards** 

New York State Agricultural Society "Cap" Creal Journalism Award (2017)

New York Wine and Grape Foundation Research Award for Contributions in Research

and Teaching (2017)

Co-author of Best Viticulture Poster with Jim Meyers, ASEV (2010)

Co-author of Best Enology Presentation with Justin Scheiner, ASEV-ES (2009)

Co-author of Best Viticulture Poster with Jim Meyers, ASEV (2008)

Co-author of 1st place student paper with Michelle Botelho, NE-ASHS (2005) Co-author of 3rd place student paper with Michelle Botelho, NE-ASHS (2004)

#### **Recent Media Engagement**

Featured in Wine Conversations: Exploring Mysteries and Myths by Keith Herndon, published by Kendall Hunt publishing company, forthcoming in spring 2025

Quoted in The science of heat stress in grapevines, Seven Fifty Daily, Sept 2024

Interviewed on Sustainable Winegrowing podcast, November 2023

Interviewed on HiRes Vineyard Nutrition Podcast, Feb 2023

Quoted in How winter pruning can make or break a harvest, Seven Fifty Daily, Sept 2022

Interviewed on Sustainable Winegrowing podcast, June 2022

Featured in Cornell's precision viticulture research – from soil to canopy, Fruit Grower News, June 2022

Featured in Viticulture in New York: Past, present, and going forward, Wine Business Monthly

magazine, June 2022

Provided expert advice for <u>Climate change and wine</u>, Climate Central, Sept 2021

Featured in Cornell's ag program solves farmers' toughest problems, City & State NY, Sept 2021

Featured on WAER <u>Cornell University engineers and plant scientists developing app to predict size of</u> fall grape crops, May 2021

Featured in <u>Cornell engineers</u>, <u>plant scientists pursue app to predict size of fall grape crops</u>, Fruit Grower News, June 2021

Featured in New grant fuels better nutrient management in vineyards, American Vineyard Magazine, Oct 2020

Quoted in How Vintners Use Cover Crops in Vineyards, Seven Fifty Daily, Oct 2019