2017 Show Me Grape & Wine Conference and Symposium

March 8, 9 and 10
Hampton Inn and Suites
Columbia, Missouri
THANK YOU TO OUR VENDORS

for participating in the 2017 Show Me Grape & Wine Conference Trade Show

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Wednesday’s complimentary lunch buffet is brought to you by

![evOAK](image1)  
![World Cooperage](image2)

Thanks also goes to the Missouri Grape Growers Association and the Missouri Wine and Grape Marketing Board for sponsoring our Wednesday evening Missouri Wine Tasting.
Conference Day One
Wednesday March 08, 2017

7:30 A.M.  Registrant check-in in the University Atrium - until noon
8:30 A.M.  Welcome
8:45 A.M.  Early season management of common grape diseases
Dr. Bruce Bordelon, Purdue University
9:30 A.M.  Understanding Sour rot: from microbes to management
Megan Hall, Cornell University
10:15 A.M.  Break with refreshments - 30 minutes
10:45 A.M.  Getting the full benefits of under-vine cover crops (webinar)
Dr. Michela Centinari, Pennsylvania State University
11:30 A.M.  Complimentary Lunch Buffet in the Conference Center Atrium - 75 minutes
12:45 A.M.  Challenges in vineyard weed management and unwanted chemical trespassing
Dr. Reid Smeda, University of Missouri
2:15 P.M.  Break with refreshments - 30 minutes
2:45 P.M.  Current status of certified grapevine production at Double A Vineyards
Rick Dunst, Double A Vineyards
3:30 P.M.  Optimizing marker-assisted selection for Norton grape breeding
Dr. Chin-Feng Hwang, Missouri State University and University of Missouri
4:15 P.M.  The Missouri Wine and Grape Board: here & now
Annette Alden and Jim Anderson, Missouri Wine and Grape Board
4:45 P.M.  Break - 45 minutes
5:30 P.M.  Missouri Wine Tasting with appetizers until 7:30 P.M. - hosted by the Missouri Grape Growers Association and the Missouri Wine and Grape Board

Conference Day Two
Thursday March 09, 2017

7:00 A.M.  Complimentary Continental Breakfast in the Conference Center Atrium - 90 minutes
9:00 A.M.  Tannins in red hybrids
Piero Spada, independent vineyard and winery consultant
9:45 A.M.  Oxygen management: theory and practice
Luke Holcombe, Scott Laboratories
10:30 A.M.  Break with refreshments - 30 minutes
11:00 A.M.  Problems in Missouri wines: prioritizing what as an industry we can do to improve quality and avoid faults
Dr. Misha Kwasniewski, University of Missouri
11:45 A.M.  Lunch Break (on your own) - 75 minutes
1:00 P.M.  Wine troubleshooting: identifying areas of concern in the production process
Dr. Todd Steiner, The Ohio State University
1:45 P.M.  Break - 45 minutes
2:30 P.M.  Missouri Wine Technical Group - until 5:30 P.M.
Early season management of common grape diseases
Dr. Bruce Bordelon

Bruce Bordelon is a professor of viticulture at Purdue University, where he has been part of the Purdue Wine Grape Team since 1991. He provides statewide extension support for the grape and small fruit industries in Indiana through a series of workshops, symposia, newsletters and web-based educational materials. His research interests include evaluation of new grape cultivars, matching cultivars to sites, integrated pest management, and vineyard management to improve fruit quality. Bordelon works closely with colleagues in surrounding states through the Midwest Fruit Workers Group. He is editor of the Midwest Fruit Pest Management Guide (revised annually and used by 13 states), and co-author of the Midwest Grape Production Guide (2005) and Midwest Small Fruit Pest Management Handbook (1997). Bordelon co-teaches courses in Field Production of Horticulture Crops, and Commercial Grape and Wine Production. Bordelon received a B.S. in plant pathology from Oklahoma State (1978), M.S. in plant pathology from Montana State (1981) and Ph.D. in fruit breeding and genetics from the University of Arkansas (1991).

Understanding sour rot: from microbes to management
Doctoral Candidate Megan Hall

Megan Hall is a PhD Candidate in the section of Plant Pathology and Plant-Microbe Biology at Cornell University. She has a Bachelors in Political Science and a Masters in Sociology, and switched into the plant sciences after making a career change from politics to viticulture. She found a love for pathology while working as a viticulture intern for a large winery and then as an assistant viticulturist for a family-owned vineyard in her home state of Oregon. She was particularly excited about the opportunity to work on the poorly defined late-season bunch rot, sour rot, which led her to Cornell in 2013.

Getting the full benefits of under-vine cover crops
Dr. Michela Centinari

Michela Centinari is an assistant professor of viticulture with Penn State University. Her research program addresses problems related to the economic and environmental sustainability of wine grape production in the eastern United States. She specializes in cold temperature stress and how cover crops and canopy management practices impact grapevine physiology, grape and wine quality, and costs of production. Michela is originally from Italy. Prior to joining Penn State University in 2014, she was a post-doctoral researcher at Cornell University where her research focused on the effect of root-zone management practices on above and below-ground grapevine growth and performance.

Challenges in vineyard weed management and unwanted chemical trespassing
Dr. Reid J. Smeda

Dr. Smeda is a Professor of Weed Science in the Division of Plant Sciences at the University of Missouri. He received a B.S. degree in Crop and Soil Science from Michigan State University in 1982, an M.S. in Horticulture from Michigan State University in 1985, and a Ph.D. in Horticulture from Purdue University in 1990. He has been employed as a faculty member in the Division of Plant Sciences at the University of Missouri since 1996. His teaching appointment involves instruction of undergraduate and graduate courses in weed science. His research program encompasses weed biology and management of problem species in agronomic crops as well as non-crop areas (roadside and railroad right-of-way); physiology and mechanism(s) for weed species resistant to herbicides; and management of invasive species in pasture, roadside, and railroad habitats. Dr. Smeda has trained four Ph.D. students and 23 M.S. students. He has published over 60 peer-reviewed papers and currently is co-writing an undergraduate textbook in Weed Science.
Beyond the classic grape maladies: pest forensics in the internet age
Dr. Dean Volenberg

Dean has an Extension and research appointment in viticulture and winery operations. His appointment is collaborative effort of the Grape and Wine Institute (GWI) and Plant Sciences Extension. Dean provides viticulture and winery Extension outreach throughout the state that includes grape production and processing. In his position Dean works closely with other members of the viticulture and enology program to transfer knowledge gained through GWI research to grape producers and winery operators.

Current status of certified grapevine production at Double A Vineyards
Rick Dunst

Rick spent most of his career at Cornell University’s Vineyard Research Lab in Fredonia, NY. He started as a research technician and eventually served as project manager cooperating with researchers from Cornell, Penn State, and USDA on a wide range of viticulture projects. Rick also conducted numerous herbicide trials, cooperated with other researchers on vineyard cover crop experiments, and for many years authored the weed management section of the New York and Pennsylvania Pest Management Guidelines for Grapes. Since his retirement (from Cornell) in 2010, Rick has worked as viticulturist at Double A Vineyards where he advises customers on variety and rootstock selection, pest management, and vineyard nutrition. He provides advice to Double A on vineyard management issues, including establishment of the new 2010 Protocol nursery increase block, a substantial investment that will be the source of improved nursery stock to the grape industry in the future – beginning now.

Optimizing marker-assisted selection for Norton grape breeding
Dr. Chin-Feng Hwang

Dr. Chin-Feng Hwang is a Professor working on the development of molecular genetic tools for marker-assisted selection (MAS) to expedite a Vitis aestivalis-derived ‘Norton’ grape breeding program in the Darr School of Agriculture at Missouri State University. The current research in the Hwang lab emphasizes the development and release of new V. aestivalis -derived ‘Norton’/V. vinifera hybrids with enhanced pathogen resistance, cold hardiness and improved fruit quality for wine making. Norton is a unique grape. Although it is grown in U.S. regions where V. vinifera production requires extensive pesticide use, it has naturally evolved resistance to powdery mildew, downy mildew and phylloxera. It is cold hardy and produces wine approaching the quality of V. vinifera-based wine. The integration of effective genetic resistance from Norton into V. vinifera cultivars would reduce growers’ dependence on chemical inputs and have significant environmental, health and financial benefits. The overall goals of Dr. Hwang’s research program are to use genetic markers to rapidly deploy favorable alleles, accelerate breeding cycles for new cultivar release and train a new generation of plant breeders. Laboratory activities include classical breeding and inheritance studies, plant-pathogen interactions, DNA marker analysis, linkage map construction, map-based positional cloning and characterization of genes of interest.

The Missouri Wine and Grape Board: here & now
Annette Alden And Jim Anderson

Annette Alden joined the Missouri Wine and Grape board as the Marketing Director in September. She has spent the last eight years in agricultural marketing with True Media, Swanson Russell and Monsanto. Annette received her B.S. in Agribusiness Management with a Minor in International Agriculture from the University of Missouri-Columbia. She looks
forward to utilizing her previous experiences to help promote Missouri wines and wineries.

Jim Anderson has led the Missouri Wine and Grape board as Executive Director for 20 years. During his years at the helm Jim has overseen the expansion of Missouri wineries from 28 to 133. As Wine and Grape Board Director his duties are to coordinate and develop an agency to administer a program that guarantees long-term sustainability. His overall goal is to have a resourceful program that assures quality wine and juice products, and serves to stimulate growth of a viable grape and wine industry in Missouri.

**Tannins in red hybrids**

**Piero Spada**

Piero Spada's passion for wine stems from the intersection of his deep-rooted Italian heritage and his inherent interest in the biological sciences. Piero received his BS in Biology from UW-Madison, and later received his MS from Cornell's Viticulture & Enology program. Today, Piero is a Midwest Vineyard & Winery Consultant specializing in cool and cold climate grape and wine production. Whether it's maximizing a varietal's potential in the vineyard or actualizing that potential in the cellar, Piero leaves no stone unturned and enjoys helping his clients to define their own unique fingerprint. For more information, please visit pierospada.com

**Wine troubleshooting: identifying areas of concern in the production process**

**Dr. Todd Steiner**

Todd Steiner has been with The Ohio State University/OARDC 27 years and has been the leader of the Enology program since 2001. He serves as the state Enologist to the Ohio commercial wine industry with both research and extension responsibilities. Todd received a B.A. in Biology from Tabor College in Hillsboro, Kansas. He went on to specialize in enology under the direction of Dr. Jim Gallander at The Ohio State University/OARDC. His research and extension efforts are focused on various vineyard cultural practices in addition to specific enological procedures enhancing wine quality and consistency for the Ohio grape and wine industry. Extension responsibilities include co-organizing the annual Ohio Grape and Wine Conference, the annual Ohio Wine Competition, organizing state workshops and being a featured presenter at both in-state and out-of-state meetings. Winery consultation is a very important aspect of his responsibilities in extension. He is also responsible for initializing a wine analysis program in working with quality control and troubleshooting for the Ohio commercial wine industry. Todd has helped develop the groundwork for the Ohio Quality Wine Program (OQW) that started with wines being evaluated in 2007. Todd has been honored in being asked to judge in numerous Regional, National and International wine competitions within the United States. He is currently serving on the Board of Directors for The American Society of Enology and Viticulture – Eastern Section (ASEV-ES).

**Problems in Missouri wines: prioritizing what as an industry we can do to improve quality and avoid faults**

**Dr. Misha T. Kwasniewski**

Misha T. Kwasniewski has been Enology Program Leader for The Grape and Wine Institute at the University of Missouri since 2013. Kwasniewski was raised in a farming family in the Lake Erie Concord Grape Belt in New York State. His interest in research and education to support the U.S. wine industry came from growing up in a community that benefited directly from the strong relationship between the grape industry, research universities and extension centers. By removing some of the unknowns of grape and wine production, researchers have the ability to reduce the risk from an inherently chaotic and unpredictable venture. Kwasniewski's research includes investigating the effect of viticultural practices on aroma chemistry, chemical changes occurring post-vinification and the creation of streamlined analytical techniques for industry use. He obtained his B.S. in viticulture and enology and PhD. in food science from Cornell University.
Symposium
Friday, March 10, 2017

7:00 A.M. Complimentary Continental Breakfast in the Conference Center Atrium - 90 minutes

8:30 A.M. Welcome and Opening Remarks
Dean Volenberg

8:40 A.M. Investigating and characterizing berry ripening patterns in Norton
Courtney E. Duncan, University of Missouri; Co-authors Misha T. Kwasniewski, Dean S. Volenberg

9:00 A.M. Impact of biochar and compost on vineyard soils and grapevine growth
Tim Weber, University of Missouri; Co-author Misha Kwasniewski

9:20 A.M. Grape viruses: what’s out there
Dean Volenberg, University of Missouri; Co-author James Schoelz

9:40 A.M. Break - 20 min

10:00 A.M. Adapting perennial crops for climate change: mixing and matching shoots and roots in grapevine for a changing world
Dan Chitwood, Donald Danforth Plant Science Center; Co-authors Allison Miller, Anne Fennell, Laszlo Kovacs, Misha Kwasniewski, Jason Londo

10:20 A.M. Construction of a high density linkage map of Vitis aestivalis-derived ‘Norton’ using both SSR and SNP markers and identification of quantitative trait loci associated with downy mildew resistance
Surya Sapkota, University of Missouri and Missouri State University; Co-authors Shanshan Yang, Li-Ling Chen, Katie E. Hyma, Lance Cadle-Davidson, and Chin-Feng Hwang

10:40 A.M. The transcriptome of white Riesling
Zach Harris, Missouri State University; Co-authors Jason Londo and Laszlo Kovacs

11:00 A.M. Break - 20 min

11:20 A.M. A reservoir of Grapevine vein clearing virus in wild plants in the Midwest
Cory Keith, Missouri State University; Co-authors Sylvia M. Petersen and Wenping Qiu

11:40 A.M. Current status of Grapevine vein clearing virus
Wenping Qiu, Missouri State University; Co-authors Sylvia Petersen, Susan Howard, Cory Keith, and Kaylie Austin

12:00 P.M. Assessment of seven new varieties from the cross of Norton and Cabernet Sauvignon
Kaylie Austin, Missouri State University; Co-authors Susan Howard and Wenping Qiu

12:20 P.M. Closing Remarks

Oxygen management: theory and practice
Luke Holcombe

Born and raised in California’s Central Valley, Luke grew up surrounded by wine grapes. This led him to pursue a degree at CalPoly, San Luis Obispo in Wine and Viticulture. Prior to joining Scott Laboratories, Luke was the Assistant Winemaker at McManis Family Vineyards in Ripon, California and Head Winemaker for Post Winery in Altus, Arkansas. He currently resides in Alma, Arkansas with his dog, Mr. Wilson.
Cross Streets
The Hampton Inn & Suites at the University of Missouri is on the corner of College Avenue (Rock Quarry Road) and Stadium Boulevard.

Closest I-70 exits
East: Highway 63 (exit 128A)
West: Stadium Blvd (exit 124)

Directions from US-63
Take US-63 to Stadium Boulevard, then turn west into downtown. Travel to College Avenue (Rock Quarry Road) and turn left. The hotel is on your immediate right.

From Lambert-St. Louis International Airport (STL)
Take I-70 West to US-63 South.
Distance from Hotel: 112 miles. Drive Time: 1.75 hours.

From Kansas City International Airport (MCI)
Take LP Cookingham Drive to I-435 East to I-70 East.
Travel I-70 East to US-63 South.
Distance from Hotel: 150 miles. Drive Time: 2.25 hours.

From Columbia Regional Airport (COU)
Take Airport Road to Highway H. Turn left, travel to US-63 North to Stadium Boulevard.
Distance from hotel 12 miles, drive time 15 minutes