65th ASEV National Conference & 39th ASEV Eastern Section Annual Meeting

June 23–27, 2014

Program includes

- Merit Award Presentation – Dr. Linda Bisson, University of California, Davis
- ASEV Extension Distinction Award Presentation – Dr. Terry Bates, Cornell University, New York
- Texas Hill Country Vineyard & Winery Tour
- Water Use Efficiency Symposium
- Winemaking for Challenging Environments Symposium
- Research Reports
- Student Flash Talks
- Texas Regional Wine Reception
- Industry Seminars with Supplier Displays
- Eastern Section Oenolympics & “Wines of the East” Reception

Hyatt Regency Austin
Austin, Texas USA
65th ASEV National Conference

For the first time ASEV will host the National Conference in Austin and in conjunction with the ASEV Eastern Section chapter Annual Meeting. You will have many options for work and play. The Texas Hill Country Vineyard and Winery Tour will launch the week, followed by the Eastern Section student Oenolympics. Diverse professional opportunities will abound with over 160 research reports, two symposia — Water Use Efficiency and Winemaking for Challenging Environments — the Merit Award presentation by Dr. Linda Bisson, University of California, Davis, keynote speakers, and Industry Seminars and supplier displays.

Austin is a bicycle-friendly city and ranked one of the fittest cities in the U.S., with 10 miles of trails that border Lady Bird Lake in downtown Austin by our conference hotel. The trails serve as a social hub for runners, walkers and cyclists. The lake offers stand-up paddle boarding, water-biking and leisurely canoe-paddling. Kayak, canoe and paddleboard rentals are available at various spots along the trail. You can also cool off in the constant 68-degree waters of Barton Springs Pool, a spring-fed swimming hole in Zilker Park. It was voted the “Best Swimming Hole in Texas.” And of course, Austin is well known for fine dining and food trucks, music and arts. Austin is also the gateway to surrounding historic towns, vineyards and wineries. You may know that Austin is officially known as the Live Music Capital of The World but you may not know the unofficial slogan is “Keep Austin Weird” in the spirit of pro-local community-based organizations.

The ASEV Technical Program Committee has set the stage for an approachable educational environment as an ideal networking hub for students, researchers, and anyone working in the enology or viticulture industry. Our conference organizers crafted the perfect blend of productive social opportunities and program content to advance your continued professional education while looking ahead to our industry’s future. Meet with colleagues new to the world of wine and grapes along with long-time industry icons in a casual and inviting locale.

Please visit www.asev.org for additional program, sponsorship, registration, and hotel information.

2014 Merit Award Recipient

The ASEV Merit Award is presented annually to an individual who has significantly contributed in an outstanding manner to the progress and advancement of enology and viticulture to the industry and/or to the Society. This award acknowledges excellence in the fields of education, technology, research, management, public relations or any discipline related to enology and viticulture.

Merit Award Presentation
Thursday, June 26, 9:20 am – 10:10 am

Dr. Linda Bisson, University of California, Davis
The Information Landscape Transformation: The Changing Role of Scientific Societies

Dr. Bisson is a trained yeast geneticist and physiologist whose research focuses on sugar catabolism and the understanding of metabolic basis for slow and incomplete fermentations. As a respected professor and former chair at the UC Davis Department of Viticulture and Enology, she has received the prestigious Maynard A. Amerine Endowed Chair funded by Ernest Gallo, has been the Chair of the UC Davis Academic Senate and, most recently, the recipient of the UC Davis Charles P. Nash Prize. She currently serves as AJEV Science Editor and has held this position for more than a decade. She is a four-time ASEV Best Enology Paper Award author, the 2000 Honorary Research Lecturer and has more than 25 years of service with ASEV as a Board Director (1988-1990) and volunteer for committees that include program organizing and planning, scholarship, publications and technical projects.

The ASEV Board is pleased to honor Dr. Linda Bisson of the University of California, Davis, as ASEV’s 2014 Merit Award recipient.
## All events will be held at the Hyatt Regency Austin, unless noted otherwise.

### as of June 2014

### Sunday, June 22
- 4:00 pm - 6:00 pm  
  ASEV Eastern Section Board Meeting

### Monday, June 23
- 7:30 am - 5:00 pm  
  Texas Hill Country Vineyard & Winery Tour
- 1:00 pm - 6:00 pm  
  Speaker Ready Room
- 3:00 pm - 6:00 pm  
  Registration
- 4:00 pm - 6:00 pm  
  ASEV National Board Meeting

### Tuesday, June 24
- 7:00 am - 5:00 pm  
  Poster Sessions Set-up
- 7:00 am - 5:30 pm  
  Speaker Ready Room
- 8:00 am - 5:30 pm  
  Water Use Efficiency Symposium
- 5:30 pm - 7:00 pm  
  Eastern Section “Wines of the East” Reception and Student Oenolympics
- 7:00 pm - 8:00 pm  
  ASEV Board Reception (by invitation only)
- 8:00 pm - 10:30 pm  
  ASEV Board Dinner (by invitation only)

### Wednesday, June 25
- 7:00 am - 6:00 pm  
  Registration
- 7:00 am - 6:30 pm  
  Speaker Ready Room
- 7:30 am - 6:00 pm  
  Poster Session (research reports)
- 8:10 am - 8:20 am  
  President’s Welcome
- 8:20 am - 9:40 am  
  Enology – Microbiology Session (oral research reports)
- 8:20 am - 9:40 am  
  Viticulture – Vine Water Stress Session (oral research reports)
- 9:50 am - 10:30 am  
  ASEV Extension Distinction Award Presentation
- 10:00 am - 4:00 pm  
  Industry Supplier Displays
- 10:40 am - Noon  
  Enology – Sensory/Chemistry Session (oral research reports)
- 10:40 am - 12:10 pm  
  Viticulture – Rootstocks Session (oral research reports)
- 1:30 pm - 3:00 pm  
  Industry Seminars (3)
  - Grapegrowing – Clean Planting Materials: Protocol 2010
  - Winemaking – Sulfide Production, Management and Prevention in Winemaking
  - General (Part I) – 2014 Harvest: Planning and Implementing Winemaking Experiments
- 1:30 pm - 3:30 pm  
  Enology – Winemaking Practices Session (oral research reports)
- 1:30 pm - 3:30 pm  
  Viticulture – Grapevine Diseases Session (oral research reports)
- 3:50 pm - 5:00 pm  
  Student Flash Talks
- 5:00 pm - 6:30 pm  
  Poster Authors Present (research reports) & Texas Regional Wine Reception
- 6:45 pm - 10:00 pm  
  Publications Committee Dinner Meeting (for committee members only)

### Thursday, June 26
- 7:30 am - 5:30 pm  
  Registration
- 7:30 am - 6:00 pm  
  Speaker Ready Room
- 7:30 am - 6:30 pm  
  Poster Session (research reports)
- 8:00 am - 9:10 am  
  Viticulture – General Session (oral research reports)
- 8:10 am - 9:10 am  
  Enology – General Session (oral research reports)
- 9:20 am - 10:10 am  
  Merit Award Presentation
- 10:00 am - 4:00 pm  
  Industry Supplier Displays
- 10:20 am - Noon  
  Viticulture – Grape Maturity Session (oral research reports)
- 10:40 am - Noon  
  Enology – Wine Chemistry Session (oral research reports)
- Noon - 12:45 pm  
  ASEV National Annual Business Meeting
- 12:45 pm - 1:15 pm  
  ASEV Eastern Section Annual Business Meeting
- 1:15 pm - 1:30 pm  
  ASEV Open Forum (all attendees)
- 1:30 pm - 3:00 pm  
  Industry Seminars (3)
  - Grapegrowing – Cold Damage: Vineyard Cultural Practices to Manage It
  - Winemaking – Yeast: More Than Alcohol Producers
  - General (Part II) – 2014 Harvest: Planning and Implementing Grapegrowing Experiments
- 1:30 pm - 3:10 pm  
  Viticulture – Vineyard Practices I Session (oral research reports)
- 1:50 pm - 3:10 pm  
  Enology – Phenolic Chemistry Session (oral research reports)
- 3:20 pm - 4:20 pm  
  Enology – Wine Tannins Session (oral research reports)
- 3:20 pm - 4:20 pm  
  Viticulture – Vineyard Practices II Session (oral research reports)
- 4:40 pm - 5:50 pm  
  Student Flash Talks
- 6:00 pm - 8:00 pm  
  Student-Industry Mixer

### Friday, June 27
- 7:30 am - 5:00 pm  
  Registration
- 8:00 am - 5:00 pm  
  Winemaking for Challenging Environments Symposium
- 4:00 pm - 6:00 pm  
  ASEV Eastern Section Board Meeting (post-conference)
Symposia
TUESDAY, JUNE 24

Water Use Efficiency Symposium
8:00 am – 5:30 pm
Learn from and interact with experts from across North America, Europe and Australia about increased water use efficiency, recent advances in grapevine water relations, irrigation technology, and water policy and politics. Speakers will address approaches to manage limited water and salinity, including use of reclaimed water. Grapevine responses to drought will be discussed as well as opportunities to improve water use efficiency through plant breeding, soil and vine monitoring, and irrigation scheduling. The session will conclude with a panel discussion focused on the increasingly important topic of water policy.

Organizing Committee:
Ed Hellman (Chair), Texas A&M AgriLife Extension and Texas Tech University, Lubbock
Alan Lakso, Cornell University, New York
Andrew McElrone, University of California, Davis
Andrew Walker, University of California, Davis

Welcome
Jim Kennedy, California State University, Fresno, ASEV President

Water Resources

Salinity Management in Vineyards
Donald Suarez, United States Department of Agriculture – Agriculture Research Service Salinity Lab, Riverside, California

Use of Reclaimed Water for Vineyard Irrigation
Michael McCarthy, South Australian Research and Development Institute, Australia

Vineyard Management with Limited Water
Mark Battany, University of California Cooperative Extension, San Luis Obispo

Recent Advances in Understanding Grapevine Water Relations

Drought and Salinity Tolerance in Rootstocks
Andrew Walker, University of California, Davis

Texas Hill Country Vineyard & Winery Tour
MONDAY, JUNE 23
7:30 am – 5:00 pm
Fee: $50/person (includes transportation, lunch, and wine tastings)
Tour Max: 79 people
Requirements: comfortable clothing, walking shoes, sun protection (sun screen, sunglasses, and hats), must be 21 or over, must be able to walk up some hills
The tour is offered on a first-registered, first-enrolled basis.

Tour Guide:
Jim Kamas, Texas A&M AgriLife Extension Service, Fredericksburg

Schedule:
7:30 am  Depart Hyatt Regency Austin
8:30 am  Arrive at Flat Creek Estates
9:30 am  Depart Flat Creek Estates
10:45 am Arrive at Becker Vineyards
11:45 am Depart Becker Vineyards
12:45 pm Arrive at Salt Lick Restaurant for Lunch
1:45 pm  Back on bus for 5-minute ride to Salt Lick Vineyards
2:30 pm  Depart Salt Lick Vineyards
2:45 pm  Arrive at Driftwood Estates
4:00 pm  Depart Driftwood Estates for Hyatt Regency Austin
5:00 pm  Arrive back at Hyatt Regency Austin

Note: Attendees must be registered for the national conference to register for this tour. Refunds will not be issued for tours due to our contractual obligations. However, tours offered are conditional upon a minimum enrollment. If the minimum enrollment is not met and the tour is cancelled by ASEV, fees will be refunded in full.

65th ASEV National Conference & 39th ASEV Eastern Section Annual Meeting | Symposia 4
Tuesday, June 24 (continued)

Improving Water Use Efficiency in Grapevines: Agronomic and Genetic Opportunities
Hipolito Medrano, University of the Balearic Islands, Spain
Role of Xylem Structure and Function in Water Relations
Andrew McElrone, University of California, Davis

Irrigation Scheduling and Water Use Efficiency

A Microtensiometer for Continuous Monitoring of Soil and Plant Water Potentials
Alan Lakso, Cornell University, New York
Vinay Pagay, Oregon State University, Corvallis
Irrigation Scheduling in Eastern North America
Andy Reynolds, Brock University, Canada
Learning from Research and Adapting Technology Towards Efficient Vineyard Water Management
Mark Greenspan, Advanced Viticulture, California

Panel Discussion: Water Policy and Politics
Doug Caroom, Bickerstaff Heath Delgado Acosta LLP, Texas
Jason Peltier, Westlands Water District, California
Kurt Schwabe, University of California, Riverside
Michael Schwisow, Schwisow & Associates, Washington

FRIDAY, JUNE 27

Winemaking for Challenging Environments Symposium

8:00 am – 5:00 pm
Speakers representing regions with cold, warm, and hot climates throughout the U.S will address environmental challenges from the vineyard to the winery. Conditions contributing to challenging environments will be introduced. The program's focus will be on some of the viticultural and enological issues arising from environmental challenges. Topics include vineyard management to make the best of a challenging situation, improving must and wine quality in the winery (e.g., green flavors, phenols, acid-pH balance) and variety development for these climates (fruit/wine quality and cold hardiness) including for Pierce's disease.

Organizing Committee:
Sara Spayd (Chair), North Carolina State University, Raleigh
Ed Hellman, Texas A&M AgriLife Extension and Texas Tech University, Lubbock
Andrew Walker, University of California, Davis

Morning Session

Welcome
Jim Kennedy, California State University, Fresno, ASEV President

Introduction: Premise for Challenging Environments
Sara Spayd, North Carolina State University, Raleigh
Dealing with Environmental Challenges in the Vineyard: Delivering the Best Product to the Winemaker
Ed Hellman, Texas A&M AgriLife Extension and Texas Tech University, Lubbock
Snake Oil or Alchemy-Techniques to Salvage a Vintage in the Winery
Misha Kwasniewski, University of Missouri, Columbia
Origin of Green Flavors in Wine and Their Management
Justin Scheiner, Texas A&M AgriLife Extension, College Station
Managing Acidity and pH in Wine
Roger Boulton, University of California, Davis
Q&A

Afternoon Session

Malolactic Fermentation under Low pH Conditions
Thomas Henick-Kling, Washington State University, Richland
Color and Phenolic Issues
Anna Katharine Mansfield, Cornell University, New York
From Elmer Swenson to Chardonel
Peter Hemstad, University of Minnesota
New Possibilities: Hope for Pierce's Disease Regions?
Andrew Walker, University of California, Davis
Panel Discussion
Mike Sipowicz, Texas Custom Wine Works, Texas
Research Reports

Research presentations (oral and poster) are based on submitted abstracts and represent work in progress and final research.

ORAL SESSIONS

WEDNESDAY, JUNE 25

President’s Welcome
8:10 am – 8:20 am
James Kennedy, California State University, Fresno

Enology – Microbiology Session
8:20 am – 9:40 am
Moderator: Amanda Stewart, Virginia Tech, Winchester
Program:
Fermentation Performance of Four Saccharomyces cerevisiae Yeast Strains in Difficult to Ferment Chardonnay Juice
Anna Mantheakis, University of California, Davis
Interactions between Brettanomyces bruxellensis and Oenococcus oeni: Impact on Growth and Hydroxycinnamic Acid Reduction
Stuart C. Chescheir, Oregon State University, Corvallis
Tracking Microbial Regionality from Vineyard to Winery through Early Stages of Postharvest Fruit Processing
Michael L. Swadener, University of California, Davis
Identification of Wine-related Microorganisms by MALDI-TOF Mass Spectrometry
Lucy Joseph, University of California, Davis

2014 ASEV Extension Distinction Award Presentation
9:50 am – 10:30 am
Concord Fruit Thinning: Using Vine Biology and Mechanized Management to Address Market Demands in New York
Dr. Terry Bates, Cornell University, New York

Enology – Sensory/Chemistry Session
10:40 am – Noon
Moderator: Belinda Kemp, Brock University, Canada
Program:
Correlating Wine Quality Ratings to Chemical, Volatile, and Elemental Profiles of Cabernet Sauvignons from California
Hildegarde Heymann, University of California, Davis
Impacts of Color and Sensory Attributes in Red Wine Varietals
Renee T. Threlfall, University of Arkansas, Fayetteville
HPLC Determination of Red Wine Tannin Concentration and Prediction of “Grippiness” Following Direct Injection
Matthew R. Revelette, California State University, Fresno
New Insights into Managing Microoxygenation
Andrew L. Waterhouse, University of California, Davis

Viticulture – Vine Water Stress Session
8:20 am – 9:40 am
Moderator: Lisa Morano, University of Houston-Downtown, Texas
Program:
Correlation between Soil Moisture, Sap Flow, and Subsequent Growth and Development in Merlot
Hemant L. Gohil, Washington State University, Prosser
Heat Waves and Water Deficit: Effects on Photosynthesis, Transpiration, and Chlorophyll Fluorescence of Malbec Grapevine
Eugenia Galat, Instituto Nacional de Tecnologia Agropecuaria, Argentina
Changes in Berry Transpiration and Xylem Backflow during Grape Berry Development
Yun Zhang, Washington State University, Prosser
Irrigation Scheduling in Northeastern North America
Andrew G. Reynolds, Brock University, Canada

Viticulture – Rootstocks Session
10:40 am – 12:10 pm
Moderator: Jim Kamas, Texas A&M AgriLife Extension Service, Fredericksburg
Program:
Salt Exclusion in Grapevine
Keynote Speaker: Rob Walker, The Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia
Rapid Recovery from Drought Stress in Deeply Rooted Vitis Rootstocks
Kevin Fort, University of California, Davis
Differences in the Drought Tolerance Characteristics of Seven Grape Rootstocks
Cecilia Osorio, University of California, Davis
Optimization of Vitis aestivalis-derived Norton Grape Breeding Using Molecular Genetic and Genomic Approaches
Chin-Feng Hwang, Missouri State University, Springfield
Wednesday, June 25 (continued)

Enology – Winemaking Practices Session

1:30 pm – 3:30 pm
Moderator:
Renee Threlfall, University of Arkansas, Fayetteville

Program:
Impact of Mechanical Harvesting and Optical Berry Sorting on Grape and Wine Composition
David A. Hendrickson, University of California, Davis

Effect of Regulated Deficit Irrigation on Saignée Treatments of Cabernet Sauvignon Must
L. Federico Casassa, Instituto Nacional de Tecnología Agropecuaria, Argentina

Investigation of Pump-over Frequency on Phenolic Extraction and Fermentation Rate during Cabernet Sauvignon Production
David E. Block, University of California, Davis

Effects of Sulfur Dioxide on Fermentation Kinetics, the Wine Microbiome, Prion Induction, and Ester Formation
Gordon A. Walker, University of California, Davis

Strategies to Prevent Turbidity Problems after the Addition of Carboxymethyl Cellulose to Red Wines
Stephan Sommer, Appalachian State University, Boone

Closure Consistency
Annegret Cantu, University of California, Davis

Viticulture – Grapevine Diseases Session

1:30 pm – 3:30 pm
Moderator:
Mark Greenspan, Advanced Viticulture Inc, California

Program:
Managing Powdery Mildew: How Specific Product Use Can Change the Timing of the Critical Period for Intervention
Michelle M. Moyer, Washington State University, Prosser

Making the Case for Early Adoption of Preventative Practices for Management of Grapevine Trunk Diseases
Kendra Baumgartner, University of California, Davis

Economic Benefits of Early Adoption of Preventative Management of Trunk Diseases
Jonathan D. Kaplan, California State University, Sacramento

Diversity of Pierce’s Disease Vectors East of the Rocky Mountains
Jim Kamas, Texas A&M AgriLife Extension Service, Fredericksburg

Xylella fastidiosa Genetics in Texas: Analysis on Multiple Spatial and Temporal Scales
Lisa D. Morano, University of Houston-Downtown, Texas

Comparative Sequence Analysis of the Pierce’s Disease Resistance Locus PdRI
Summaira Riaz, University of California, Davis

Thursday, June 26

Viticulture – General Session

8:00 am – 9:10 am
Moderator:
Hans Walter-Peterson, Cornell University, New York

Program:
Response and Recovery of Grapevines to Severe and Persistent Reductions in Irrigation
Mike McCarthy, South Australian R&D Institute, Australia

Long-Term Trends and Epidemiology of Pierce’s Disease in Texas
David N. Appel, Texas A&M AgriLife Extension Service, College Station

Responses of Phenolic Compounds to Sunlight Intensity in Cool-Climate Cabernet franc
James M. Meyers, Cornell University, New York

Enology – General Session

8:10 am – 9:10 am
Moderator:
Anita Oberholster, University of California, Davis

Program:
Phenolic and Aroma Composition of Grapes and Wines from Five Hybrid Grape Varieties Used in Northern Wine Production
Karline Pedneault, Quebec Agrifood Development Centre, Canada

Supramolecular Sensors for Fingerprinting Red Wines
Eric V. Anslyn, University of Texas, Austin

Rapid, Inexpensive Headspace Method for Determination of Molecular Sulfur Dioxide
Patricia A. Howe, Cornell University, New York

Merit Award Presentation

9:20 am – 10:10 am

Dr. Linda Bisson
2014 Merit Award Recipient
University of California, Davis

The Information Landscape Transformation: The Changing Role of Scientific Societies
Thursday, June 26 (continued)

**Viticulture – Grape Maturity Session**

10:20 am – Noon

**Moderator:**
Matthew Fidelibus, *University of California, Davis*

**Program:**
- Effect of Light Environment on Methoxypyrazine Content of Cabernet Sauvignon
  - Cassandra M. Plank, *Texas Tech University, Lubbock*
- Development of a Grape Chemical Quality Scale for *Vitis vinifera* L. Cabernet Sauvignon
  - Bruce S. Pan, *E&J Gallo Winery*
- The End of Ripening
  - Mark A. Matthews, *University of California, Davis*

**Enology – Wine Chemistry Session**

10:40 am – Noon

**Moderator:**
James Harbertson, *Washington State University, Prosser*

**Program:**
- Elemental Profiling of Malbec Wines from Argentina and California Made under Controlled Winemaking Conditions
  - Jenny Nelson, *Agilent Technologies, California*
- Profiling the Chemical Composition of Semillon Grape Berries at Three Stages of *Botrytis cinerea* Infection
  - Thomas S. Collins, *University of California, Davis*
- Addition Rate of Exogenous Tannin for Optimal Retention in Hybrid Red Wines
  - Alex J. Fredrickson, *Cornell University, New York*

**Viticulture – Vineyard Practices I Session**

1:30 pm – 3:10 pm

**Moderator:**
Michelle Moyer, *Washington State University, Prosser*

**Program:**
- Comparison of Bilateral Cordon Training Methods on the Development and Productivity of Grapevines
  - Larry J. Bettiga, *University of California, Davis*
- Under-Trellis Management Impacts Agrochemical and Nutrient Leaching in a Finger Lakes Vineyard
  - Adam D. Karl, *Cornell University, New York*
- Evaluating Crushed Glass Mulch, Dried Distillers Grain, and Groundcovers for Sustainable Vineyard Floor Management
  - Paul E. Read, *University of Nebraska, Lincoln*
- Effect of Herbicide Strip Width and Late-Season Weed Competition on Winegrape Vine Growth, Berry Quality, and Yield
  - Nicholas T. Basinger, *North Carolina State University, Raleigh*

For more details on the full schedule, see the provided page.
Thursday, June 26 (continued)

Effect of Condensed Tannin Size on Tannin Protein Interactions
Rachel L. Kilmister, Department of Environment and Primary Industries, Australia

Viticulture – Vineyard Practices II Session
3:20 pm – 4:20 pm
Moderator:
Chin-Feng Hwang, Missouri State University, Mountain Grove

Program:
Influence of Vine Vigor and Crop Level on Pinot noir Vine Growth, Nutrition, Fruitfulness, and Fruit Composition
Alison L. Reeve, Oregon State University, Corvallis
Vegetative Compensation Response of a Procumbent Grapevine Cultivar under Mechanical Canopy Management
Lydia F. Wessner, Grape Creek Vineyards, Texas
Optimizing Fruit-Zone Leaf Removal Practices in Cabernet franc and Petit Verdot
Cain C. Hickey, Virginia Tech, Winchester

Wednesday, June 25

7:30 am – 6:30 pm
Authors present during Texas Regional Wine Reception (5:00 pm – 6:30 pm)
Student Flash Talks 3:50 pm – 5:00 pm

Thursday, June 26

7:30 am—6:00 pm
Student Flash Talks 4:40 pm—5:50 pm

Chair:
Leticia Chacón-Rodríguez, Treasury Wine Estates, California
(Listed in alphabetical order)

Industry Posters

Use of a Noninvasive and Nondestructive Technology to Measure Oxygen and Carbon Dioxide in Wine
Massimo Fedel, L Pro Srl Via del Lavoro, Italy
Acadian LSC, a Commercial Extract of Ascophyllum nodosum, Improves Brix Uniformity in Pinot noir Winegrapes
Holly A. Little, Acadian Seaplants, California
New Approach for Studying Oxidation Processes in Wine: An EPR Spin-Trapping Automated Assay
Kalina Rangelova, Bruker BioSpin Corporation, Massachusetts

Enology Posters

Free Amino Acids and Volatile Composition of Malbec Must and Wines from Different Regions of Mendoza, Argentina
Mariela V. Assof, Instituto Nacional de Tecnología Agropecuaria, Argentina
Postbottling Development of Sulfur-like Off Aromas in Wines with Added Flavorants
Christine E. Hansen, Cornell University, New York

Effect of Coinoculation on Chambourcin Wine Quality
Laura J. Homich, Pennsylvania State University, University Park
Effect of Yeast Strain on Appassimento Wine Production in Ontario
Jennifer M. Kelly, Brock University, Canada
Fingerprinting Wine Blends Using Indicator Displacement Assays
Lina Mahmood, University of Texas, Austin
Comparative Analysis of Wines from Carica Papaya, Hibiscus Sabdariffa and Palm Wine with Two Commercial Brands (White and Red)
Gloria Ukalin Obuzor, University of Port Harcourt, Nigeria
Understanding the Factors Underlying Chronically Difficult to Ferment Juices
Vidhya Ramakrishnan, University of California, Davis
Descriptive Sensory Analysis of Wines Produced from La Crescent Grapes
Jennie R. Savits, Iowa State University, Ames
Yeast Diversity and Composition in Spontaneous Fermentations of Two Varietals at Three Canadian Wineries
Chyrystal Marie Scholl, The University of British Columbia, Canada
Understanding Carryover of Vitis labrusca Associated Aromas in Vitis vinifera Wines
Jared C. Smith, Pennsylvania State University, University Park
Effect of Pre- and Postfermentation Fining with Polyvinylpolyprrolidone on the Aromatic Profile of a Viognier Wine
Charlene B. Van Buiten, Pennsylvania State University, University Park
Enology Posters (continued)

Impact on Agronomic Parameters in Vines and Wine Quality of Foliar Treatments with Yeast Derivatives
José Ramón Lissarague, Universidad Politécnica de Madrid, Spain
Depolymerization of Proanthocyanidins from Grape Seed Extract
Mauri Anderson, University of California, Davis
Evaluation of Pigmented Tannin Structural Characteristics by a Complementary Suite of Mass Spectrometric Techniques
Jonathan R. Cave, University of California, Davis

- Effect of Exogenous Acetaldehyde during Fermentation on Red Wine Tannins and Astringency
  Marlena K. Sheridan, Pennsylvania State University, University Park

Survey of Phenolics in North Carolina Red Wines
Sara E. Spayd, North Carolina State University, Raleigh

- Limits on Red Wine Tannin Extraction and Additions: The Role of Pathogenesis-related Proteins
  Lindsay F. Springer, Cornell University, New York

Merlot Versus Cabernet Sauvignon Brand and Consumer Selection
Stephen Bok, California State University, East Bay

Effect of Wine-based Dosage Solutions on the Volatile Aroma Composition and Flavor of Ontario Sparkling Wine
Belinda S. Kemp, Brock University, Canada

- Postharvest Impact of Brown Marmorated Stink Bug (Halyomorpha halys) Taint in Wine
  Pallavi Mohekar, Oregon State University, Corvallis

Impact of an Aroma-Enhancing Ester on Aroma Perception of a Riesling Wine Model
Kimmo Sirén, Hochschule Geisenheim University, Germany

Descriptive Analysis and Consumer Study of Viognier Wines from Virginia, France, and California
Martha Wicks Mueller, Barren Ridge Vineyards

Plastic Polymers in the Wine Industry: HACCP Considerations
Cassandra M. Plank, Texas Tech University, Lubbock

- Relationship of Yeast Dynamics and Chemical/Sensory Profiles of Inoculated and Spontaneous Chardonnay and Pinot noir
  Marissa Neuner, The University of British Columbia

Extraction of Oak-derived Compounds of Merlot Wine Aged with French Winewood: Implication on Final Wine Quality
Kleopatra Chira, The Institut National de la Recherche Agronomique (INRA), France

- Determining the Origin of Fermentation Volatiles Using Labeled Glucose Tracers and High-Precision Isotope Ratio Analyses
  Anna Katharine Mansfield, Cornell University, New York

Quantifying Cumulative Wine Oxidation via Acetaldehyde Condensation Reaction Products
Ana L. Peterson, University of California, Davis

Pectinase-Catalyzed Esterification of Cinnamic Acids with Ethanol during Winemaking
Fumie Saito, University of Yamanashi, Japan

Effect of Cofermentation of Red Grapes on Tannin Extraction and Composition
Matthew R. Revelette, California State University, Fresno

Viticulture Posters

Effect of Early Lag-Phase Thinning on Low-Vigor Zinfandel
Matthew R. Revelette, California State University, Fresno

- Identification of True Hybrids of Vitis aestivalis-derived Norton-based Populations Using Molecular Markers
  Pragya Adhikari, Missouri State University, Springfield

Population Dynamics, Gene Flow, and Sources of Chloride Exclusion in Wild Vitis from the Southwest United States
Claire C. Heinitz, University of California, Davis

Relationship between the Formation of Upper Lateral Sinus and VvNAC21/22-like Expression in Grapevine Leaves
Yumi Kawagoe, University of Yamanashi, Japan

- Are Norton and Cynthiana Synonyms? A Genome-wide Comparative Assessment Using Microsatellite Markers
  Mia Mann, Missouri State University, Springfield

- Genetic Mapping of Powdery Mildew Resistance in the Wild Chinese Species Vitis pioaszewii
  Daniel Pap, University of California, Davis

- In Vitro Induction of Tetraploids in Muscadina Hybrid Rootstocks
  Xiaqing Xie, Northwest A & F University, China

- Trellis Conversion of Traditional Systems and Irrigation Stress Effects on a Procumbent Grapevine in Warm Climate
  Andrew L. Beebe, California State University, Fresno

Interactive Effect of Crop Load and Skin Contact Time on the Phenolic Composition of Malbec Wines from Argentina
Martín L. Fanzone, Instituto Nacional de Tecnología Agropecuaria, Argentina

Jackie L. Harris, Missouri State University, Columbia

Conversion from Cordon Training and Spur Pruning to Head Training and Cane Pruning Yields Mixed Results
Tremain A. Hatch, Virginia Tech, Winchester
Viticulture Posters (continued)

- Delay of Budbreak on Edelweiss Grapevines with Naphthaleneacetic Acid
  **Benjamin A. Loseke**, University of Nebraska, Lincoln

- Evaluating Canopy Leaf Area Sampling Protocols for VSP Canopies
  **Alejandra M. Navarrete**, Oregon State University, Corvallis

- Yield Mapping in California Winegrape Vineyards
  **Luis A. Sanchez**, E&J Gallo Winery, California

- Lateral Shoot Removal Increases Yeast-Assimilable Nitrogen
  **Christine M. Stockert**, University of California, Davis

- Understanding Vineyard Yield and Fruit Quality Variability
  **Erin E. Troxell**, Hochschule Geisenheim University, Germany

- Effects of Pruning Systems and Irrigation Stress on Yield and Phenolic Composition of Zinfandel in Hot Climate
  **Clinton C. Nelson**, California State University, Fresno

- Effects of Rootstock Selection and Irrigation Stress on Yield and Phenolic Composition of Zinfandel in Hot Climate
  **Clinton C. Nelson**, California State University, Fresno

- Effect of Undervine Vegetation Management on Vine Vigor, Fruit Composition, and Wine Composition
  **Mark N. Krasnow**, The Culinary Institute of America, New York

- Unraveling the Relationship between Grape Extractability and Wine Composition
  **Jose Santos**, Enartis Vinquiry, California

- Soil Geochemistry Fingerprints of Texas Hill Country Syrah Vineyards: Implications for Wine Differences?
  **Rebecca Barbosa**, University of Houston-Downtown, Texas

- Temperature Profiles of Central Coast Vineyard Regions
  **Mark C. Battany**, University of California Cooperative Extension, San Luis Obispo County

- Effects of Crop Loads and Vineyard Sites on the Winter Hardiness of Sauvignon blanc and Merlot
  **Carl Bogdanoff**, Pacific Agri-Food Research Centre, Canada

- Characterizing Cold Air Pooling in Vineyard Depressions and Scouring Using Frost Fans
  **Pat Bowen**, Pacific Agri-Food Research Centre, Canada

- Anatomical Features of Grape Berries Frontenac and Frontenac Grist with Novel Anthocyanin Accumulation Patterns
  **Kathryn L. Cook**, University of Minnesota, St. Paul

- Impact of Nitrogen Fertilization Methods on Vine and Berry Nitrogen Status under Intensive Vineyard Cover Cropping
  **DeAnna D’Attilio**, Virginia Tech, Winchester

- Napa and Sonoma Berry Report
  **Leah Henry**, California Polytechnic, San Luis Obispo

- Influence of Soil Characteristics on Wine: Comparison of Syrah Wines from Six Texas Hill Country Vineyards
  **Antonio Moreno**, University of Houston-Downtown, Texas

- A Greater Understanding of Nutrient Supply for Pinot noir Production
  **R. Paul P. Schreiner**, USDA – Agricultural Research Service Corvallis, Oregon

- trans-2-Hexenal Affects the Resveratrol Accumulation in Leaf Discs and Berry Skins
  **Shuji Shiozaki**, Osaka Prefecture University, Japan

- The Utility of Growing Degree Days as an Index in Viticulture
  **Elvis A. Takow**, Texas A&M AgriLife Extension Service, College Station

- Effect of Nitrogen Application Rate and Timing on Methoxypyrazine Development in Cabernet Sauvignon Grapes
  **Kevin Usher**, Pacific Agri-Food Research Centre, Canada

- Profiles and Antioxidant and Antimicrobial Activities of Fifty-Eight Muscadine Varietal Skin and Seed Polyphenols
  **Changmou Xu**, University of Florida, Gainesville

- Comparison of California Heritage Zinfandel and Primitivo Grapevine Selections in Napa Valley, California
  **Michael Penn**, University of California, Davis

- Evaluation of Mechanically Applied Heat in Syrah and Merlot
  **Hemant L. Gohil**, Washington State University, Prosser

- Determining the Effect of Regulated Deficit Irrigation on Cabernet Sauvignon in Washington
  **Hemant L. Gohil**, Washington State University, Prosser

- Functional Analysis of Pierce’s Disease Resistance Genes from Vitis arizonica
  **Cecilia Aguero**, University of California, Davis

- Molecular Analysis of Phylloxera Present in Argentinian Vineyards
  **Cecilia Aguero**, University of California, Davis

- Anthracnose Incidence in Different Vitis labrusca Cultivar and Rootstock Combinations in Humid Subtropical Climate
  **Luciane Bertoletti Barros**, Panama Federal University, Brazil

- Assessment of Pierce’s Disease Resistant 87.5% Vitis vinifera Selections in Alabama
  **Elina D. Coneva**, Auburn University, Alabama

- Role of Grape Mealybug in Grapevine Leafroll Disease Epidemiology in Northern California and Implications for Management
  **Monica Cooper**, University of California Cooperative Extension, Napa County

- Potential to Eradicate Xiphinema index Using the Bioantagonistic Rootstock O39-16
  **Evan Goldman**, University of California, Davis

- Ethanol and Acetic Acid Content of Sour-Rotted Winegrapes and Disease Control with Antimicrobial and Insecticide Sprays
  **Megan E. Hall**, Cornell University, New York
Viticulture Posters (continued)

Promising Strategies for Managing Cotton Root Rot of Winegrapes in Texas  
Sheila A. McBride, Texas A&M AgriLife Extension Service, College Station

Functional Microclimate Size in Powdery Mildew Epidemiology and Impacts for Forecasting and Disease Control  
Brianna McGuire, University of California, Davis

Efficacy of Biopesticide-based Programs on Erysiphe necator in Vitis vinifera Chardonnay  
Jensena M. Newhouse, Washington State University, Prosser

Surya Sapkota, Missouri State University, Springfield

Impact of Grapevine Red Blotch-Associated Virus on Performance of Three Winegrape Cultivars in North Coast Vineyards  
Rhonda J. Smith, University of California Cooperative Extension, Sonoma County

Grape Rootstock-Scion Interactions and Their Influence on Ripening Periods and the Initiation of Senescence  
Jean C. Dodson, University of California, Davis

Using a Rhizotron to Evaluate Deep and Shallow Rooting in Grape Rootstocks  
Joaquin Fraga, University of California, Davis

Rootstock Trials for Central and Southeast Texas: Regions of Moderate to High Pierce’s Disease Probability  
Andrew J. Labay, Texas A&M AgriLife Extension Service, Fredericksburg

Sour Shrivels: A Paradoxical Ripening Disorder of Grape Berries  
Bhaskar Bondada, Washington State University, Richland

Rootstock/Irrigation Interactions and Their Effect on Vine Water Status, Yield, and Wine Quality Parameters  
Arianna Bozzolo, Missouri State University, Columbia

Surface Renewal Detects Changes in Daily Water Requirements of Vines Subjected to Contrasting Irrigation Practices  
Arturo Calderon-Orellana, University of California, Davis

Dynamic Changes in Petiole Hydraulic Conductance in Grapevine Leaves Acclimated to Different Light and Water Regimes  
Jorge Esteban Perez Peña, Instituto Nacional de Tecnología Agropecuaria (INTA), Argentina

Effect of Preharvest Irrigation Cutoff on Grape Composition and Wine Quality of Vitis vinifera L. cv. Malbec  
Maia Ecchegoyen, Instituto Nacional de Tecnología Agropecuaria, Argentina

The Phenomenon of Cavitation in Grapevine (Vitis vinifera): Unraveling Implicated Mechanisms  
Ines Pilar Hugalde, Instituto Nacional de Tecnología Agropecuaria, Argentina

Application of a Prototype System for Irrigation Scheduling Based on Satellite Mapping of Water Requirements in California  
Kirk Post, California State University, Monterey Bay

Limitations to Photosynthesis during Water Deficit in Three Grapevine Cultivars  
Jorge Esteban Perez Peña, Instituto Nacional de Tecnología Agropecuaria (INTA), Argentina

Occupational Competencies for the Grape and Wine Industry: Stakeholders Know Best  
Michelle L. Norgren, Missouri State University, Springfield
Student Flash Talks

Some student poster presenters have been assigned oral, 4-minute Flash Talks. These “flash” presentations will provide additional opportunities for interaction between conference attendees and student researchers.

Moderator:
Andrew Walker, University of California, Davis
(Listed in presentation order)

WEDNESDAY, JUNE 25
3:50 pm – 5:00 pm
Identification of True Hybrids of Vitis aestivalis-derived Norton-based Populations Using Molecular Markers
Pragya Adhikari, Missouri State University, Springfield
Soil Geochemistry Fingerprints of Texas Hill Country Syrah Vineyards: Implications for Wine Differences?
Rebecca Barbosa, University of Houston, Texas
Trellis Conversion of Traditional Systems and Irrigation Stress Effects on a Procumbent Grapevine in Warm Climate
Andrew L. Beebe, California State University, Fresno
Merlot Versus Cabernet Sauvignon Brand and Consumer Selection
Stephen Bok, California State University, East Bay
Interactive Effects of Mechanical Leaf Removal and Regulated Deficit Irrigation on Merlot Grapevines in Warm Climate
Michael J. Cook, California State University, Fresno
Grape Rootstock-Scion Interactions and Their Influence on Ripening Periods and the Initiation of Senescence
Jean C. Dodson, University of California, Davis
Using a Rhizotron to Evaluate Deep and Shallow Rooting in Grape Rootstocks
Joaquin Fraga, University of California, Davis
Potential to Eradicate Xiphinema index Using the Bioantagonistic Rootstock O39-16
Evan Goldman, University of California, Davis
Ethanol and Acetic Acid Content of Sour-Rotted Winegrapes and Disease Control with Antimicrobial and Insecticide Sprays
Megan E. Hall, Cornell University, New York
Population Dynamics, Gene Flow, and Sources of Chloride Exclusion in Wild Vitis from the Southwest United States
Claire C. Heinitz, University of California, Davis
Effect of Coinoculation on Chambourcin Wine Quality
Laura J. Homich, Pennsylvania State University, University Park
The Phenomenon of Cavitation in Grapevine (Vitis vinifera): Unraveling Implicated Mechanisms
Ines Pilar Hugalde, Instituto Nacional de Tecnología Agropecuaria, Argentina
Delay of Budbreak on Edelweiss Grapevines with Multiple Applications of Amigo Oil and Naphthalenacetic Acid
Benjamin A. Loseke, University of Nebraska, Lincoln
Fingerprinting Wine Blends Using Indicator Displacement Assays
Lina Mahmood, University of Texas, Austin

THURSDAY, JUNE 26
4:40 pm – 5:50 pm
Are Norton and Cynthiana Synonyms? A Genome-wide Comparative Assessment Using Microsatellite Markers
Mia Mann, Missouri State University, Springfield
Functional Microclimate Size in Powdery Mildew Epidemiology and Impacts for Forecasting and Disease Control
Brianna McGuire, University of California, Davis
Postharvest Impact of Brown Marmorated Stink Bug (Halyomorpha halys) Taint in Wine
Pallavi Mohekar, Oregon State University, Corvallis
Influence of Soil Characteristics on Wine: Comparison of Syrah wines from Six Texas Hill Country Vineyards
Antonio Moreno, University of Houston-Downtown, Texas
Effects of Rootstock Selection and Irrigation Stress on Yield and Phenolic Composition of Zinfandel in Hot Climate
Clinton C. Nelson, California State University, Fresno
Relationship of Yeast Dynamics and Chemical/Sensory Profiles of Inoculated and Spontaneous Chardonnay and Pinot noir
Marissa Neuner, The University of British Columbia, Canada
Genetic Mapping of Powdery Mildew Resistance in the Wild Chinese Species Vitis piaszechii
Daniel Pap, University of California, Davis
Comparison of California Heritage Zinfandel and Primitivo Grapevine Selections in Napa Valley, California
Michael Penn, University of California, Davis
Quantifying Cumulative Wine Oxidation via Acetaldehyde Condensation Reaction Products
Ana L. Peterson, University of California, Davis
Surya Sapkota, Missouri State University, Springfield
Yeast Diversity and Composition in Spontaneous Fermentations of Two Varietals at Three Canadian Wineries
Chrystal Marie Scholl, The University of British Columbia, Canada
Effect of Exogenous Acetaldehyde during Fermentation on Red Wine Tannins and Astringency

Marlena K. Sheridan, Pennsylvania State University, University Park

Understanding Carryover of Vitis labrusca Associated Aromas in Vitis vinifera Wines

Jared C. Smith, Pennsylvania State University, University Park

Limits on Red Wine Tannin Extraction and Additions: The Role of Pathogenesis-related Proteins

Lindsay F. Springer, Cornell University, New York

Profiles, and Antioxidant and Antimicrobial Activities of Fifty-Eight Muscadine Varietal Skin and Seed Polyphenols

Changmou Xu, University of Florida, Gainesville
Industry Seminars

These seminars are an ASEV program featuring the fundamentals of commercial winemaking and viticulture practices. They are designed to emphasize useful, practical, hands-on knowledge of the general topic category with specific product focus. Suppliers with related products and services will have table-top displays to view.

Industry Seminars are included in the General Registration fee.

Organizing Committee:
Lise Asimont (Chair), Francis Ford Coppola Presents, California
Kristen Barnhisel, Inglenook, California
Nichola Hall, Scott Laboratories, California

WEDNESDAY, JUNE 25

1:30 pm – 3:00 pm

Grapesrowing – Clean Planting Materials: Protocol 2010

In 2008, the National Clean Plant Network (NCPN) was established with the mission of “providing high quality asexually propagated plant material free of targeted plant pathogens and pests that cause economic loss to protect the environment and ensure the global competitiveness of specialty crop producers”. In the following year, the NCPN set a new standard for foundation plant material for the United States. The new testing strategy, Protocol 2010, requires that nuclear stock at the five Grape Clean Plant Centers in the U.S. be generated through micro shoot tip culture, and test free of an extensive list of pathogens. This rigorous testing is conducted to ensure that clean plant material is available to nurseries and growers, and serves as the foundation of state certification programs.

During this session, speakers will discuss the different facets of the certification process and highlight the potential benefits of using certified plant material.

Moderator:
Justin Scheiner, Texas A&M AgriLife Extension, College Station

Speakers:
Bill Blackmon, William Chris Vineyards, Texas
Bobby Cox, Bingham Family Vineyards, Texas

1:30 pm – 3:00 pm

Winemaking – Sulfide Production, Management and Prevention in Winemaking

Although the various mechanisms that lead to the formation of volatile sulfur compounds (i.e., hydrogen sulfide, mercaptans, etc.) throughout the winemaking process are not fully understood, we can say that these complex reactions are troublesome and, once experienced, hard to forget.

During this session our speakers will discuss the current understanding underlying the production of sulfur off-odors and, how to manage the winemaking process to minimize their formation. We will also include a discussion on treatment and identification of negative sulfur-off odors.

Moderator:
Nichola Hall, Scott Laboratories, California

Speakers:
Karl Antink, J. Lohr Vineyards & Wines, California
Denise Gardner, Pennsylvania State University, University Park
Benedicte Rhyne, Wine Country Consulting, Texas

1:30 pm – 3:00 pm

General (Part I) – 2014 Harvest: Planning and Implementing Winemaking Experiments

Each year, winemakers and grapegrowers are challenged to improve winemaking techniques, to not only adapt to the current season, but to put forth experiments focused on improved wine quality for the future. During this session, our speakers will discuss effective methods for planning and implementing winemaking experiments to achieve valuable results. They will also discuss preparation options for the upcoming 2014 harvest.

Moderator:
Christiane Schleussner, Silver Oak Cellars, California

Speakers:
Chris Gerling, Cornell University, New York
Marta Sanchez-Lastowski, Haak Vineyards and Winery, Texas
THURSDAY, JUNE 26

1:30 pm – 3:00 pm

**Grapedrowing – Cold Damage: Vineyard Cultural Practices to Manage It**

Winter cold damage is a devastating injury to vineyards, especially *Vitis vinifera*, and can cause disruption in crop production for years after the initial injury. The 2013–2014 winter reached record lows and snowfall levels, and caused cold damage to vineyards in many parts of the country. Proper management of cold damage through critical vineyard cultural practices can make a huge difference in recovering both vigor and crop by years. This seminar will focus on the experience growers’ experience with cold damage and the methods they have employed to recover the production in their vineyards.

**Moderator:**
Hans Walter-Peterson, Cornell University, New York

**Speakers:**
Russ Smithyman, Chateau Ste. Michelle Winery, Washington
Jim Willwerth, Brock University, Canada

1:30 pm – 3:00 pm

**Winemaking – Yeast: More Than Alcohol Producers**

Although we rely on wine yeast to convert the available sugar to ethanol with minimal sensory deviations, their capabilities far extend this basic task.

During this session we will hear how wine yeast can influence the aromatic potential of your wine and how they can metabolize malic acid to various degrees. We will also examine yeast lees and discuss how they can influence wine flavor and stability.

**Moderator:**
Amanda Stewart, Virginia Tech, Winchester

**Speakers:**
Katie Cook, University of Minnesota, Saint Paul
Luke Holcombe, Post Vineyard, Arkansas
Chandra Richter, E&J Gallo, California

1:30 pm – 3:00 pm

**General (Part II) – 2014 Harvest: Planning and Implementing Grapegrowing Experiments**

Many winemakers and grapegrowers strive not only to make clean wine each vintage, but to learn as much as possible about the vineyard, optimizing each parcel and making intelligent harvest decisions. Often there are challenges to establishing and conducting viticultural experiments during the busy pace of harvest. During this session, our speakers will discuss the pertinent methods to plan and implement vineyard experiments to achieve credible and accurate results. The speakers will also discuss techniques and ideas in preparation for the upcoming 2014 harvest.

**Moderator:**
Mark Greenspan, Advanced Viticulture Inc, California

**Speakers:**
Lise Asimont, Francis Ford Coppola Presents, California
Fritz Westover, Vineyard Team

Supplier Display Tables are still available (at publication time)!

Contact: society@asev.org or (530) 753-3142 or visit www.asev.org for details

**2014 Supplier Displays:**
Agilent Technologies
CoolTerra™ Biochar
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Invisible Sentinel, Inc.
Renaissance Yeast Inc.
Spokane Industries
Stainless Fabrication, Inc.
Turrentine Brokerage
Vintage Nurseries
Pre-register by June 17 and save!
Save UP TO $400 by becoming a member today.

2014 Pre-registration Rates
Valid through June 17

- **Texas Hill Country Vineyard & Winery Tour**
  (Monday, June 23)
  **Includes:** Wine Tasting, Lunch and Transportation
  ASEV Member ........................................ $50
  Non-Member ........................................ $50
  Student Member .................................... $50

- **Water Use Efficiency Symposium**
  (Tuesday, June 24)
  **Includes:** Speaker Handout
  ASEV Member ........................................ $225*
  Non-Member ........................................ $325*
  Student Member .................................... $50*

- **Eastern Section “Wines of the East” Reception and Student Oenolympics**
  (Tuesday, June 24)
  **Includes:** Eastern Region Wines Paired with Hors d’OEuvres
  ASEV Member ........................................ $35
  Non-Member ........................................ $50
  Student Member .................................... $15

- **General Registration**
  (Wednesday, June 25 & Thursday, June 26)
  **Includes:** Research reports (oral and poster), Industry Seminars & Supplier Displays, Merit Award Presentation, Poster Session, Texas Regional Wine Reception, and Student-Industry Mixer.
  ASEV Member ........................................ $210*
  Non-Member ........................................ $410*
  Student Member .................................... $60*

- **Industry Seminars & Supplier Displays ONLY**
  (Wednesday, June 25 & Thursday, June 26)
  These Industry Seminars and Supplier Displays are included in General Registration fees above.
  (Fees are per seminar and include admission to supplier displays)
  ASEV Member (if ONLY registering for Industry Seminar)........ $50**
  Non-Member (if ONLY registering for Industry Seminar)........ $75**

- **Winemaking for Challenging Environments Symposium**
  (Friday, June 27)
  **Includes:** Speaker Handout
  ASEV Member ........................................ $200*
  Non-Member ........................................ $300*
  Student Member .................................... $50*

  *Fees will increase by $75 after June 17
  **Fees will increase by $25 after June 17

CAWG members are welcome to register at the ASEV member rates. Please contact us for a promotional code.

After June 17, the additional $25-$75 fee will only be applied once if you register for multiple events.

2 Ways to Pre-Register

1. **Online**
   [www.asev.org](http://www.asev.org)

2. **Telephone**
   (888) 559-9530 or (781) 821-6729
   The call center is open from 6:00 am to 5:00 pm (PDT), Monday through Friday.

   For registration changes, you may contact the call center by email (registration@asev.org) or at the number above.

Hotel Information

**Hyatt Regency Austin**
208 Barton Springs Road
Austin, TX 78704
1-(888) 421-1442 or (512) 477-1234

Membership Information

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