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UCCE

Vine Lines

Fresno County

December 2010

Stephen J. Vasquez,
Viticulture Farm Advisor

In This Issue

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Release of 'Fay Rouge'— A Red Wine Variety Well Suited for the San Joaquin Valley

Peter Christensen and Matthew Fidelibus

'Fay Rouge' is named after Fay Triplett, a wine grape grower from Ceres, California who conducted a private wine grape breeding program over a period of 25 years. 'Fay Rouge' has completed indexing and is in 'Provisional Status' at Foundation Plant Services (FPS).

'Triplett blanc,' a white variety, was released in 2004; two red wine varieties, 'Maxine Rouge' and 'Rougett,' were released in 2007. These varieties had shown promise in preliminary testing by Fay at Ceres and were subsequently transferred to the UC Kearney Agricultural Center in the late 1980s and early 1990s where they were evaluated with 29 other Triplett selections. Background information on Fay Triplett's breeding program and the first variety release, 'Triplett blanc,' can be found in FPS Grape Program Newsletters, October 2002 and October 2004 at:
fps.ucdavis.edu;
an article describing 'Maxine

(Continued on page 3)

Sampling for Grapevine Viruses

Grapevines harbor more than 55 virus and virus-like diseases that cause a range of symptoms from severely damaging (some killing grapevines), to others considered mild with little or no economic impact. Unfortunately, several damaging virus and virus-like diseases are widespread in California vineyards.

New vineyards planted from virus infected cuttings or budwood will be diseased from the moment they are transplanted and suffer chronic losses for the entire existence of the block. In a diseased planting, cumulative losses are substantial because plants remain infected for life. Therefore, to avoid losses from virus diseases, it is necessary to avoid using infected stock in propagation. Growers should only use certified planting material from California grapevine nurseries participating in the California Department of Food and Agriculture certification program.

(Continued on page 5)

Vernon Singleton: Vintners Hall of Fame

The Culinary Institute of America Vintners Hall of Fame celebrates the men and women whose collective vision, determination, and hard work have been responsible for the growth and worldwide prestige of the California wine industry. Bronze sculptures of the inductees—crafted by renowned artist Lawrence Newlan—are displayed on the historic 2,200-gallon redwood wine barrels in the former Christian Brothers' Barrel Room. Each plaque includes a biography of the inductee, capturing that person's unique accomplishments and role in making California one of the most legendary places in the world for fine wine.

Each year, the college holds A Celebration of California Wine & Food, a series of events celebrating the induction of new members into the Vintners Hall of Fame. Proceeds from the induction celebrations contribute to student scholarships.

Vernon Singleton, professor emeritus in the Department of Viticulture and Enology, University of California, Davis, has been named to the 2011 Vintners Hall of Fame by the Culinary Institute of America. Singleton, who retired in 1991 after almost 35 years at UC Davis, did groundbreaking research involving phenolics and oxidation in wine that was years ahead of the current surge of interest in these compounds.

Singleton and four additional wine industry leaders will be honored at a ceremony in February at the Culinary Institute of America's Greystone campus in St. Helena. The ceremony will be part of the CIA's fifth annual Celebration of California Wine and Food.

As the fourth member of the UC Davis faculty to be inducted into the hall, which was established in 2007, Singleton joins former colleagues Carole Meredith, Harold Olmo, and Maynard Amerine, with whom he co-wrote: *Wine: An Introduction for Americans*.

The Vintners Hall of Fame is open to the public daily, from 10 a.m. to 6 p.m. (subject to change). Admission is free.

New USDA APHIS Invasive Pests Website

The new USDA APHIS website has a lot of good information on invasive pests that have been found in the United States. It was first developed by the California Department of Food and Agriculture and has been expanded upon by the USDA. The site includes the following pest alerts on some of the most damaging pest to California's agriculture including grapes:

Asian Citrus Psyllid, Asian Longhorned Beetle, Citrus Greening, European Grapevine Moth, European Gypsy Moth, False Codling Moth, Light Brown Apple Moth, Mediterranean Fruit Fly, Mexican Fruit Fly, and Oriental Fruit Fly. The site includes information on pest status for each state, where to report unusual pests and pest management.

Help Eliminate Invasive Pest

- Don't pack a pest. When traveling, make sure you don't have any unintended stowaways.
- Be aware of quarantined areas. Don't transfer plant material in or out of areas that are under quarantine.
- Check your packages. Check shipping packages coming from outside CA for invasive pests to ensure no pests are present.
- Pests aren't pets. Don't transport animals into CA for personal collections.
- Report a pest. If you see an unusual pest in your commercial fields, report it to your local county agriculture commissioner.

Release of 'Fay Rouge'

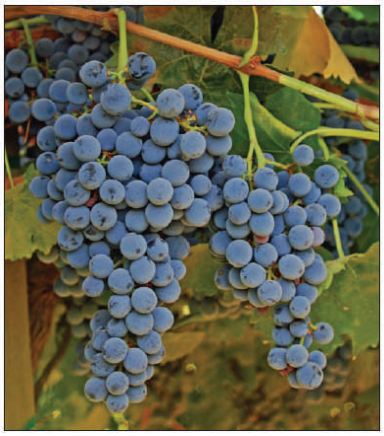
(Continued from page 1)

Rouge' and 'Rougett' is in the October 2007 newsletter.

'Fay Rouge' was tested as F101-4 and is a complex cross of F1-2 [T213-13 x T42-36 (Ruby Cabernet x Barbera)] x T793-20 (Grenache x Ravat noir). The parentage of T213-13 is: T61-9 (Grenache x Gros Manzenc) x T74-21 (Zinfandel x Cabernet Sauvignon). It is of the same parentage and a sister variety to 'Maxine Rouge.'

The shoots are of medium diameter, semi-erect and trailing. Shoot tips are glabrous and medium green. Leaves are cordiform in shape, small to medium in size, dark green on upper surface and medium green on lower surface. They are slightly bullate and wavy at the margins, with a narrow Ushaped petiolar sinus; the superior lateral sinus is of medium depth and the inferior lateral sinus is absent to shallow. They are glabrous on the upper and lower surfaces and with sparse cobwebby hairs on the lower surface veins; the teeth are of medium size with slightly convex sides.

The clusters are of medium size, conical, slightly shouldered, loose to well-filled, and with a medium-length peduncle. There was no occurrence of bunch rot during the trial. The berries are short oval, small-medium in size, of dark purple-black color, and with a gray bloom. The skin is tough and of good anthocyanin content. The canopy is moderately open due to relatively small leaves.



The vines are very fruitful. The fruit ripens in mid season (mid September in Fresno County) and with good compositional balance, making the variety well suited to a warm climate district. A three-year summary of the harvest data from the UC Kearney Agricultural Center (Fresno County) is given in Table 1.

The test vines at Kearney were planted at 8- x 10-feet vine and row spacing and trained to a bilateral cordon at 54 inches and with a foliar catch wire at 65 inches. They were pruned to 22 2-node spurs per vine. The fairly open canopy minimizes the need for canopy manipulation.

Table wines made from the variety have been described as medium bodied with good color and mouth feel and of good acidity. The flavor profile is fresh red to dark fruits, and it can have some herbaceous flavor as well. It has been described as similar to Cabernet Sauvignon or Ruby Cabernet if the fruit is fully ripe.

Peter Christensen is a Viticulture Specialist, Emeritus and Matthew Fidelibus, Viticulture Specialist, Department of Viticulture and Enology, UC Davis based at UC Kearney Ag Center.

Table 1. 'Fay Rouge' 3-year harvest means

	Berry Analysis				Cluster Analysis			Total Yield
	Wt./Berry gms	Soluble Solids	Titratable Acidity g/100ml	pH	No./vine	Wt./cluster lb.	No. with rot	Lbs./vine
16-Sep	1.82	23.1	0.79	3.69	114	0.47	0	53.6

"Growing Agritourism" Workshop

The UC Small Farm Program announces a series of "Growing Agritourism" workshops this winter, made possible by funding from Western Sustainable Agriculture Research and Education (Western SARE).

Agricultural tourism is a commercial enterprise at a working farm, ranch or agricultural plant conducted for the enjoyment or education of visitors, and that generates supplemental income for the owner.

Agritourism can include farm stands or shops, U-pick, farm stays, tours, on-farm classes, fairs, festivals, pumpkin patches, Christmas tree farms, winery weddings, orchard dinners, youth camps, barn dances, hunting or fishing, guest ranches, and more.

The UC Small Farm Program, working with county-based UC Cooperative Extension farm advisors, provides resources for agritourism operators and hosts California's statewide directory of agritourism operations.

If you are…

- an agritourism operator
- a tourism professional
- an agricultural organization leader
- a resource manager
- a county planner, regulator or commissioner
- a city, county or state elected official
- a community development professional
- a farmer or rancher considering agritourism

...you are invited to join us for an educational and participatory professional development workshop

- to learn and share the latest in agritourism development and marketing tools
- to network with regional operators and other professionals to organize and promote agritourism
- to discuss common challenges and opportunities
- to build a stronger infrastructure for successful agritourism in the region

Interested participants can now register for the San Joaquin Valley workshop.

San Joaquin Valley & Foothills: Wednesday, January 19, 2011 UCCE Merced County, Merced CA information and registration: http://ucanr.org/mercedagtour

Additional agritourism workshops can be found by visiting the events calendar at:

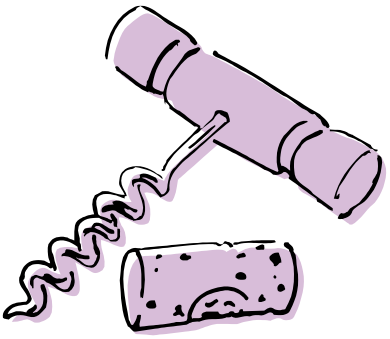
http://ucanr.org/index.cfm?calendar=yes

For additional information on the workshops please contact:
Penny Leff at 530.752.7779

Sweet Dessert and Dried Fruit Wines Symposium

Sweet wines are made from a variety of different techniques to concentrate sugar, including partial drying, freezing, botrytis and late harvesting. Experts from around the world will discuss these techniques. Other topics/ activities will include:

- Economics of production costs, technologies and how to enter niche markets
- Meet global scientific experts and accomplished international producers and taste their wines
- Learn about the world's first LEED Platinum Teaching and Research Winery



When: Wednesday, January 12, 2011 from 9:00am to 6:00pm

Where: Silverado Vineyards Sensory Theater, Robert Mondavi Institute Sensory Building, UC Davis

Price: Public ($125), Friends of the RMI, UCD Staff, Students and Faculty ($95)

Register Online here or call:
Kim Bannister for more information at (530) 752-5171.

Viruses

Continued from page 1)

The intensity of virus symptoms varies during the growing seasons, depending on the variety of grape (scion and rootstock) and cultural factors. Although some disease symptoms are diagnostic, the absence of symptoms is not a reliable indication that the plant is healthy. Many grapevine viruses are latent (not showing symptoms nor causing disease) under certain circumstances. The use of propagating wood carrying these latent viruses may lead to serious disease or even vine death if a susceptible variety of rootstock or scion is used in propagating the new vines.

In many cases, the virus associated with a specific disease has been characterized and a great deal is known about the virus, its biology, and its genetic structure. However, there are still grapevine diseases which are believed to be caused by virus and is referred to as "virus-like" because the pathogen which causes them is still unidentified. The primary test for these diseases is that they are graft transmissible. This general class of pathogens is known as graft transmissible agents (GTAs). Many of them are latent or semi-latent in European grapes and most American species.

Best time to Sample

Autumn and winter are the best times to sample for leafroll, stem pitting and viti viruses. Vineyards suspected of having fanleaf should be sampled in the spring time for best results. Growers should look for symptoms associated with virus infections, which include but are not limited to: leaf rolling, discoloration of the leaves, reduced yields, poor fruit maturity and color and shortened canes. Plant material samples should be taken from suspect vines, stored in paper bags and shipped overnight to a laboratory for testing. Sampled grapevines should be marked for future sampling and testing if needed.

Field indexes and/or laboratory tests are required to accurately differentiate the grapevine viruses. For more information about specific viruses, please refer to Table 1 for specific virus disease characteristics.

The University of California's Foundation Plant Services offers pathogen testing on a fee-for-service basis for viral pathogens. Testing is performed using Polymerase Chain Reaction, which is one of the most sensitive methods for pathogen detection currently available. Testing is available for the following viral pathogens of grapevines:

- **Grapevine leafroll-associated virus (1–5)**
- **Grapevine vitivirus (A, B, & D)**
- **Rupestris stem pitting-associated virus**
- **Grapevine fan leaf virus**
- **Grapevine fleck virus**
- **Tomato ring spot virus**
- **Arabis mosaic virus**
- **Grapevine rootstock stem lesion-associated virus (formerly know as Redglobe virus)**

For more information call:
(530) 752-3590.

For more information visit:
Foundation Plant Materials:
http://fps.ucdavis.edu/

UC IPM: http://ucipm.ucdavis.edu

Table 1. Virus disease affecting California's vineyards.

Fanleaf (and other nepoviruses)	Virus	Spring is best; fall and winter are okay	Active shoot tips in spring; shoots/canes	Reliable in spring	Reliable in spring, less reliable in fall and winter
Leafroll	Virus	Late summer, fall, and winter	Petioles in late summer and fall; shoots/canes for cambium scrapings in fall and winter	Only available for GLRaVs 1 to 5; Reliable in late summer and fall	Only available for GLRaVs 1 to 5, 7, and 9; Reliable in late summer, fall, and winter.
Rupestris stem pitting	Virus	Year round	Petioles, leaves and cambial scrapings	Not generally available	Reliable
Vitiviruses: GVA, GVB & GVD	Virus	Spring, fall and winter	Petioles, leaves or cambial scrapings	Available for GVA only; reliable in spring	Available for GVA, GVB, and GVD

The Top 100 Questions for Global Agriculture

Anticipating a world population of 9 billion people by 2050, global agriculture faces the daunting challenge of increasing food production by 70 to 100 percent in the next four decades, without significantly increasing prices.

To better focus on the overwhelming task at hand, a multidisciplinary team of 55 agricultural and food experts from the world's major agricultural organizations, scientific societies and academic institutions recently identified the top 100 questions that must be answered to achieve such a dramatic increase in global food production. Among this group was Thomas P. Tomich, director of the Agricultural Sustainability Institute at UC Davis.

Those 100 key questions for the future of global food production appear this month in the International Journal of Agricultural Sustainability, available online at:

The top 100 questions for global agriculture or http://www.earthscan.co.uk/?tabid=503

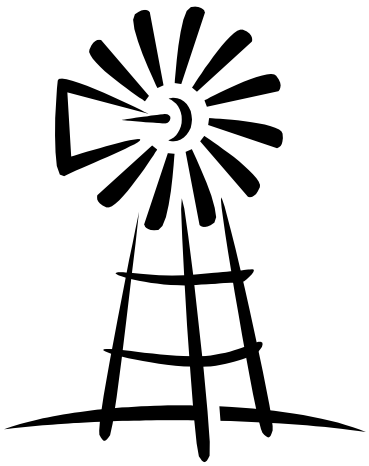
The top 100 questions cover 13 priority themes and are intended to help frame the research, policy and funding agendas for global agriculture. They were selected from an initial list of 618 questions that had been identified by a core group of experts representing universities, United Nations agencies, research institutes, non-governmental organizations, foundations and regional research secretariats in 23 countries.

Tomich, one of the paper's co-authors, predicts that global agricultural and food systems will have to change substantially to feed the world, especially in light of looming issues such as climate change, water stresses, energy insecurity and dietary shifts.

"California is a hub for technological and scientific innovation, and we can set the pace for a transition to a more sustainable food system, providing inspiration and insights for the world," Tomich said. "Indeed, if we cannot pull this off in California, who can?"

He noted that it is imperative for the scientific research agenda to keep abreast with the challenges of global food production.

"For California agriculture to stay at the cutting edge in a competitive food system that is facing increasingly complex challenges worldwide, our researchers need to be engaged globally," he said.



Brown Marmorated Stink Bugs

The Brown Marmorated Stink Bug (BMSB) is an exotic insect pest. Native to China, Japan, Korea and Taiwan, it was accidentally introduced to the US and is now found in 29 states. It has not yet established itself in California, but a colony of BMSB was identified and destroyed by the California Department of Food and Agriculture (CDFA) in a storage facility in Vallejo, CA in March 2005. There is growing concern that BMSB may eventually become established in CA, a very undesirable possibility, as the BMSB is a major economic pest in Asia attacking a variety of high value crops, including tree fruit, and BMSB has damaged stone fruits and apples in the eastern United States.

Adult BMSB resemble other stinkbugs. They have a marbled pattern on their backs and specialized mouthparts that enable them to penetrate and feed on plant tissues. Feeding results in fruit deformation (cat-facing), and internal brown spotting that renders the fruit unsuitable for fresh market. The BMSB can emit a foul odor; the presence of BMSBs in wine grape clusters at harvest and crush may contaminate the fruit and impart their foul bitter-sweet odor to the wine.

More information on the BMSB is available online:

https://www.wpdn.org/webfm_send/86

CALENDAR OF EVENTS

Local Meetings and Events

San Joaquin Valley Grape Symposium
January 5, 2011
7:30 a.m. — 1:00 p.m.
C.P.D.E.S. Hall
172 Jefferson Avenue
Easton, CA 93706
http://ucanr.org/2011_grape_symposium

U.C. Davis University Extension Meetings

(800) 752-0881

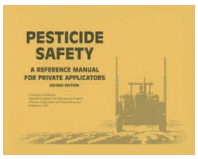
Introduction to Wine Analysis for Professional Winemakers and Winery Lab Workers
January 22, 2011
9:00 a.m. — 6:00 p.m.
1127 North, Robert Mondavi, Old Davis Rd.
Davis, CA
Section: 103VIT209

Tasting Room Design and Management
February 23, 2011
9:00 a.m. — 4:30 p.m.
Da Vinci Building
1632 Da Vinci Ct.
Davis, CA
Section: 103VIT205

Managing the Small Vineyard I
February 26, 2011
9:00 a.m.— 4:00 p.m.
Room 180 Medical Science Building
Davis, CA
Section: 103VIT211

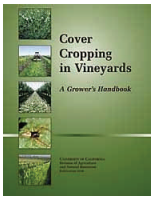
Varietal Winegrape Production Short Course
March 1-3, 2011
8:30 a.m. — 5:00 p.m.
Freeborn Hall, North Quad
Davis, CA
Section: 103VIT202

Publications from the University of California



Pesticide Safety: A Reference Manual for Private Applicators
ANR Publication 3383
Price - $7.00 + tax and shipping

Updated in 2006, this manual covers information essential for anyone using pesticides on California farms, including growers, managers and employees. The manual covers pesticide labels, worker safety (handlers and fieldworkers), how to mix and apply pesticides, calibration, the hazards of pesticide use including heat related illness, and pesticide emergencies.



Cover Cropping In Vineyards
ANR Publication 3338
Price - $20.00 + tax and shipping

This guide features cutting-edge methods for using cover crops to enhance vineyard performance. Based on extensive research, this guide details technical and theoretical information on how cover crops affect vineyards and promote ecological stability.

Order Form

Publication	Qty.	Price	Subtotal
Pesticide Safety		$ 7.00	
Cover Cropping in Vineyards		$ 20.00	

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Produced by UC Cooperative Extension Farm Advisor Stephen J. Vasquez. Contact me for further article information, or to be added to the mailing list.

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Hours: 8:00—5:00 M-F

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Visit us online at
http://cefresno.ucdavis.edu

In This Issue

For special assistance regarding our programs, please contact us.

San Joaquin Valley Grape Symposium Program

Wednesday, January 5, 2011
C.P.D.E.S. Hall
172 W. Jefferson Avenue - Easton, California

Agenda

7:00 a.m.	Registration - Refreshments
7:45 a.m.	***Welcoming remarks***
8:00 a.m.	Climate and Its Effects on Grape Production *Stephen Vasquez, Farm Advisor, UC Cooperative Extension, Fresno County*
8:30 a.m.	Biology of European Grapevine Moth *Eugene Hannon, Entomologist, Agricultural Commissioner's Office, Fresno County*
9:00 a.m.	Management of European Grapevine Moth *Walt Bentley, UC IPM Entomologist, UC Kearney Agricultural Center, Fresno County*
9:30 a.m.	**Break and Refreshments**
10:00 a.m.	Regulatory Impact of the EGVM Quarantine to Fresno County Grape Growers *Tye Hafner, Deputy Agricultural Commissioner, Fresno County*
10:30 a.m.	Grapes vs. Nuts: An Historical Review of Production in the San Joaquin Valley *Jim Lapsley, Professor, Department of Viticulture and Enology, UC Davis*
11:00 a.m.	Grape and Wine Production: Competitiveness in a Global Industry *Daniel Sumner, Professor, Department of Ag and Resource Economics, UC Davis*
12:00 p.m.	Lunch: Sponsored by Allied Grape Growers
1:30 p.m.	Prize Drawing (Must be present to win)

CONTINUING EDUCATION PCA AND CCA HOURS HAVE BEEN REQUESTED

Fill out registration form below — OR register & pay on-line at: http://ucanr.org/2011_grape_symposium

Company: _____ **Phone:** _____

Address: _____ **City:** _____ **Zip:** _____

Attendee Names

_____ _____

_____ _____

_____ _____

Checks Payable to: UC Regents

Mail payment and registration to:
San Joaquin Valley Grape Symposium
1720 S. Maple Avenue
Fresno, CA 93702

Fee includes meeting and proceedings: $10.00 (Received by Dec. 31, 2010)

Late registration for meeting and proceedings: $20.00 (After Dec 31, 2010)

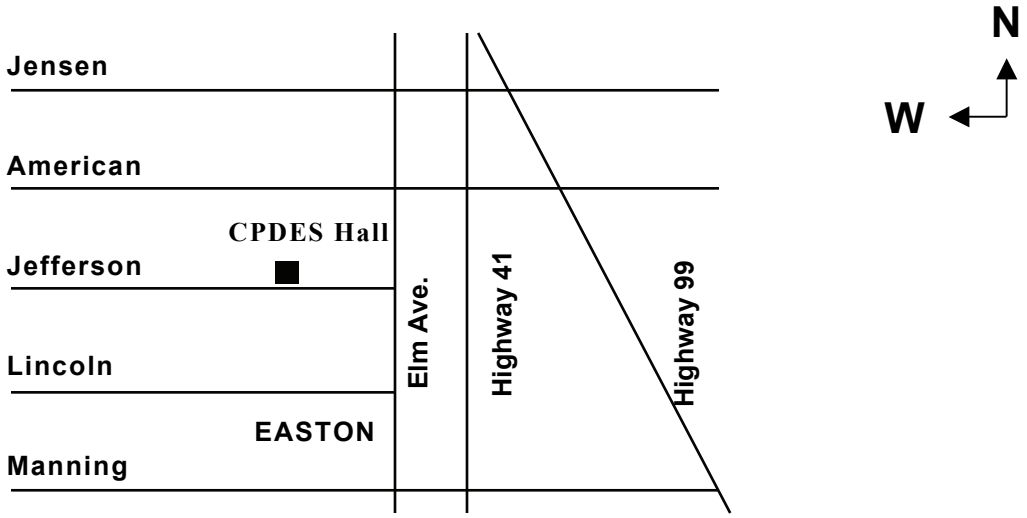
Meeting and Proceedings: _____ ***X $10.00 each = $*** _____

Check Number: _____ ***Amount enclosed $*** _____

San Joaquin Valley Grape Symposium Program

Wednesday, January 5, 2011

C.P.D.E.S. Hall
172 W. Jefferson Avenue
Easton, California



From North of Fresno: Take Highway 99 south to Highway 41 south. Take Highway 41 south to American Avenue. Turn west on American Avenue towards Elm Avenue. Turn south on Elm Avenue towards Jefferson Avenue. Turn west on Jefferson. C.P.D.E.S. Hall will be on your right.

From South of Fresno: Take Highway 99 south to Manning Avenue. Turn west on Manning Avenue to Elm Avenue. Turn north on Elm Avenue towards Jefferson Avenue. Turn west on Jefferson Avenue. C.P.D.E.S. Hall will be on your right.

Register on-line and pay by credit card @ http://ucanr.org/2011_grape_symposium

Our programs are open to all potential participants. Please contact the Fresno County UCCE office (two weeks before the Grape Symposium) at 559-456-7285 if you have any barriers to participation requiring any special accommodations or financial assistance. Financial assistance is available to cover the cost of the meeting and proceedings only.