

# Committee Meeting in Davis, CA Assistance to the California Department of Food and Agriculture Pierce's Disease/Glassy-Winged Sharp Shooter Board on Grapevine Viruses and Grapevine Disease

## AGENDA FOR MARCH 5 OPEN SESSIONS

### MEETING VENUE

Christensen Room

[UC Davis Foundation Plant Services](#)

Foundation Plant Services

455 Hopkins Road

Davis, CA 95616

**TUESDAY, MARCH 5, 2024**

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### OPEN SESSION (9:00 – 11:00 AM) – *Public welcome*

#### 9:00 Welcome and Introductions; Overview of Open Session

*Anna Whitfield, Committee Chair*

#### 9:15 Grapevine Red Blotch Virus Biology, Ecology, and Management

*Bob Gilbertson, Distinguished Professor of Plant Pathology, UC Davis*

*Topics/questions to be addressed:*

- *Significance of red blotch to winegrape production and relative importance to the industry*
- *Describe the current knowledge on red blotch virus-host biology and areas where significant progress could be made furthering our understanding and developing effective control strategies. What barriers need to be overcome?*
- *Discuss virus and protein localization; What makes the red blotch virus special/different from other Geminiviruses?*
- *Why can't we (i) observe virions in infected plants and (ii) cannot use coat protein based detection in serological assays? If there is no coat protein production, how do we reconcile vector transmission since vector transmission of virions is mediated by the coat protein. Does GRBV transmission fall outside this conventional wisdom?*
- *Identify areas where significant progress could be made towards understanding virus and vector biology/ecology and developing effective control strategies. What barriers need to be overcome?*

#### 10:00 Grapevine Red Blotch and Leafroll Viruses: Virus-Host Interactions, and Vector Biology and Management

*Rodrigo Almeida, Professor of Ecology of Emerging Infectious Diseases and the Hildebrand-Laumeister Chair in Plant Pathology, UC Berkeley*

*Topics/questions to be addressed:*

- *Provide an update on your research aimed at understanding and controlling vector-borne viruses impacting wine grapes*
- *Identify key areas where additional study is needed to understand the basic biology of virus-host interactions and vector biology*
- *Identify areas where significant progress could be made towards developing effective control strategies. What knowledge gaps and barriers need to be overcome?*
- *Discuss any other aspects of red blotch and leafroll that you feel are important for the committee to take into consideration*

**10:45 Coffee Break (and follow-up questions [if there are any] for Bob and Rodrigo)**

**10:55 Takeaways from the FPS Tour on March 4**

**11:00 Adjourn Open Session**

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**OPEN SESSION (1:00 – 3:00 PM) – Public welcome**

**1:00 Welcome and Introductions; Overview of Open Session**

*Anna Whitfield, Committee Chair*

*Alex Karasev, Committee Vice-Chair*

**1:15 DISCUSSION WITH PD/GWSS BOARD AND VARIOUS STAKEHOLDERS**

*Moderators: Anna Whitfield and Alex Karasev*

*Note: In the interest of time, meeting participants are asked to focus on the questions below. Comments are limited to 2 minutes per speaker.*

**PD/GWSS Board to address these questions:**

- Grants program – which is your priority grapevine red blotch disease (GRBD) or grapevine leafroll disease (GLD) research and why?
- What control/management strategies have been tried (chemical, biological, etc.) and what methods/strategies are currently under evaluation?
- Is the industry receptive to novel approaches, such as transgenic plants or GE vectors?
- Is the board satisfied with the number of PIs who are based in California that submit proposals?

**Growers and PCA consultants/farm/IPM advisors to address these questions (red font for consultants/farm/IPM advisors)**

- Describe how you are currently taking care of GRBD/GLD-infected grapevines. *What GRBD/GLD management methods/strategies do you currently recommend to growers?*
- About how much yield increase (if any) have you seen since employing your current practices?
- Are you also spraying for GRBD/GLD insect vectors and participating in an areawide pest management program?
- What current GRBD/GLD management strategies that resulted from GRBD/GLD research community are you employing in your vineyards and why did you choose to employ them? What is your primary consideration when choosing a management strategy/method – cost, efficacy, ease of application? *What*

*current GRBD/GLD management strategies that resulted from the GRBD/GLD research community are you recommending to growers and why did you choose to recommend them?*

- What kind of information would you (grower/consultant/advisor) like to have to improve management of GRBD and GLD?
- Are you trying any unconventional or non-research-based control methods? What are these and are any of these methods effective? *Are you recommending any unconventional or non-research-based control methods? What are these and are any of these methods effective?*
- What are your current strategies for testing? Describe the challenges/roadblocks for virus testing? What is working and what needs to be improved?

**2:00 Coffee Break**

**2:15 Resume Discussion**

**Nursery operators to address these questions:**

- Describe your virus testing protocols for GRBD and GLD
- How do you control virus-transmitting vector insects in your nursery? How difficult or effective is what you are doing? Are they efficient enough?
- What would be helpful for you to better control your insect populations in your operations?

**3:00 Adjourn Open Session**

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**SPEAKER BIOS**

**Rodrigo Almeida** is Professor of Ecology of Emerging Infectious Diseases and the Hildebrand-Laumeister Chair in Plant Pathology at the University of California, Berkeley. He studies the biology, ecology, evolution, and management of insect-borne plant pathogens, focusing on economically relevant and emerging bacterial and viral diseases of perennial crops, including grapevines. He is Fellow of the American Association for the Advancement of Science, and a Marie Curie Research and a Fulbright Research Fellow; his work was also recognized with the Syngenta Award and the Lee M. Hutchins awards from the American Phytopathological Society.

**Robert (Bob) Gilbertson** is a Distinguished Professor at the University of California, Davis. Gilbertson is interested in utilizing various approaches to assess plant pathogen diversity and to apply this information in the development of disease resistant varieties through collaboration with plant breeders. He is also interested in developing improved pathogen detection and inoculation methods to facilitate improved screening of crop varieties, germplasm, and progenies for disease resistance to a variety of pathogens. Finally, he is very interested in utilizing improved varieties in IPM programs for disease management in the field. In the area of virology, Gilbertson is especially recognized for his ground-breaking work on the geminiviruses. He has been a pioneer in exploiting both traditional and molecular tools in the investigation of geminivirus population structure and evolution. Gilbertson was awarded the APS Syngenta Award in 1998 and was elected as a fellow of the American Association for the Advancement of Science in 2006. He served as editor-in-chief of *Phytopathology* from 2005 to 2008.