

CDFA Pierce's Disease and Glassy-winged Sharpshooter Board
Research and Outreach Funding Recommendation
(April 29, 2019)

Topic	Project Leader	Institution	Title	Recommended Funding				Notes
				Year 1 (FY 2019-20)	Year 2 (FY 2020-21)	Year 3 (FY 2021-22)	Total	
Pierce's disease	Andrew Walker	UC Davis	Breeding Pierce's disease resistant wine grapes	\$283,314	\$292,021	\$0	\$575,335	[a]
Pierce's disease	Andrew Walker	UC Davis	Molecular breeding support for the development of Pierce's disease resistant wine grapes	\$300,148	\$337,720	\$0	\$637,868	[a]
Pierce's disease	Caroline Roper	UC Riverside	Generating Pierce's disease resistant grapevines using CRISPR/Cas9 and traditional transgenic approaches	\$124,510	\$0	\$0	\$124,510	
Pierce's disease	David Gilchrist	UC Davis	Field evaluation of cross-graft protection effective against Pierce's disease by dual DNA constructs expressed in transgenic grape rootstocks	\$43,725	\$23,032	\$23,452	\$90,209	
Pierce's disease	Dean Gabriel	Univ. of Florida	High-throughput screen for small molecules targeting bifunctional catalase/oxidase (KatG) in <i>Xylella fastidiosa</i>	\$170,482	\$114,556	\$0	\$285,038	
Pierce's disease	Rodrigo Almeida	UC Berkeley	Testing of grapevines designed to block vector transmission of <i>Xylella fastidiosa</i>	\$99,676	\$0	\$0	\$99,676	
Pierce's disease	Steve Lindow	UC Berkeley	Optimizing biological control of Pierce's disease with <i>Paraburkholderia phytofirmans</i>	\$145,894	\$149,999	\$0	\$295,893	
insects	Rachael Naegele	USDA ARS, Parlier	Identification of grape cultivars and rootstocks with resistance to vine mealybug	\$17,698	\$0	\$0	\$17,698	
viruses	Achala KC	Oregon State Univ., Central Point	Interaction of red blotch-associated virus and deficit irrigation on grapevine water relations, disease development, and vine productivity	\$30,154	\$0	\$0	\$30,154	[b]
viruses	Chris Rock	Texas Tech	Structure-function studies on grapevine red blotch virus to elucidate disease etiology	\$105,000	\$0	\$0	\$105,000	
viruses	Marc Fuchs	Cornell	Ecology of grapevine red blotch virus	\$249,992	\$0	\$0	\$249,992	[c]
viruses	Monica Cooper	UC Cooperative Extension	Improving extension outcomes: Identifying drivers and barriers to adoption of management practices using leafroll and red blotch disease as model systems	\$50,200	\$88,500	\$25,000	\$163,700	
viruses	Neil McRoberts	UC Davis	Education and outreach for the Grapevine Certification and Registration Program, and an assessment of recently established production blocks	\$59,726	\$0	\$0	\$59,726	
viruses	Stephanie Bolton	Lodi Winegrape Commission	Grapevine virus management in Lodi: A collaborative research and integrated outreach effort to help solve a statewide challenge	\$39,000	\$0	\$0	\$39,000	
viruses & insects	Marc Fuchs	Cornell	Resistance to grapevine leafroll-associated virus 3 and the grape mealybug	\$387,176	\$0	\$0	\$387,176	[c]
viruses & insects	Yen-Wen Kuo	UC Davis	Virus-based delivery of interfering RNAs targeting grapevine leafroll-associated virus(es) and associated mealybugs	\$129,481	\$135,302	\$0	\$264,783	
				\$2,236,176	\$1,141,130	\$48,452	\$3,425,758	

Notes

[a] Contingent upon completion of intellectual property paperwork for pre-released plant material.

[b] Will be funded by American Vineyard Foundation instead.

[c] Revised, reduced-cost proposal being prepared.