

The National Academies of
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Board on Agriculture and Natural Resources

PUBLIC WEBINAR

**WILDFIRE AND WILDFIRE SMOKE:
EFFECTS ON ECOSYSTEMS, AGRICULTURAL WORKERS, HORSES, AND WINE GRAPES**

--Via ZOOM--

Tuesday, December 8	
10:00 am EST	Open Public Session on Wildfire - Session I <i>The Past and Future Ecological Effects of Wildfire</i> Philip Higuera, Associate Professor of Fire Ecology, Montana State University
11:30 am EST	Break
Noon	Open Public Session on Wildfire (Virtual) - Session II <i>Double Jeopardy: Effects of Covid-19 and Wildfire Smoke on California Farmworkers</i> Ken Pinkerton, Director, UC Davis Western Center for Agricultural Health and Safety Heather Riden, Program Director, UC Davis Western Center for Agricultural Health and Safety
1:15 pm EST	Break
1:30 pm EST	Open Public Session on Wildfire - Session III <i>Wildfire Smoke Effects on Wine</i> Wesley Zandberg, Assistant Professor of Chemistry, University of British Columbia–Okanagan <i>Effects of Wildfire Smoke on Horses and Livestock</i> Jenifer R. Gold, Clinical Associate Professor of Veterinary Medicine, Washington State University
3:00 pm EST	Adjourn.

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Presenter Biosketches
(in order of session)

Phil Higuera is an associate professor of fire ecology in the Department of Ecosystem and Conservation Sciences at the University of Montana. He directs the PaleoEcology and Fire Ecology Lab, funded largely from the National Science Foundation and Joint Fire Science Program, and he teaches undergraduate and graduate courses in fire and disturbance ecology. Work from his lab spans western North America and has revealed how fire activity varies with climate change in recent decades and the distant past, and how forest ecosystems have responded to these changes. In 2018, Clarivate Analytics named him one of its “highly cited scientists,” for papers published over the previous decade.

Kent Pinkerton is the Director of the UC Davis Western Center for Agricultural Health and Safety. Pinkerton's research focuses on the health effects of inhaled environmental air pollutants to alter respiratory, cardiovascular and neurological structure and function. Special areas of interest include the interaction of gases and airborne particles to produce cellular and structural changes within site-specific regions and cells of the respiratory tract in both acute and chronic timeframes of exposure. He is interested in the health effects of airborne particles in an agricultural setting.

Heather Riden is the Agricultural Health and Safety Program Director for the Department of Public Health Sciences and the Western Center for Agricultural Health and Safety. She is also the Principal Investigator on two State of California contracts related to high-hazard occupational safety training and pesticide safety education. Riden has over 15 years of experience in leadership roles advancing programs that advocate for the health of vulnerable populations

Wesley Zanberg is an assistant professor of biochemistry and molecular biology in the Department of Chemistry at the University of British Columbia, Okanagan. Dr. Zanberg's research interests are in the area of glycobiology, in particular, in (1) devising new methods for purifying and analyzing poly- and oligosaccharides (glycans) from organisms or tissue-cultured cells and (2) developing new ways to chemically perturb oligosaccharide metabolism in cells or animals. He recently worked with colleagues to quantify organoleptic volatile phenols in smoke-exposed *Vitis vinifera* berries (wine grapes). He holds a PhD from Simon Fraser University and BSc from Trinity Western University.

Jennifer R. Gold is an associate professor in Equine Internal Medicine at Washington State University. She received a DVM from a Washington State University/Oregon State University dual program in 2002, and completed a rotating internship in equine medicine and surgery at Mid-Atlantic Equine Medical Center in 2003. After a 3-year residency in Large Animal Internal Medicine at Cornell University, Dr. Gold became a Diplomate of the American College of Veterinary Internal Medicine and joined Texas A&M University as a clinical assistant professor in the Department of Large Animal Clinical Sciences, later becoming a Diplomate of the American College of Veterinary Emergency and Critical Care-Large Animal. Dr. Gold served as a locum in the United Arab Emirates, working for the Sheik of Dubai at Dubai Equine Hospital. She worked on endurance, race, and performance horses performing internal medicine and critical care. She joined the faculty of Washington State University in 2015 and provides instruction on veterinary medical care for horses and agricultural animals.