

NAU-UC Davis Education Conference on  
One Health for Food Safety and Security  
University of California, Davis  
January 27 – February 16, 2019

Sponsored by: Nanjing Agricultural University

Hosted by:  
University of California, Davis  
Western Institute for Food Safety and Security



## Conference Description

The NAU-UC Davis Education Conference on One Health for Food Safety and Security, held at University of California, Davis, January 28 – February 15, provided an in-depth educational experience for undergraduate students from Nanjing Agricultural University to learn about the importance of applying a One Health approach to solving problems concerning food safety and security, and animal health. The conference was sponsored by Nanjing Agricultural University and hosted by the Western Institute for Food Safety and Security, (WIFSS). The comprehensive program included lectures, field trips, and team-building exercises which increased the students' awareness of taking a multidisciplinary approach to solving complex problems concerning the health of people, animals and the environment. This One Health approach to solving problems is critical in promoting progress towards safer, better quality food systems and healthy animals in China.

WIFSS's One Health conferences are building the foundation for the establishment of a One Health Center for Food Safety and Animal Health at NAU. Research and education programs at the Center will focus on understanding and dissemination of information for food safety, water quality and animal health. NAU students, schooled in teamwork at the conferences, will be the future teachers and researchers at the Center.

Special thanks to our speakers and team facilitators, and special thanks to the many people who gave so generously of their time to help this be a successful conference, including:

- Chris Brunner, Public Relations Officer and Conference Coordinator, WIFSS
- Jenny Chen, Co-Conference Coordinator, WIFSS
- James Cullor, Professor Emeritus, School of Veterinary Medicine
- Sara Garcia, Project Scientist, WIFSS
- David Goldenberg, Food Safety and Security Training Coordinator, WIFSS
- Heather Johnson, Educational Specialist, WIFSS
- Emily Kunz, Graphic Designer and Web Developer, WIFSS
- Michael Luo, One Health Coordinator, WIFSS
- Nicole Nisson, Program and Financial Assistant, WIFSS
- Bennie Osburn, Director of Outreach and Training, WIFSS
- Carol Wang, One Health Coordinator, WIFSS
- Gregory Wlasiuk, E-Learning Curriculum Designer, WIFSS

# WEEK ONE

## SUNDAY – JANUARY 27

1:00 – 3:00	1477 Drew Ave Ste 101	Arrive WIFSS	Ms. Jenny Chen, Ms. Chris Brunner, Ms. Carol Wang and Mr. Michael Luo greet students
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## MONDAY – JANUARY 28

9:00 – 9:15	1041 Valley	Welcome and Introduction of Conference Leadership	Dr. Bennie Osburn, Director for Outreach & Training, Western Institute for Food Safety and Security
9:15 – 10:15	1041 Valley	Overview of WIFSS and the Impact of Water Quality on Animals, People, and the Environment	Dr. Rob Atwill, Director, Western Institute for Food Safety and Security
10:15 – 10:30	1041 Valley	BREAK	
10:30 – 11:30	1041 Valley	Overview of Programs of the College of Agricultural & Environmental Sciences	Dr. Bennie Osburn, Director for Outreach & Training, Western Institute for Food Safety and Security
11:30 – 1:00	1041 Valley	LUNCH	
1:00 – 1:45	1041 Valley	History of California	Mr. Kelly Nimtz, School of Veterinary Medicine, Emeritus Director of Development
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1:45 – 2:00	1041 Valley	Opening Survey	Ms. Carol Wang, Coordinator One Health Youth
2:00 – 2:45	1041 Valley	21 <sup>st</sup> Century California and Things to Do in Davis	Mr. Gregory Wlasiuk, E-Learning Curriculum Designer, Western Institute for Food Safety and Security

## TUESDAY – JANUARY 29

9:00 – 10:30	1041 Valley	Icebreaker and Introduction of Team Facilitators, and Team Assignments – <b>Discussion #1</b>	Ms. Heather Johnson, Instructional Systems Designer, and Dr. Sara Garcia, Project Scientist, Western Institute for Food Safety and Security
10:30 – 10:45		BREAK	
10:45 – 11:15	1041 Valley	Soil Health: Linking Ecosystem Health to Human and Animal Health: Challenges and Opportunities?	Dr. Jorge Rodrigues, Assoc. Professor, Department of Land, Air, and Water Resources
11:15 – 12:00	1041 Valley	Plant Health	Dr. Maeli Melotto, Assoc. Professor, Department of Plant Sciences
12:00 – 1:30		LUNCH	
1:30 – 2:15	1041 Valley	Examples of Metals that Pollute Our Environment and Adversely Affect Human and Animal Health	Dr. Robert Poppenga, Professor, California Animal Health and Food Safety Laboratory

## WEDNESDAY – JANUARY 30

9:00 – 9:45	1041 Valley	One Health Overview	Dr. Bennie Osburn, WIFSS
9:45 – 11:30	1041 Valley	<b>Discussion # 2</b> – Gallery Walk	Ms. Heather Johnson, Instructional Systems Designer, and Dr. Sara Garcia, Project Scientist, WIFSS
11:30 – 1:00	1041 Valley	LUNCH	
1:00 – 1:50	1041 Valley	Understanding and Manipulating Phenolic and Carotenoid Pathways for Crop Improvement	Dr. Tian Li, Department of Plant Sciences, College of Agricultural & Environmental Sciences
1:50 – 2:00		BREAK	

2:00 – 2:20	1041 Valley	Connect the Dots Session	Dr. Bennie Osburn, WIFSS
<b>THURSDAY – JANUARY 31</b>			
9:00 – 9:45	1041 Valley	Precision Agriculture	Dr. Shrinivasa Upadhyaya, Professor, Department of Biological and Agricultural Engineering
9:45 – 10:00		BREAK	
10:00 – 10:45	1041 Valley	Overview of Dairy Herd Health	Dr. Richard Pereira, Assistant Professor of Clinical Livestock Herd Health, School of Veterinary Medicine
10:45 – 11:00		BREAK	
11:00 – 12:00	1041 Valley	<b>Discussion #3: Part One:</b> Overview – Analyze, Think, Protect	Ms. Heather Johnson, Instructional Systems Designer, and Mr. David Goldenberg, Food Safety and Security Training Coordinator, Western Institute for Food Safety and Security
12:00 – 1:30	1041 Valley	LUNCH	
1:30 – 3:30	1041 Valley 2010 Valley 2011 Valley 2013 Valley	<b>Discussion #3: Part Two:</b> Good Guys vs Bad Bugs Team Exercise <b>Discussion #4:</b> Preparing the Final Presentation	Team Facilitators
<b>FRIDAY – FEBRUARY 1</b>			
9:00 – 9:45	1041 Valley	Swine Behavior and Welfare	Dr. Kristina M. Horback, Professor, Applied Ethology, Department of Animal Science
9:45 – 10:00		BREAK	
10:00 – 10:45	1041 Valley	One Health Approach to Sustainable Dairy Production and Dairy Food Safety	Dr. Sara Garcia, Project Scientist, Western Institute for Food Safety & Security
10:45 – 11:00	1041 Valley	BREAK	
11:00 – 11:45	1041 Valley	Invasive Diseases of Plants Leading to Food Insecurity	Dr. Neil McRoberts, Assistant Professor, Department of Plant Pathology, Director of Quantitative Biology & Epidemiology (QBE) Lab
12:00 – 1:30	1041	LUNCH	
1:30 – 2:30	1041 Valley	Connect the Dots Sessions and Preparation for Field Trip	Dr. Osburn, Director Outreach & Training, Ms. Chris Brunner, Public Relations Officer, WIFSS
<b>WEEK TWO – Field Trip</b>			
<b>MONDAY – FEBRUARY 4 – Chinese New Year Eve</b>			
8:00	Davis	Depart Campus	
10:30	Livingston	Arrive Foster Farms	1000 Davis St, Livingston
10:30 – 12:00		Overview and Tour	Dr. Bob O'Connor, CEO Foster Farms
12:00 – 1:00		LUNCH	Foster Farms
1:00		Board Bus	
3:00 – 4:30	Parlier	Kearney Agricultural Research and Extension (KARE) Center	9240 South Riverbend Avenue, Parlier, CA 93648, Phone: (559) 646-6500
4:30		Board Bus	
5:30	Tulare	Arrive Tulare – Check into Hotel	Fairfield Inn & Suites 1225 Hillman St, Tulare 93274 (559) 686-4700
6:30	Visalia	Canton Chinese Restaurant	419 E Main St, Visalia, CA 93291 (559) 732-5716

TUESDAY – FEBRUARY 5 – Chinese New Year			
8:00		Board Bus	
8:30	VMTRC	Arrive VMTRC	<i>Veterinary Medicine Teaching &amp; Research Center 18830 Road 112, Tulare (559) 688-1731</i>
8:30 – 9:00	VMTRC	Overview of VMTRC	<i>Dr. Terry Lehenbauer, Director, Veterinary Medicine Teaching &amp; Research Center</i>
9:00 – 9:30		Nutrition Research at the VMTRC	<i>Dr. Heidi Rossow, Associate Professor of Ruminant Nutrition, VMTRC</i>
9:30 – 9:45		BREAK and Board Bus for Dairy	
9:45 – 11:45	Tulare	Tour of Dairy	<i>Dr. Deniece Williams, Dairy Production Medicine Clinician, VMTRC</i>
12:00 – 1:30	VMTRC CEP	LUNCH	<i>Catered</i>
1:30 – 2:15		Tour California Animal Health and Food Safety Laboratory System, Tulare (CAHFS)	<i>Dr. John Adaska, Professor, Chief California Animal Health and Food Safety Laboratory System, Tulare</i>
2:30		Board Bus	
3:00 – 6:00		Free Time	
6:30	Tulare	Group Dinner	<i>Que Pasa Mexican Café, 1549 Hillman St., Tulare (559) 684-0600</i>
WEDNESDAY – FEBRUARY 6			
8:30	Tulare	Check out of Hotel, Board Bus	
10:00	Coalinga	Arrive Harris Ranch Feedlot	
10:00 – 11:30		Overview and Tour	<i>Mr. Mike Smith, VP Technical Services, Harris Ranch Beef Division</i>
11:30 – 1:00		Lunch at Harris Ranch	<i>Banquet Room, Restaurant, Ziba Dehzad (559) 935-0717 x6681</i>
4:00	Monterey	Arrive Hotel Monterey	<i>Casa Munras Garden Hotel &amp; Spa, 700 Munras Ave, Monterey, CA 93940 (831) 375-2411</i>
5:30		Group Dinner	<i>Round Table Pizza 375 Alvarado St, Monterey, CA 93940 (831) 373-1351</i>
THURSDAY – FEBRUARY 7			
8:30	Monterey	Check out of Hotel	
9:00 – 10:00	Monterey	Tour San Carlos Cathedral	<i>500 Church St, Monterey, CA 93940- 3209</i>
10:15	Monterey	Return to Hotel and Board Bus	
10:30 – 11:00	Monterey	Visit Public Beach	
11:00 – 12:00	Seaside	LUNCH	<i>TBD</i>
4:00	Davis	Arrive Campus	
FRIDAY – FEBRUARY 8			
9:00 – 10:30	1041 Valley	Field Trip Round Up	<i>Dr. Bennie Osburn, Ms. Chris Brunner, WIFSS</i>
10:30 – 10:45		BREAK	
10:45 – 11:15		Walk/Ride Bike	
11:15	Campus	Arrive UC Davis Welcome Center	
11:30 – 12:30		Tour of Campus	



## WEEK THREE

### MONDAY – FEBRUARY 11

9:00 – 10:45	1041 Valley	How to Communicate Scientific Subjects to the Public	Ms. Emily Kunz, Graphic Designer and Web Developer, and Ms. Heather Johnson, Instructional Systems Designer, WIFSS
10:45 – 11:00		BREAK	
11:00 – 11:45	1041 Valley	Dairy Manure Regulations and Economic Implications for Dairy Farms in California	Dr. Pablo Valdes-Donoso, Postdoctoral Scholar, UC Davis, California Agricultural Issues Center
11:45 – 1:00		LUNCH	
1:00 – 1:45	1041 Valley	Overview of Public Health Related to Foodborne Diseases	Dr. Michele Jay-Russell, Research Microbiologist & Manager Liaison to WIFSS, Western Center for Food Safety

### TUESDAY – FEBRUARY 12

9:00 – 9:45	1041 Valley	Environment, Land and Food Systems	Dr. Catherine Brinkley, Department of Human Ecology
9:45 – 10:00		BREAK	
10:00 – 12:00	Valley and Campus	Hands-On Classroom Experiences	Various Locations on Campus
12:00 – 1:30		LUNCH	
1:30 – 3:00	VMTH	Tour of Veterinary Medical Teaching Hospital and Free work period for student groups	Bradley Welchel, Brittany Kastens, Jake Stokes, Students, School of Veterinary Medicine, Class of 2021

### WEDNESDAY – FEBRUARY 13

9:00 – 9:45	1041 Valley	Power of One	Ms. Chris Brunner, Public Relations Officer, Western Institute for Food Safety and Security
9:45 – 10:00		BREAK	
10:00 – 10:45	1041 Valley	Building Videos & Marketing One Health	Ms. Emily Kunz, Graphic Designer and Web Developer and Mr. Michael Luo, Coordinator One Health Youth, WIFSS
10:45 – 11:00		BREAK	
11:00 – 11:45	1041 Valley	Perspectives on Ebola: Outbreaks, Reservoirs, and One Health	Dr. Brian Bird, Academic Program Management Officer, School of Veterinary Medicine, One Health Institute
11:45 – 1:30		LUNCH	
1:30 – 3:00	1041 Valley	Prepare Presentations	Team Facilitators

### THURSDAY – FEBRUARY 14

9:00 – 9:45	1041 Valley	Involvement of Microbiome Analysis in Food Safety Research	Dr. Luxin Wang, Department of Food Science and Technology
9:45 – 10:00		BREAK	
10:00 – 10:45	1041 Valley	Aquaculture Health	Dr. Esteban Soto, Department of Medicine and Epidemiology, School of Veterinary Medicine
10:45 – 12:00		Distribution of One Health T-Shirts Complete Closing Survey	Mr. Michael Luo and Ms. Carol Wang, Coordinators One Health Youth
12:00 – 2:00	1041 Valley	LUNCH	

2:00 – 3:00	1041Valley 1043 Valley 1047 Valley	Final Preparations for Presentations	<i>Team Facilitators</i>
<b>FRIDAY – FEBRUARY 15</b>			
8:30 – 9:00	1041 Valley	Closing Remarks	<i>Dr. Bennie Osburn, Western Institute for Food Safety and Security</i>
9:00 – 9:20	1041 Valley	Team Hot Pot	<i>Mr. David Goldenberg, Team Facilitator</i>
9:20 – 9:40	1041 Valley	Team Health Protectors	<i>Ms. Heather Johnson, Team Facilitator</i>
9:40 – 9:55		BREAK	
9:55 – 10:15	1041 Valley	Team Silver Bullet	<i>Dr. Sara Garcia, Team Facilitator</i>
10:15 – 10:35	1041 Valley	Team Calabash Sisters	<i>Dr. Bennie Osburn, Team Facilitator</i>
10:35 – 10:55	1041 Valley	Team FBI	<i>Dr. James Cullor, Team Facilitator</i>
10:55 – 11:10		BREAK	
11:10 – 11:30		Group Photo Outdoors	<i>Mr. Don Preisler, Photographer, School of Veterinary Medicine</i>
11:30 – 12:15	1041 Valley	Certificate Ceremony	<i>Dr. Bennie Osburn, Western Institute for Food Safety and Security</i>
12:15 – 1:30	1023 Valley	LUNCH and Video Show	<i>Catered Lunch</i>
<b>SATURDAY – FEBRUARY 16</b>			
6:45 a.m.	Campus	Bus Pick Up for Trip to San Francisco International Airport	<i>Meet in Visitor Parking Lot 15</i>



### John Adaska

Dr. John Adaska is chief of the California Animal Health and Food Safety Laboratory System's (CAHFS) Tulare Branch. Adaska has served veterinarians, dairy farmers, and animal health stakeholders for more than 20 years. The Tulare facility is one of four laboratories within CAHFS, headquartered at UC Davis and operated for the state by the School of Veterinary Medicine to protect animal health and performance, and safeguard public health and the food supply.



### Robert Atwill

Dr. Robert Atwill is Director of the Western Institute for Food Safety and Security, and Director of Veterinary Medicine Extension. He is a professor of epidemiology and medical ecology in the Department of Population Health and Reproduction, School of Veterinary Medicine, UC Davis. His academic program focuses on identifying strategies for minimizing microbial contamination of food and water.



### Brian Bird

Dr. Brian Bird is a virologist with UC Davis One Health Institute and is Global Lead for Sierra Leone and Multi-Country Ebola operations for PREDICT-USAID. The aim of PREDICT is to enable global surveillance for viruses with the potential to spillover from animals to people and cause pandemics. Several times in the past 42 years, Ebola has appeared from the forests, started an outbreak of disease in humans and then vanished. Researchers believe that between outbreaks the virus must be in a wild animal host without causing much harm.



### Catherine Brinkley

Dr. Catherine Brinkley, UC Davis Community & Regional Development, is a veterinarian (VMD) and a city planner (PhD) who conducts spatial analyses to inform practice. Her work is used internationally by the United Nations Food Agriculture Organization as well as local communities to guide plans and policies. Dr. Brinkley's lab group currently works on two main research projects investigating community food systems and district energy. Their research seeks to answer the broad question: how do food systems reorient diets and land-uses? Their findings are published in leading planning journals.



### Chris Brunner

As the Public Relations Officer for the Western Institute for Food Safety and Security Ms. Brunner develops innovative, strategic and appropriately targeted communications to market the institute, as well as managing organizational aspects of One Health conferences and workshops. She interfaces with multiple international university offices for the programmatic activities. Chris is the principal liaison for WIFSS's guidance with international student One Health clubs.





### **Xinbin Chen**

Dr. Xinbin Chen is Professor at UC Davis Schools of Medicine and Veterinary Medicine. He is leader of the Comparative Oncology Program at the two schools. The comparative oncology program has the goal of drawing on key strengths of UC Davis in animal research pertaining to the disease mechanisms that are implicated in the genesis and progression of cancer. His research focuses on the function of the p53 family in tumor suppression, development, and aging.



### **James Cullor**

Dr. Jim Cullor, a professor emeritus in the Department of Population, Health and Reproduction at the School of Veterinary Medicine, works extensively throughout China talking to dairymen about how to maintain animal, public, and ecosystem health, and food safety. His research focus is mastitis, neonatal diseases, vaccines, novel antimicrobial compound development and testing, and studying novel methods for controlling pathogens in milk.



### **Sara Garcia**

Dr. Sara Garcia is a Project Scientist with WIFSS and earned her B.S. in Genetics and Ph.D. in Integrative Pathobiology at UC Davis. She has expertise in food safety, microbiology and molecular genetics and has worked domestically and internationally in these fields. Dr. Garcia has worked with academic and industry partners to influence best practices and guidelines for the application of technology in Food Safety and Food Systems to enhance the health of humans, animals and the ecosystem.



### **David Goldenberg**

Mr. Goldenberg is an instructor in food safety with the Western Institute for Food Safety and Security. He contributes to food safety projects for the US Food and Drug Administration (FDA) Integrated Food Safety System (IFSS). He is involved in the produce investigations course and is working on integrating video and table top exercises to enhance adult learning principles.



### **Kristina Horback**

Dr. Kristina Horback, UC Davis Department of Animal Science, investigates whether species-specific personality traits influence how an animal not only copes with stress but also how the animal expresses its internal state, such as pain or fear, in order to enhance animal-based measurements of welfare. Knowledge of individual differences in personality may allow animal caretakers to gauge social compatibility, customize environmental enrichment, and identify individuals more susceptible or resilient to environment/social stress.



### Michele Jay-Russell

Dr. Michele Jay-Russell is program manager for the Western Center for Food Safety and liaison to WIFSS. Her research interests are in food safety and veterinary public health with an emphasis on the molecular epidemiology of enteric zoonotic foodborne pathogens. Recent work aims to understand the role of wildlife and domestic animals in the environmental dissemination of *Campylobacter* and *E. coli* O157 on dairy and produce farms.



### Heather Johnson

Ms. Heather Johnson is Acting Instructional Systems Designer and Educational Specialist at WIFSS. She oversees the instructional design component of WIFSS training and educational projects in accordance with certification standards that meet local, state and federal agency requirements. She designs blended - learning educational materials specifically using principles of adult education.



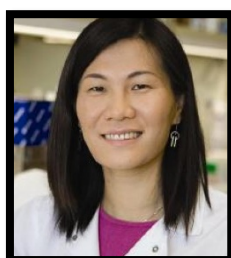
### Emily Kunz

Ms. Emily Kunz earned her BS in Visual Communications at Brigham Young University-Idaho, and her MFA in Integrated Design from the University of Baltimore. With expertise in print, web, and video, she has worked as an in-house graphic designer, a freelance designer, and an educator for a variety of companies, businesses, and educational institutions.



### Terry Lehenbauer

Dr. Lehenbauer is Professor in the Department of Population Health and Reproduction, and Director of the Veterinary Medicine Teaching and Research Center, in the School of Veterinary Medicine. His research focuses on dairy cattle herd health and production medicine with an emphasis on infectious disease epidemiology, risk management and animal health economics, especially related to bovine respiratory disease, mastitis, and antimicrobial use.



### Tian Li

Research in the Li Tian Lab, Department of Plant Sciences, UC Davis, focuses on understanding how phytochemicals are synthesized and understanding the regulatory architecture controlling phytochemical accumulation in plants. The lab applies the knowledge obtained from its biochemical pathway interrogation to improving the performance and nutritional value of crop plants. Dr. Li has graduate group affiliations in Biochemistry, Molecular, Cellular and Developmental Biology, Horticulture and Agronomy, International Agricultural Development, and Plant Biology.



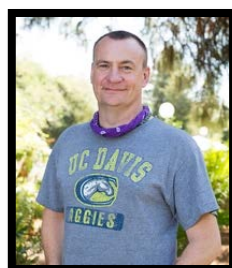
### **Xunde Li**

Dr. Xunde Li is a research microbiologist who works on food and waterborne pathogens in the Atwill Water and Foodborne Zoonotic Disease Laboratory at WIFSS. His research focuses on survival and transmission of zoonotic pathogens, molecular epidemiology of protozoal pathogens and dynamics of antibiotic resistant bacteria in animal production systems.



### **Michael Luo**

Mr. Michael Luo, is CEO of Nanjing Wheat Leaf Educational Technology, Ltd, and Mr.M Language Workshop, and he is President of One Health Youth (China). Mr. Luo facilitates translation and serves as cultural advisor for Western Institute for Food Safety and Security One Health conferences.



### **Neil McRoberts**

Dr. Neil McRoberts, associate professor, UC Davis Department of Plant Pathology, is Director of the Western Plant Diagnostic Network, and Principle Investigator of the Quantitative Biology & Epidemiology (QBE) Laboratory. Dr. McRoberts studies the interaction between plant diseases and the other components of agricultural and natural plant communities. He is particularly interested in the emergence of robust statistical properties at different scales in agriculture and the feedback between human decision making and management actions and other features of system dynamics.



### **Maeli Melotto**

Dr. Maeli Melotto, is an associate professor in the Department of Plant Sciences, specializing in plant-pathogen interactions. The Melotto lab is focused on understanding the close interaction between plants and human pathogens at the molecular level. The researchers seek to know how the plant immune system works to fight against pathogen infection and how pathogens employ virulence strategies to overcome plant defenses.



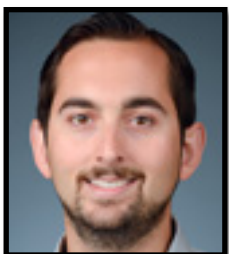
### **Kelly Nimtz**

Mr. Kelly Nimtz is retired from the School of Veterinary Medicine. His responsibilities included fund raising for new veterinary buildings, student scholarships, and faculty endowments. He directed the school's first capital campaign and established the Development Office. Prior to his retirement in 2010, Kelly and his Development Office colleagues assisted with the construction of five new buildings including funds needed to construct a \$20 million Center for Companion Animal Health.



### **Bennie Osburn**

Dr. Bennie Osburn is Director of Outreach and Training at the Western Institute for Food Safety and Security. He is Dean Emeritus of the School of Veterinary Medicine, UC, Davis. Dr. Osburn's research has focused on infectious diseases of livestock, zoonotic diseases, including foodborne pathogens, and the ecology of infectious agents. He is interested in applying a One Health approach to food safety.



### **Richard Pereira**

Dr. Richard Pereira is an Assistant Professor of Clinical Livestock Herd Health at UC Davis, providing in-house and ambulatory veterinary herd health and reproduction services to dairy farm, ranches and breeding operations. His research interest is on antimicrobial resistant and zoonotic bacteria in livestock and herd health, with the aim of developing effective and feasible interventions to reduce and prevent the spread of disease and drug resistance.



### **Heidi Rossow**

Dr. Heidi Rossow is an Associate Professor of ruminant nutrition with UC Davis School of Veterinary Medicine located at the Veterinary Medicine Teaching and Research Center (VMTRC) in Tulare, California. Her areas of research are computer modeling of nutrient metabolism and systems analysis of dairy production. She has created several computer programs that evaluate rations and relate energetics and metabolism of the cow to milk production and has developed on farm monitoring programs to evaluate incidence of clinical



### **Robert Poppenga**

Dr. Robert Poppenga is a veterinary toxicologist and head of the toxicology section of the California Animal Health and Food Safety Laboratory System. He supervises 12 analytical chemists using state of the art analytical platforms and providing toxicology diagnostic services to California animal owners, producers and state agencies. He has a particular interest in the effects of environmental contaminants on wildlife and chemical food safety.



### **Jorge Rodrigues**

Dr. Jorge Rodrigues is a professor in the Department of Land, Air and Water Resources. The research theme in his laboratory is to understand the nature and ecology of microbial processes of importance in nature and of value to mankind. His particular interests span from biological regulation of biogeochemical cycles and natural and agricultural ecosystems to microbial diversity and functionality in termite hindguts. His areas of expertise are microbial community analyses, metagenomics, metatranscriptomics and soil microbiology.





### Esteban Soto

Dr. Esteban Soto is a faculty member in Department of Medicine and Epidemiology and Companion Exotic Animal Medicine & Surgery Service at UC Davis. He is a certified fish pathologist by the American Fisheries Society-Fish Health Section and board certified by the American College of Veterinary Microbiologists, and as an Aquatic Veterinarian by the World Aquatic Veterinary Medical Association. His main research interests are to understand the pathogenesis of important infectious diseases of wild and aquatic animals, and to develop strategies to protect animals from these diseases.



### Shrinivasa Upadhyaya

Dr. Shrinivasa K. Upadhyaya is a Professor in the Department of Biological and Agricultural Engineering, University of California, Davis. He spearheaded advances in research connecting a broad range of physical processes to their interactions with in-field soil, water, plant, and machine systems. The methods involved in his body of research have formed the basis for his active program of graduate and undergraduate teaching. His program includes course creation in biological systems modeling and analysis, precision agriculture and GIS/GPS.



### Pablo Valdes-Donoso

University of California Agricultural Issues Center (AIC) postdoc Pablo Valdes-Donoso focuses his research on disease management and animal health economics. He studies strategies to control porcine reproductive and respiratory syndrome (PRRS) in the US. He worked as a collaborating instructor for several courses in animal health economics for graduate and DVM students at the University of Minnesota, and as a Teaching Assistant in Statistics and Intermediate Microeconomics at UC Davis.



### Luxin Wang

Dr. Luxin Wang, UC Davis Food Science and Technology, studies the microbial safety of fresh produce, aquaculture products and animal products. Her program uses conventional microbiological technologies and new precision approaches, such as comparative genomics and metagenomics, to study the behavior of foodborne pathogens and their interactions with the background microbiome with the goal to manage foodborne pathogens from farm and pond to fork, thus ensuring a safe and sustainable food supply chain.



### Gregory Wsaliuk

Mr. Greg Wsaliuk earned his BA and MA in English from UC Davis. While at Davis he taught undergraduate literature and creative writing courses. After graduate school he learned graphic design, course design, and online learning practices during his two years at UC Davis Extension.



### Deniece Williams

Dr. Deniece Williams teaches the DVM professional curriculum and graduate clinical training programs at the VMTRC. She works with faculty, residents and students to facilitate team development and research in the areas of Dairy Production Medicine and Herd Health. She provides clinical veterinary herd health and reproductive services. Dr. Williams' research interests include neonatal calf disease, bovine respiratory disease (BRD), mastitis and epidemiology of infectious disease in dairy cattle.



## Staff Support



**Chris Brunner**  
Public Relations Officer, WIFSS



**Jenny Chen**  
Public Relations Assistant, WIFSS



**Nicole Nisson**  
Program and Financial Assistant, WIFSS