

# Integrating One Health for Agriculture and Veterinary Sciences

University of California, Davis  
July 23 – August 1, 2018

Sponsored by:  
Jiangsu Agri-animal Husbandry Vocational College  
Wuhu Institute of Technology

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



## Conference Description

The Integrating One Health for Agriculture and Veterinary Sciences conference, July 23 – August 1, 2018, is hosted and coordinated by the Western Institute for Food Safety and Security, (WIFSS), and sponsored by Jiangsu Agri-animal Husbandry Vocational College, and Wuhu Institute of Technology. Lectures will be held in UC Davis School of Veterinary Medicine facilities.

The conference raises awareness of a comprehensive One Health approach to food safety through education, management, and application of technical services, and 22 faculty from Jiangsu Agri-animal Husbandry Vocational College and Wuhu Institute of Technology will participate in conference.

Through classroom lectures presented by UC Davis faculty including professors from the School of Veterinary Medicine and the College of Agricultural and Environmental Sciences, and through field trips offering hands-on learning experiences, participants will learn about the complex problems that arise at the interface of animals, humans and the environment. Our guests will also have the opportunity to hear from educational experts on teaching methods and innovative lesson ideas used here at UCD SVM that can be used to enhance teaching and learning at their home institutions in China. Faculty from vocational colleges throughout China will be the leaders in promoting food safety from the farm to the table in China. This novel approach to food safety integrates One Health concepts into teaching methods, based in part on problem based learning. Through our conferences faculty are equipped to provide students with a better understanding of the connections in the food system between the environment, animals and people, and nurture their awareness of the importance of multi-disciplinary teams addressing food safety problems. Students will be able to trace the source of contamination which can help prevent or eliminate future foodborne illness outbreaks.

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, Conference Coordinator, WIFSS
- Jenny Chen, Conference Assistant, 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, Conference Assistant, Nanjing Wheat Leaf Educational Technology, Ltd.
- Nicole Nisson, Program and Financial Assistant, WIFSS
- Bennie Osburn, Director of Outreach and Training, WIFSS
- Jin Wang, Professor, Jiangsu Vocational College of Agriculture and Forestry

# WEEK ONE

## SUNDAY – JULY 22 – Arrive Davis

12:00 – 2:00	WIFSS	Meet Host Families at Western Institute for Food Safety and Security (WIFSS)	1477 Drew Ave, Suite 101, Davis
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## MONDAY – JULY 23 – Welcome

9:00 – 9:45	1041 Valley	Welcome – Overview of UC Davis, School of Veterinary Medicine, and WIFSS	Dr. Bennie Osburn, Director, Outreach & Training, WIFSS
9:45 – 10:00	1041 Valley	Opening Survey	Michael Luo, CEO, Nanjing Wheat Leaf Educational Technology Co., Ltd.
10:00 – 10:30	1041 Valley	Conference Schedule Overview and Learning Objectives	Heather Johnson, Instructional Systems Designer, WIFSS
10:30 – 10:45		BREAK	
10:45 – 11:30	1041 Valley	Overview of One Health	Dr. Bennie Osburn, WIFSS
11:30 – 1:00		LUNCH	
1:00 – 1:45	1041 Valley	21 <sup>st</sup> Century Teaching & Learning	Heather Johnson, Instructional Systems Designer, WIFSS
1:45 – 2:30	1041 Valley	Communication Through the Use of Video	Emily Kunz, Graphic Designer & Web Developer, WIFSS

## TUESDAY – JULY 24 – University Extension and Teaching Methods

9:00 – 9:45	1041 Valley	Principles of One Health Approaches to Poultry Production	Dr. Maurice Pitesky, UC Cooperative Extension Specialist, Department of Population Health and Reproduction, School of Veterinary Medicine
10:00		Board Vans	
10:00 – 10:30	Campus	UC Davis Pastured Poultry Farm	Old Davis Road
10:45		Return to Campus	
11:00 – 12:00	1041, 1011, 1013, 2010 Valley	Discussion Session #1	Team Facilitators: Bennie Osburn, David Goldenberg, Heather Johnson, Sara Garcia, James Cullor, Jin Wang
12:00 – 1:30		LUNCH	
1:30 – 2:30	1041 Valley	Overview of California Dairy Quality Assurance Program (CDQAP)	Dr. Michael Payne, Dairy Outreach Coordinator, WIFSS
2:30 – 3:30	1041 Valley	Using One Health Approaches to Solving Complex Problems: Spinach Outbreak	Dr. Michele Jay-Russell, Program Manager, Western Center for Food Safety

## WEDNESDAY – July 25

9:00 – 9:45	1041 Valley	Animal Science Curriculum	Dr. Lee Pettey, Director of Animal Science Curriculum and Assessment, Department of Animal Science
9:45 – 10:30	1041 Valley	Combined Farming Operations and the Role of a Cooperative Extension Specialist	Dr. Alda Pires, UC ANR Extension Specialists and Faculty, Department Population Health & Reproduction, School of Veterinary Medicine
10:30 – 10:45		BREAK	
10:45 – 11:30	1041 Valley	Overview of Community Practice at UC Davis	Dr. Ilana Halperin, Clinical Professor, Department of Medicine & Epidemiology, School of Veterinary Medicine
11:30 – 1:00		LUNCH	
1:00 – 1:45	1041 Valley	California Dairy Industry A Brief View	Dr. Ed DePeters, Professor, Department of Animal Science

WEDNESDAY – July 25			
1:45 – 2:30	1041 Valley	Integrative Medicine Service at the UC Davis	<i>Dr. Jamie Peyton, Chief of the Small Animal Integrative Medicine Service, William R. Pritchard Veterinary Medical Teaching Hospital</i>
2:30 – 2:45		BREAK	
2:45 – 3:15	1041, 1013, 2010 Valley	Discussion Session #2	<i>Team Facilitators: Bennie Osburn, David Goldenberg, Heather Johnson, Sara Garcia, James Cullor, Jin Wang</i>
THURSDAY – July 26			
9:00 – 10:15	1041 Valley	The End! Designing Effective Lessons	<i>Dr. Karen Boudreaux, Education Program Specialist, School of Veterinary Medicine</i>
10:15 – 10:30		BREAK	
10:30 – 11:30	1041 Valley	Dairy Dynamic Management	<i>Dr. James Cullor, Professor Emeritus, School of Veterinary Medicine</i>
11:30 – 1:30		LUNCH	
1:30 – 2:30	1041 Valley	Student Assessment: How do you Know THEY Know?	<i>Dr. Sara Garcia, WIFSS</i>
2:30 – 3:30	1041, 1011, 1013, 2010 Valley	Discussion Session #3	<i>Team Facilitators: Bennie Osburn, David Goldenberg, Heather Johnson, Sara Garcia, James Cullor, Jin Wang</i>
FRIDAY – July 27			
9:00 – 10:00	1041 Valley	Overview of Dairy Herd Health	<i>Dr. Richard Pereira, Assistant Professor of Clinical Livestock Herd Health, School of Veterinary Medicine</i>
10:00 – 10:10		BREAK	
10:10 – 11:00	1041 Valley	Life Cycle Analysis for Cattle and Sheep	<i>Dr. James W. Oltjen, Cooperative Extension Animal Management Systems Specialist, Department of Animal Science</i>
11:00 – 11:15		BREAK	
11:15 – 12:15	1041 Valley	Satisfying the Rising Demand for Animal Protein While Protecting the Environment	<i>Dr. Frank Mitloehner, Professor, Department of Animal Science</i>
12:00		ADJOURN	

## WEEK TWO

### MONDAY – JULY 30 – Stevinson/Salinas

8:00	Campus	Board Bus	Visitor Parking Lot 50
8:15		Depart Campus	
10:30 – 12:00	Stevinson	Dairy Production and Waste Management, Animal Health and Food Safety, Merced Dairy	Private Address
12:30 – 1:30	Los Banos	LUNCH McDonalds Restaurant	1500 W Pacheco Blvd, Los Banos, 93635 (209) 829-1566
3:30	Salinas	Arrive Salinas, Check into Best Western Plus Salinas Valley Inn & Suites	187 Kern St, Salinas, CA 93905, (831) 751-6411
4:00 – 5:30		Discussion Session – Group Presentations	Conference Room at Hotel
6:00		Group Dinner – Culturas Hidalgo & Oaxaca Restaurant	473 E Market St, Salinas, 93905, (831) 975-4766

### TUESDAY – JULY 31 – Salinas/Monterey

8:30	Salinas	Check out of Hotel	
8:40		Board Bus	
9:00 – 11:00	Salinas	USDA ARS Field Station: Pre and Postharvest Technology and Food Safety	Dr. Sharon Benzen, 1636 E. Alisal Street, Salinas, 93905 (831) 755-2828
11:30 – 3:00		Hartnell College: Agricultural Business & Technology Institute	1752 E. Alisal Street, Salinas, CA 93905
12:00 – 1:00		LUNCH Hartnell Conference Room	Catered by Turf Club
4:00	Monterey	Check into Hotel	Casa Munras Garden Hotel & Spa, 700 Munras Ave, Monterey, CA 93940 (831) 375-2411
4:30 – 6:00		Faculty Group Presentations and Certificate Ceremony	Bennie Osburn presenting certificates, Hotel Conference Room
6:00 – 7:00		DINNER	Round Table Pizza, 375 Alvarado St, Monterey, CA 93940

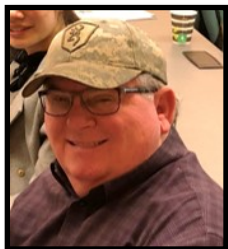
### WEDNESDAY – AUGUST 1 – San Francisco Departure Day

6:45	Monterey	Check out of Hotel, Board Bus	
7:00		Depart Monterey	
10:00	San Francisco	Arrive San Francisco International Airport for departure to China	
12:30	Davis	WIFSS Team Arrive Campus	Visitor Parking Lot 50



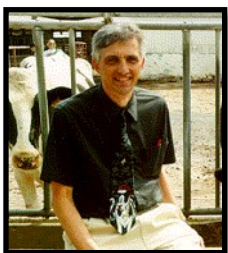
### Karen Boudreaux

Dr. Karen Boudreaux is the Educational Specialist for the UC Davis School of Veterinary Medicine. She has been with UC Davis School of Veterinary Medicine since 2008. She holds a Ph.D. in Leadership and Research, a Master's in Educational Curriculum, a Master's in Counseling, and a Master's in Business Administration. Dr. Boudreaux previously worked in the public school setting as was assistant professor at the University of Louisiana, Lafayette where she taught and practiced in the Master's and Ph.D. programs.



### 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.



### Ed DePeters

Dr. Ed DePeters is a professor in the Department of Animal Science at the University of California, Davis. His research, which has been widely applied in the dairy industry, has focused on how the composition of milk, particularly the fatty-acid content, can be modified by changes in the cow's diet, and how agricultural by-products such as almond hulls and cottonseed can be converted into nutritious feeds. His research has resulted in more than 120 scientific publications.



### 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. David Goldenberg is Food Safety and Security Training Coordinator 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.



### 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.



### Ilana Halperin

Dr. Ilana Halperin earned her veterinary degree from UC Davis in 2003. After graduation, she completed a one-year rotating internship in veterinary internal medicine and surgery in Albuquerque, New Mexico. Dr. Halperin then spent the next 12 years as a general practitioner in California before joining UC Davis in 2016.



### 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.



### 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.



### **Frank Mitloehner**

Dr. Frank Mitloehner is a professor and air quality specialist in cooperative extension in the Department of Animal Science, at the University of California, Davis. He is an expert for agricultural air quality, animal-environmental interactions, and agricultural engineering. Dr. Mitloehner was elected chairman of a global United Nations FAO project to benchmark the environmental footprint of livestock production. He serves as a workgroup member on the President's Council of Advisors on Science and Technology (PCAST).



### **James Oltjen**

Dr. James W. Oltjen is an Animal Management Systems Extension Specialist at UC Davis. His extension efforts include animal enterprise management, modeling of natural resources and beef cattle, feedlot performance prediction, and modeling beef herd management. He collaborates with researchers in seven countries to improve growth and composition models. He is technical advisor to the California Beef Quality Assurance Program. He is a past-president of the American Society of Animal Science.



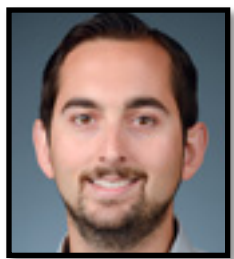
### **Bennie Osburn**

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.



### **Michael Payne**

Dr. Michael Payne is a researcher and outreach coordinator at WIFSS. Dr. Payne has worked as a veterinarian in extension, academics and private practice. He is director of the California Dairy Quality Assurance Program, an industry, academic regulatory partnership which promotes the health and welfare of livestock, consumers and the environment through outreach, education and research.



### **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.



### **Lee Pettey**

Dr. Lee Pettey is Director of Animal Science Curriculum and Assessment and specializes in curriculum development and assessment in animal sciences, livestock management and evaluation, and applied animal nutrition. He leads the department in developing and implementing pedagogically sound improvements to the courses taught within the department and is interested in advancing the use of technology in animal science courses, specifically laboratory courses, as well as improving the participation rate of students in large lecture and laboratory settings.



### **Jamie Peyton**

Dr. Jamie Peyton is Chief of the Small Animal Integrative Medicine Service at UC Davis Veterinary Medical Teaching Hospital. She is board certified in Emergency and Critical Care, and is a certified veterinary rehabilitation therapist at the Canine Rehabilitation Institute. She is a member of several integrative medicine associations, including the American Academy of Veterinary Acupuncture, the American Association of Traditional Chinese Veterinary Medicine and the International Veterinary Academy of Pain Management.



### **Alda Pires**

Dr. Alda Pires is an Assistant Specialist in Cooperative Extension (UCCE) for Urban Agriculture and Food Safety; in the Department of Population Health and Reproduction. Her research focuses on quantitative methods to improve animal health and control infectious diseases in livestock on small-scale farms. Her research and extension programs are to identify strategies to reduce the dissemination of foodborne pathogens during pre-harvest on small-scale farms and improve animal health and food safety.



### **Maurice Pitesky**

Dr. Maurice Pitesky is a UC Cooperative Extension Specialist in the Department of Population Health and Reproduction in the School of Veterinary Medicine. His research focus is on the application of classic and spatial epidemiology in disease surveillance, food safety management, and other processes associated with poultry health, and the interface of science and policy with respect to food safety and public health.



### **Jin Wang**

Dr. Jin Wang, Associate Professor of English at Jiangsu Vocational College of Agriculture and Forestry teaches courses in College English, Listening and Speaking English, and English Interpretation. Professor Wang's research focuses on English technical communication and intercultural communication. She has several publications including, "From the view of A Dream in Red Mansions to understand the Subjectivity of Translation Researchers." She is currently on sabbatical for one year at the Western Institute for Food Safety & Security where she will assist with course development.

## Staff Support



**Chris Brunner**  
Public Relations Officer, WIFSS



**Jenny Chen**  
Public Relations Assistant, WIFSS



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