NAU-UC Davis Education Conference on One Health for Food Safety and Security University of California, Davis January 22 – February 9, 2018

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 the University of California, Davis, January 22 – February 9, is hosted by the Western Institute for Food Safety and Security, (WIFSS). The conference provides 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 comprehensive program includes lectures, field trips, and team-building exercises which increase 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 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, Conference Coordinator, WIFSS
- Jenny Chen, Conference Assistant, WIFSS
- James Cullor, Professor Emeritus, School of Veterinary Medicine
- David Goldenberg, Food Safety and Security Training Coordinator, WIFSS
- Heather Johnson, Educational Specialist, WIFSS
- Michael Luo, Nanjing Wheat Leaf Educational Technology, Ltd.
- Nicole Nisson, Program and Financial Assistant, WIFSS
- Bennie Osburn, Director of Outreach and Training, WIFSS
- Michael Payne, Dairy Outreach Coordinator, WIFSS
- Jin Wang, Professor, Jiangsu Vocational College of Agriculture and Forestry

WEEK ONE						
MONDAY -	JANUARY 2	22				
9:00 – 9:30	1041 Valley	Overview of School of Veterinary Medicine	Dr. Michael Lairmore, School of Veterinary Medicine			
9:30 – 10:00	1041 Valley	Overview of School of Veterinary Medicine Students for One Health	Dr. Paulina Zielinska, Office of Global Affairs, School of Veterinary Medicine			
10:00 - 10:20	1041 Valley	BREAK				
10:20 – 10:50	1041 Valley	Overview of Western Institute for Food Safety and Security	Dr. Robert Atwill, Western Institute for Food Safety and Security			
10:50 – 11:00	1041 17 11	BREAK				
11:00 – 11:30	1041 Valley	Welcome and Conference Overview	Dr. Bennie Osburn, Western Institute for Food Safety and Security			
11:30 – 1:00	7.0.47.77.11	LUNCH	0.1 1 (22			
1:00 – 1:45	1041 Valley	Introduction to the History and Culture of California	Mr. Kelly Nimtz, School of Veterinary Medicine, Emeritus			
TUESDAY -	JANUARY 2	23				
9:00 – 10:30	1041 Valley	DISCUSSION #1 - Introduction	Team Facilitators – Bennie Osburn, David Goldenberg, Heather Johnson, Mike Payne, Jim Cullor, Jin Wang			
10:30 – 10:45		BREAK				
10:45 – 11:15		Epidemiological Study From a PhD Student's Perspective	Ms. Jennifer Chase, Western Institute for Food Safety and Security			
11:15 – 12:30	1041 Valley	LUNCH				
12:30 – 2:30		Tour Veterinary Medical Teaching Hospital	Wesley Leung, Brittany Paige Kastens, Spencer Fennick, School of Veterinary Medicine, Class of 2021			
WEDNESDA	WEDNESDAY – JANUARY 24					
9:00 – 9:45	1041 Valley	Feed-based Technologies to Improve Weaned Pig Health and Production Dr. Yanhong Liu, Departmen Science				
9:45 – 10:00		BREAK				
10:00 – 10:45	1041 Valley	Project-Based Learning for Food Safety; Discussion on Expectations of Group Presentations Ms. Heather Johnson, Wester for Food Safety and Security				
10:45 – 11:00		BREAK				
11:00 – 12:00	1041 Valley 1011 Valley 1013 Valley	David Goldenberg, Heather Jo				
12:00 - 1:30	1041 Valley	LUNCH				
1:30 – 2:15	1041 Valley	One Health Overview	Dr. Bennie Osburn, Western Institute for Food Safety and Security			

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THURSDAY	– JANUARY		
9:00 – 9:45	1041 Valley	California Dairy Industry A Brief View	Dr. Ed DePeters, Department of Animal Sciences
9:45 - 10:00	1041 Valley	BREAK	
10:00 – 10:45	1041 Valley	Dairy Dynamic Management	Dr. James Cullor, School of Veterinary Medicine
10:45 – 11:15		BREAK	
11:15 – 12:00	1041 Valley	Building Capacity to Prevent Pandemics Using a One Health Approach	Dr. Tracey Goldstein, One Health Institute
12:00 - 1:30		LUNCH	
1:30 – 2:30	1041 Valley	DISCUSSION #3 – Part One: Overview – Analyze, Think, Protect	Team Facilitators – Bennie Osburn, David Goldenberg, Heather Johnson, Mike Payne, Jim Cullor, Wang Jin
FRIDAY – JA	ANUARY 26		
9:00 – 9:45	1041 Valley	Satisfy the Rising Demand for Animal Protein While Protecting the Environment	Dr. Frank Mitloehner, Department of Animal Science
9:45 - 10:00		BREAK	
10:00 – 11:30	1041 Valley 1011 Valley 1013 Valley	DISCUSSION #3 – Part Two: Good Guys vs Bad Bugs	Team Facilitators – Bennie Osburn, David Goldenberg, Heather Johnson, Mike Payne, Jim Cullor, Jin Wang
11:30 – 1:00		LUNCH	
1:00 – 1:45	1041 Valley	Veterinary Toxicology and Food Forensics	Dr. Birgit Puschner, Department of Molecular Biosciences, School of Veterinary Medicine
1:45 – 2:00	1041 Valley	Field Trip Overview	Dr. Bennie Osburn, Western Institute for Food Safety and Security

WEEK TWO – Monterey/Salinas/Tulare					
MONDAY -	MONDAY – JANUARY 29				
8:30	Campus	Depart VP Lot 50	Meet outside Valley		
12:00 – 1:00	Salinas	LUNCH	In-N-Out Burger, 151 Kern St, Salinas, 93905		
1:15	Salinas	Arrive USDA ARS Field Station	1636 E. Alisal Street, Salinas, 93905 (831) 755-2828		
1:30 – 1:45		Brief Welcome	Ms. Sharon Benzen, USDA-Ag Research Service, and Bennie Osburn, WIFSS		
1:45 – 2:45		Overview of Food Safety Environmental Investigations	Dr. Melissa Partyka, Western Institute for Food Safety & Security		
3:00 - 3:30		Travel Time			
3:30 – 4:00	Monterey	Check Into Hotel	Casa Munras Garden Hotel & Spa, 700 Munras Ave, Monterey, CA 93940 (831) 375-2411		
4:00 - 6:00	Monterey	Free Time			
6:00		DINNER	Round Table Pizza, 375 Alvarado St, Monterey		
TUESDAY -	- JANUARY				
8:15	Hotel	Board Bus			
8:15 – 8:45		Travel Time			
9:00 – 9:45	Salinas	Overview of Program and Research at USDA ARS Field Station	Ms. Sharon Benzen, USDA-Ag Research Service		
9:45 -10:00		BREAK			
10:00 – 11:30		Water Quality Evaluation Exercises	Mr. Ronald Bond, Dr. Melissa Partyka, Western Institute for Food Safety & Security		
11:30 – 12:45		LUNCH - Catered	PortoBellos Catering		
12:45 – 1:00		Break and Board Bus			
1:15 – 3:00		Tour of ARS Field Station	Mr. Ronald Bond, Dr. Melissa Partyka, Ms. Sharon Benzen		
3:00 – 3:30		Travel Time			
3:30	Monterey	Arrive Hotel			
3:30 - 6:00		Free Time			
6:00		DINNER	China Garden Restaurant, 600 Munras Ave, Monterey		
WEDNESDA	WEDNESDAY – JANUARY 31				
8:15	Monterey	Check out of Hotel and Board Bus			
8:30		Depart Hotel			
8:45 – 9:45		Visit Pubic Beach			
10:00		Board Bus for Trip to Tulare			
2:00	Tulare	Check Into Fairfield Inn & Suites	Fairfield Inn & Suites 1225 Hillman St, Tulare 93274 (559) 686-4700		
2:00 - 6:00		Free Time			
6:30	Tulare	DINNER	Que Pasa Mexican Café, 1549 Hillman St., Tulare (559) 684-0600		

THURSDAY – FEBRUARY 1			
8:00	Fairfield Inn	Check out of hotel	
8:15		Board Bus	
8:30	VMTRC	Arrive VMTRC	Veterinary Medicine Teaching & Research Center 18830 Road 112, Tulare (559) 688-1731
8:30 – 9:00	VMTRC	Overview of VMTRC	Dr. Terry Lehenbauer, Veterinary Medicine Teaching & Research Center
9:00 – 9:30		VMTRC Research – Nutrition	Dr. Heidi Rossow, VMTRC
9:30 - 9:45		Travel to Dairy	
9:45 – 11:45	Tulare	Tour of Dairy	Dr. Deniece Williams, VMTRC
12:00 - 12:30	VMTRC	LUNCH	Catered by Panda Express
12:30 – 1:45		Tour of CAHFS	Dr. John Adaska, CAHFS
1:45 – 2:00		BREAK	
2:00		Board Bus	
6:00	Davis	Arrive Parking Lot 50	Drop Off Valley Hall
FRIDAY – FEBRUARY 2			
9:00	Welcome Center, UC Davis	Meet at Welcome Center for Tour	Ms. Jessica Acuna, 530–752–2971
9:30 – 11:00		Campus Tour	
11:00		Adjourn	

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MONDAY -	FEBRUARY	5		
9:00 – 9:45	1041 Valley	Graduate Education at UC Davis and USA	Dr. Xinbin Chen, School of Veterinary Medicine	
9:45 – 10:00		BREAK		
10:00 – 10:45	1041 Valley	Studies of Antibiotic Resistance of Enteric	Dr. Xunde Li, Western Institute for Food	
		Bacteria in Dairy Farms in California	Safety and Security	
10:45 – 11:00		BREAK		
11:00 – 12:00		Linking Ecosystem Health to Human and Animal Health: Challenges and Opportunities?	Dr. Jorge Rodrigues, Department of Land, Air, and Water Resources	
12:00 – 1:00	1041 Valley	LUNCH		
1:00 – 1:30	1041 Valley	Overview of WIFSS Video Library	Ms. Heather Johnson, Western Institute for Food Safety and Security	
1:30 – 3:00	1041 Valley 1011 Valley 1013 Valley	Team Work on Presentation DISCUSSION #4 – Preparing for Final Presentation	Team Facilitators – Bennie Osburn, David Goldenberg, Heather Johnson, Mike Payne, Jim Cullor, Jin Wang	
TUESDAY -	FEBRUARY	6		
9:15 – 10:00	1041 Valley	Economics: A Tool to Guide Decision and Policy Making	Dr. Tim Carpenter, School of Veterinary Medicine	
10:00-10:05	1041 Valley	Introduction to Plant Sciences at UC Davis	Dr. Maeli Melotto, Department of Plant Sciences	
10:05 – 10:45	1041 Valley	Citrus Food Safety	Dr. Adrian Sbodio, Department of Plant Sciences	
10:45 – 11:15	1041 Valley	Addressing Plant Stress Through Advancements in Plant Hormone Signaling	Dr. Logan DeMatt, Department of Plant Sciences	
11:15 – 12:00	1041 Valley	Rice Blast Resistance: Synergistic Breeding and Molecular Genetic Approaches to Develop Resistant Germplasm	Dr. Nathan Pumplin, Department of Plant Sciences	
12:00 – 1:30	1041 Valley	LUNCH	Catered Lunch with UC Davis Extension Group, and Horticulture and Agronomy Graduate Students	
1:30 – 2:00		Walk to Student Farm		
2:00 – 3:00	Agricultural Sustainability Institute	Tour Student Farm	Lee Ann Richmond, Department of Plant Sciences	
WEDNESDA	Y – FEBRUA	ARY 7		
9:00 – 9:45	1041 Valley	The Power of One	Ms. Chris Brunner, Western Institute for Food Safety and Security	
9:45 – 10:00		BREAK		
10:00 – 10:45	1041 Valley	UC Davis Integrative Veterinary Medicine Service	Dr. Jamie Peyton, School of Veterinary Medicine	
10:45 – 11:00	1041 77 11	BREAK	N. E. d. IV. Market	
11:00 – 12:00	1041 Valley	Building Videos and Marketing One Health	Ms. Emily Kunz, Western Institute for Food Safety and Security Mr. Michael Luo, Nanjing Wheat Leaf Educational Technology, Ltd.	
12:00 – 1:30	1041 Valley	LUNCH		
1:30 – 2:30	1041 Valley	Team Work on Presentations		

THURSDAY – FEBRUARY 8			
9:00 – 9:45	1041 Valley	Antibiotic Stewardship	Dr. Michael Payne, Western Institute for Food Safety and Security
9:45 - 10:00		BREAK	
10:00 – 10:30		Fish Medicine	Dr. Esteban Soto, School of Veterinary Medicine
10:30		Board Vans	
10:45 – 11:45	CABA	Tour Center for Aquatic Biology and Aquaculture (CABA) Facility	Ms. Linda Deanovic, Center for Aquatic Biology and Aquaculture
12:00 – 1:30	1041 Valley	LUNCH	
1:30 - 2:00	1041 Valley	Closing Survey	
1:30 – 3:00	1041 Valley	Final Preparations for Presentations	
FRIDAY – FE	BRUARY 9		
8:30 – 9:00	1041 Valley	Closing Remarks	Dr. Bennie Osburn, Western Institute for Food Safety and Security
9:00 - 9:30	1041 Valley	Team Presentation	Davis Warriors
9:30 - 10:00	1041 Valley	Team Presentation	FELPAB
10:00 - 10:15		BREAK	
10:15 – 10:45	1041 Valley	Team Presentation	Return of the King
10:45 – 11:15	1041 Valley	Team Presentation	Shield
11:15 – 11:30		BREAK	
11:30 – 11:45		Group Photo Outdoors	Mr. Don Preisler, Photographer, School of Veterinary Medicine
11:45 – 12:15	1041 Valley	Certificate Ceremony	Dr. Bennie Osburn, Western Institute for Food Safety and Security
12:15 – 2:00	1023 Valley	LUNCH and Video Show	Catered
CONGRATULATIONS!			



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.



Ronald Bond

Prior to beginning his career at the UC Davis Western Center for Food Safety and the Western Institute for Food Safety and Security, Ronny Bond managed field and laboratory logistics and a shellfish sanitation program at the University of Southern Mississippi's Gulf Coast Research Laboratory. His current research focuses on how physical/chemical processes within watersheds and agricultural water infrastructure create ecologically important conditions favorable to proliferation of disease causing bacteria, this includes monitoring and sampling of water, directing data collection of geographic, hydrologic and meteorological conditions.



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.



Tim Carpenter

Dr. Tim Carpenter is Professor Emeritus in the EpiCentre at Massey University in New Zealand and the Center for Animal Disease Modeling and Surveillance (CADMS) in the Veterinary School at UC Davis. CADMS is recognized as an FAO Reference Laboratory for Veterinary Epidemiology and Modeling and as an OIE Collaborating Center for Veterinary Epidemiology and Public Health. Dr. Carpenter's research and teaching has focused on a variety of diseases in animals and humans in more than 40 countries.



Jennifer Chase

Jennifer Chase is interested in the continual development and optimization of cost-effective time-efficient laboratory methods for high throughput sampling, without compromising assay sensitivity. She enjoys finding new and useful applications for unrelated technologies or techniques that can be applied to existing or new laboratory methods that target pathogenic bacteria including, E. coli O157, non-O157 STEC, and Salmonella spp.



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.



Linda Deanovic

Ms. Deanovic is the Director of the Center for Aquatic Biology and Aquaculture. She provides daily support to several professors, their staff and graduate students at this aquaculture facility. She has an extensive history working with regulatory agencies on projects related to water quality in California surface waters. Her research has focused on aquatic toxicology and water quality monitoring in relation to pesticide and heavy metal runoff from non-point sources of pollution.



Logan DeMatt

Logan DeMott is a PhD candidate in Plant Pathology working in the lab of Prof. Maeli Melotto. His research focuses on the mechanistic underpinnings of jasmonate signaling in Arabidopsis, with an emphasis on biotic and abiotic stress tolerance. His background education and experience involve biochemistry, cell biology and plant pathology.



Ed DePeters

Dr. 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.



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.



Tracey Goldstein

Tracey Goldstein, PhD, is Associate Director and Professor at the University of California Davis, One Health Institute, where she developed and oversees the One Health Institute Laboratory and the Marine Ecosystem Health Diagnostic and Surveillance Laboratory. She is Co-Principle Investigator and Pathogen Detection lead for the USAID Emerging Pandemic Threats PREDICT project. Her background is in wildlife diseases, developing disease diagnostics to detect novel and known pathogens for viral detection in developing countries.



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.



Michael Lairmore

Dr. Michael Lairmore, Dean and Distinguished Professor of the School of Veterinary Medicine is one of the few veterinarians elected as a Member of the National Academy of Medicine. As a scientist he bridges multiple disciplines to address basic questions related to viral causes of cancer. Dean Lairmore presides over six academic departments, the William R. Pritchard Veterinary Medical Teaching Hospital, the California Animal Health and Food Safety Laboratory System, the Veterinary Medicine Teaching and Research Center in Tulare, Veterinary Medicine Extension, and numerous centers of excellence.



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.



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.



Yanhong Liu

Dr. Yanhong Liu is assistant professor in the Department of Animal Science at the University of California, Davis. Her research evaluates dietary effects on pig health by investigating impacts of products now available to the industry and developing new approaches for the industry. The long term goal of the research taking place in her Comparative Animal Nutrition and Physiology Laboratory is to help the animal industry deploy feed-based health



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.



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.



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).



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 Emertius 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.



Melissa Partyka

Dr. Melissa Partyka is a Research Ecologist with the Western Center for Food Safety and the Western Institute for Food Safety and Security. Her research has focused on the spatial dynamics and connectivity of marine microbial communities and waterborne pathogens in aquatic and marine environments, with an emphasis on zoonotic organisms associated with human illness.



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.



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.



Nathan Pumplin

Dr. Nathan Pumplin is a Project Scientist in the lab of Prof. Maeli Melotto in the Department of Plant Sciences. His research is focused on the devastating blast disease of rice, caused by the fungal pathogen Magnaporthe oryzae. Experimental work aims to understand and deploy mechanisms for plants to resist disease. He has a background studying plant genetics, cell biology, plant-microbe interactions and epigenetics.



Birgit Puschner

Dr. Birgit Puschner, Professor, and Chair, of the Department of Molecular Biosciences, School of Veterinary Medicine, focuses her research on the detection and confirmation of toxic substances causing animal diseases and mechanistic studies evaluating environmental toxicants, including including microcystins, polychlorinated biphenyls (PCB) and polybrominated diphenyl ethers (PBDE) and plant toxins. She has enhanced understanding of the pathophysiology of diseases caused by toxicants, improved methods of toxicant detection, and contributed data of public health significance about animal and human exposures.



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.



Heidi Rossow

Dr. 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 and sub-clinical ketosis and feeding consistency.



Adrian Sbodio

Mr. Sbodio coordinates and conducts pre- and post-harvest research and outreach education on diverse fresh and minimally-processed horticultural foods. Adrian is field research coordinator and technical associate in the Department of Plant Sciences in the Suslow laboratory. The lab conducts mission-oriented research combining lab and on-farm research on *E. coli*, *Salmonella*, and *Listeria* in conventional and organic production systems, for the purpose of identifying opportunities for optimal microbial reductions and delivery of safe food to the consumer.



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.



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.



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.



Paulina Zielinska

Dr. Paulina Zielinska is the Director of the Office for Global Programs in the UC Davis School of Veterinary Medicine, where she works closely with students interested in international experiences. She is a faculty advisor for the Students for One Health (SOH) Club and serves as a mentor for a student-led One Health project in Knights Landing, CA. She is also a director of the Davis-based non-profit organization-economic grassroots programs in India and globally.

Staff Support



Chris Brunner Public Relations Officer, WIFSS



Jenny Chen Public Relations Assistant, WIFSS



Nicole Nisson Program and Financial Assistant, WIFSS