One Health for Food Systems Conference: Integrating Veterinary, Food, Animal and Agricultural Engineering Sciences University of California, Davis

August 12 – 30, 2019

Sponsored by: Nanjing Agricultural University

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











Conference Description

The One Health for Food Systems Conference: Integrating Veterinary, Food, Animal and Agricultural Sciences held at the University of California, Davis, August 12-30, 2019, hosted by the Western Institute for Food Safety and Security, (WIFSS), 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 which includes lectures, field trips, and team-building exercises raises student awareness for taking a multidisciplinary approach to solving problems. This approach prepares them for careers which will promote progress towards safer, better quality food systems and healthy animals in China.

The conferences build 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, practiced in teamwork, 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
- Sara Garcia, Project Scientist, WIFSS
- David Goldenberg, Food Safety and Security Training Coordinator, WIFSS
- Heather Johnson, Instructional Systems Designer, WIFSS
- Michael Luo, Coordinator, One Health Youth
- Nicole Nisson, Program and Financial Assistant, WIFSS
- Bennie Osburn, Director of Outreach and Training, WIFSS
- Carol Wang, Coordinator, One Health Youth
- Greg Wlaskiuk, e-Learning Curriculum Designer, WIFSS

		WEEK ONE	
SUNDAY -			
2:00 - 4:00 pm	WIFSS	Arrive WIFSS, Meet Host Families	Greeted by Jenny Chen, Chris Brunner, and Carol Wang 1477 Drew Ave, Suite 101, Davis, CA
MONDAY -	AUGUST 12	- WELCOME	
9:00 – 9:15		Welcome and Introductions	Dr. Bennie Osburn , Director, Outreach & Training, Western Institute for Food Safety and Security, Dean Emeritus School of Veterinary Medicine
9:15 – 9:45	1102 Gourley	Puzzle Activity Ice Breaker	Heather Johnson, Instructional Systems Designer, and Dr. Sara Garcia, Project Scientist, Western Institute for Food Safety and Security (WIFSS)
9:45 – 10:00	1102 Gourley	Conference Learning Objectives and Opening Survey	<i>Heather Johnson</i> , Instructional Systems Designer, WIFSS
10:00 – 10:15		BREAK	
10:15 – 10:45	1102 Gourley	Wall Activity – What's Your Idea of One Health?	<i>Heather Johnson</i> , Instructional Systems Designer, and <i>Dr. Sara Garcia</i> , Project Scientist, WIFSS
10:45 – 11:30	1102 Gourley	One Health Overview	<i>Dr. Bennie Osburn,</i> Director, Outreach & Training, WIFSS
11:30 – 12:00	1102 Gourley	Team Building – PART ONE Introduction	Dr. Sara Garcia, Project Scientist, WIFSS
12:00 – 1:30		LUNCH	
1:30 – 2:00	1102 Gourley	Power of One	Chris Brunner, Communications and International Programs Coordinator, WIFSS
2:00 - 2:30	1102 Gourley	Team Building – PART ONE Completion	Dr. Sara Garcia, Project Scientist, WIFSS
TUESDAY -	AUGUST 13		
9:00 – 10:00 10:00 – 11:00	1102 Gourley 1102 Gourley	Case Study and Discussion FMD as a Transboundary Disease	<i>Dr. Sara Garcia</i> , Project Scientist, WIFSS <i>Dr. Michael Payne</i> , Dairy Outreach Coordinator, WIFSS
11:00 – 11:15		BREAK	
11:15 – 12:00	1102 Gourley	Introduction to Davis	Gregory Wlasiuk, e-Learning Curriculum Designer, Western Institute for Food Safety and Security
12:00 – 1:30		LUNCH	
1:30 – 2:15	1102 Gourley	History of California	<i>Kelly Nimtz</i> , Director Emeritus for Development, School of Veterinary Medicine
2:15 – 3:00		Team Building – PART TWO	Heather Johnson, Dr. Sara Garcia, Chris Brunner, Greg Wlasiuk, and David Goldenberg, Food Safety and Security Training Coordinator, WIFSS
	<u> Y – AUGUS</u>		
9:00 – 10:00	1102 Gourley	Communicating One Health and Gallery Walk	<i>Heather Johnson</i> , Instructional Systems Designer, and <i>Dr. Sara Garcia</i> , Project Scientists, WIFSS

10:00 - 11:00		Good Guy vs Bad Bugs	<i>Heather Johnson</i> , Instructional Systems
10.00 – 11.00		Good Guy vs Dad Bugs	Designer, and Dr. Sara Garcia , Project
			Scientists, WIFSS
11:00 – 11:15		BREAK	Scientists, WII 55
11:15 – 12:00	1102 Gourley		T T 1 1 71 D
	1102 Gourley	Discussion 1: Meet Your Team	Team Facilitators: <i>Heather Johnson, Dr. Sara Garcia, David Goldenberg, Chris Brunner, Bennie Osburn, Greg Wlasiuk, Dr. James Cullor</i> , Professor Emeritus, Department of Population, Health and Reproduction, School of Veterinary Medicine; and <i>Michael Luo</i> , Coordinator One Health Youth
12:00 – 1:30		LUNCH	
1:30 – 2:15	1102 Gourley	Linking Ecosystem Health to Human and Animal Health: Challenges and Opportunities	<i>Dr. Jorge Rodrigues</i> , UC Davis Department of Land, Air, and Water Resources
2:15 – 3:00	1102 Gourley	Introduction to Plant Sciences at UC Davis	<i>Dr. Maeli Melotto</i> , UC Davis Department of Plant Sciences
THURSDAY	- AUGUST	15	
9:00 – 11:00	1102 Gourley	Team Building and Communications Activity	<i>Michael Luo</i> , Coordinator, One Health Youth
11:00 – 11:15		BREAK	
11:15 – 12:00	1102 Gourley	Research and Leadership on Treating Animal Waste to Improve Its Potential for Use as a Fertilizer in Agriculture	Rylie Ellison, Fourth Year PhD Student in in Agricultural and Environmental Chemistry Graduate Group, UC Davis
12:00 - 1:30		LUNCH	17
1:30 – 2:15	1102 Gourley	Overview of Dairy Herd Health	Dr. Richard Pereira , Assistant Professor of Clinical Livestock Herd Health, School of Veterinary Medicine
2:15 – 3:00	1102 Gourley	One Health Approach to Solving Complex Food Safety Outbreaks	<i>Dr. Michele Jay-Russell</i> , Research Microbiologist & Manager Liaison to WIFSS, Western Center for Food Safety
FRIDAY – A	UGUST 16		
9:00 – 10:00	1102 Gourley	Case Studies of One Health Research: Rwanda	<i>Dr. James Cullor</i> , Professor Emeritus, Department of Population, Health and Reproduction, School of Veterinary Medicine
10:00 - 10:15		BREAK	
10:15 – 11:30	Breakout Rooms	Discussion 2: Choosing Your Group Project	Team Facilitators: <i>Heather Johnson, Dr.</i> Sara Garcia, Dr. James Cullor, Greg Wlasiuk, David Goldenberg, Bennie Osburn, Chris Brunner, and Michael Luo
11:30 – 12:00	1102 Gourley	First Week Wrap Up and Field Trip Overview	<i>Dr. Sara Garcia</i> , and <i>Chris Brunner</i> , WIFSS
12:00		Adjourn for Weekend	
		WEEK TWO – FIELD TR	RIP
MONDAY -	AUGUST 19		
8:30		Bus Departs Campus	Visitor Parking Lot 50 – In front of Valley
10:45	Livingston	Bus Arrives Foster Farms	1000 Davis St, Livingston
11:00 – 12:00		Modern Poultry Production in the U.S.	Dr. Bob O'Connor, CEO Foster Farms
12:00 – 1:00		LUNCH	Provided by Foster Farms
1:15		Board Bus	

2:30	Visalia	Approximate – Arrive Hotel Visalia	Comfort Suites, 210 E. Aceauia Ave, Visalia, CA 93291, Mimi DelRio (559) 738-1700
6:00		GROUP DINNER	Canton Chinese Restaurant, 419 E Main St, Visalia, CA 93291 (559) 732-5716
TUESDAY -	AUGUST 20	0	
8:15	Visalia	Check out of Hotel	
8:30		Board Bus	
11:00	Kings Canyon	Arrive Kings Canyon	
11:00 – 3:00		Tour Kings Canyon	
3:00		Board Bus	
5:30	Tulare	Approximate - Arrive Hotel Tulare	Fairfield Inn & Suites, 1225 Hillman St., Tulare 93274 Johnnie Harris (559) 686- 4700
Evening		Rest and Dinner on Your Own	
WEDNESDA	Y - AUGUS	T 21	
8:15		Board Bus	Fairfield Inn & Suites
8:30	VMTRC	Arrive VMTRC	Veterinary Medicine Teaching & Research Center 18830 Road 112, Tulare (559) 688-1731
8:30 – 9:00	Conf Room	Nutrition Research at the VMTRC	<i>Dr. Noelia Silva del Rio</i> , Cooperative Extension Specialist, VMTRC
9:00 – 9:30	Conf Room	Overview of VMTRC	<i>Dr. Deniece Williams</i> , Dairy Production Medicine Clinician, VMTRC
9:30 – 9:45		BREAK and Board Bus for Dairy Tour	
9:45 – 11:45	Dairy Ranch	Tour of Dairy Ranch	<i>Dr. Blanca Camacho</i> , Dairy Production Medicine Clinician, VMTRC
12:00 – 1:30	Conf Rm	LUNCH	Catered
1:30 – 2:15	CAHFS	Tour California Animal Health and Food Safety Laboratory System, Tulare (CAHFS)	Dr. Pat Blanchard , Pathologist, California Animal Health and Food Safety Laboratory System, Tulare
2:30 - 6:00		Personal Work Time	
6:00		GROUP DINNER	Que Pasa Mexican Café, 1548 Hillman St, Tulare (559) 684-0600
THURSDAY	– AUGUST	22	
8:30	Tulare	Check out of Hotel and Board Bus	
8:30 – 9:0		Travel to Parlier	
9:00 – 11:00	Parlier	Lecture and Tour Kearney Agricultural Research and Extension (KARE) Center	<i>Dr. Jeffrey Dahlberg</i> , Kearney Ag Station 9240 South Riveren Avenue, Parlier, CA 93648 (559) 646-6500
11:00		Board bus at KARE	
1:00 – 1:30	Merced	LUNCH	In-n-Out Burger
1:30		Board bus	
4:00	Davis	Arrive Davis Campus	
FRIDAY - A	<u>UGUST</u> 23 –	- Personal Development	
		WEEK THREE	
MONDAY –			
9:00 – 9:50	1047 Valley	Regenerative Approach to Mandibular Reconstruction in Dogs	<i>Dr. Boaz Arzi</i> , Dentistry and Oral Surgery Service, School of Veterinary Medicine
9:50 - 10:00		BREAK	
10:00 – 10:50	1047 Valley	Overview of Nutrition Service, Veterinary Medical Teaching Hospital	<i>Dr. Andrea Fascetti</i> , Dept of Molecular Biosciences, School of Veterinary Medicine
10:50 - 11:00		BREAK	

11:00 – 11:05	1047 Valley	Instructions – Final Presentation	<i>Heather Johnson</i> , Instructional Systems Designer
11:05 – 12:00	1047, 2010, 2011, 2013, 2030 Valley	Work on Presentation – Breakout Rooms	Team Facilitators: Heather Johnson, Dr. Sara Garcia, Dr. James Cullor, Greg Wlasiuk, David Goldenberg, Bennie Osburn, Chris Brunner, and Michael Luo
12:00 – 1:30		LUNCH	
1:30 – 3:00	1047, 2010, 2011, 2013, 2030 Valley	Continue working on presentations	Team Facilitators: Heather Johnson, Dr. Sara Garcia, Dr. James Cullor, Greg Wlasiuk, David Goldenberg, Bennie Osburn, Chris Brunner, and Michael Luo
TUESDAY -	AUGUST 27	7	
9:00 – 11:30	RMI South 2211	Food Science and Technology Students Lecture: Involvement of Microbiome Analysis in Food Safety Research Tour: Food Science and Technology	Dr. Luxin Wang , Assistant Professor, UC Davis, Department of Food Science and Technology
9:30 – 11:30	2033 Bainer	Agricultural Engineering Students Lecture: Biological Systems Engineering Graduate Program Tour:	Dr. Bryan M. Jenkins, Professor and Chair, and Dr. Ruihong Zhang , Professor, UC Davis Department of Biological and Agricultural Engineering
9:00 – 11:30	Breezeway of Meyer Hall	Animal Science & Technology Students Lecture: One Health and Meat Safety: From Farm to Table BAE Department Tour	<i>Dr. Xiang (Crystal) Yang</i> , Assistant Professor, and <i>Caleb Sehnert</i> , Animal Resource Supervisor, UC Davis Department of Animal Science
10:00 – 11:00	1041 Valley	Veterinary Medicine Students Lecture: UC Davis School of Veterinary Medicine Community Practice	<i>Ilana Halperin,</i> Health Sciences Assistant Professor of Clinical Medicine & Epidemiology
12:00 – 1:30	1041Valley	LUNCH - All	
1:00 – 2:00	VMTH Lobby	Veterinary Medicine Students Tour of Veterinary Medical Teaching Hospital	Wesley Leung, Class of 2021 Jeffrey Connor Lowenthal, and Erica Chang, Class of 2022, School of Veterinary Medicine
1:30 – 3:00	1041, 1011, 1013 Valley	ALL Work on Presentations	Team Facilitators: Heather Johnson, Dr. Sara Garcia, Dr. James Cullor, Greg Wlasiuk, David Goldenberg, Bennie Osburn, Chris Brunner, and Michael Luo
WEDNESDA	Y – AUGUS	T 28	
9:00 – 10:00	1041 Valley	Sharing Science and One Health and Improving Scientific Communication Discussion & Activity	Heather Johnson , Instructional Systems Designer, and Dr. Sara Garcia , Project Scientist, WIFSS
10:00 – 11:00	1041 Valley	Tofel and GRE	Gregory Wlasiuk, e-Learning Curriculum Designer, and Dr. Sara Garcia, Project Scientist, WIFSS
11:00 – 11;15		BREAK	
11:15 – 12:00	1041 Valley	Connect the Dots	Dr. Bennie Osburn , Director, Outreach & Training, WIFSS
12:00 – 1:30	1041 1055	LUNCH	
1:30 – 4:00	1041, 1011, 1013, 2030 Valley	Work on Presentations	Team Facilitators: Heather Johnson, Dr. Sara Garcia, Dr. James Cullor, Greg Wlasiuk, David Goldenberg, Bennie Osburn, Chris Brunner, and Michael Luo

THURSDAY	- AUGUST	29	
9:00 – 10:00	1041 Valley	Jeopardy Game	Heather Johnson , Instructional Systems Designer, and Dr. Sara Garcia , Project Scientist, WIFSS
10:00 – 3:00	1041, 1011, 1013, 2030 Valley	Work on Presentations	Team Facilitators: Heather Johnson, Dr. Sara Garcia, Dr. James Cullor, Greg Wlasiuk, David Goldenberg, Bennie Osburn, Chris Brunner, and Michael Luo
FRIDAY - A	UGUST 30 -	- FINAL DAY	
8:30 – 9:00	1041 Valley	Closing Remarks	Dr. Bennie Osburn, Director, Outreach & Training, Western Institute for Food Safety and Security, Dean Emeritus School of Veterinary Medicine
9:00 – 9:30	1041 Valley	Team Give Me Five	<i>Dr. Sara Garcia</i> , Project Scientist, WIFSS
9:30 – 10:00	1041 Valley	Team Green Happy Alive Tortoises from Nanjing Eating Dreams	<i>Dr. James Cullor</i> , Professor Emertius, and <i>Gregory Wlasiuk</i> , e-Learning Curriculum Designer, WIFSS
10:00 - 10:15		BREAK and Closing Survey	
10:15 – 10:45	1041 Valley	Team One	Heather Johnson, Instructional Systems Designer, WIFSS
10:45 – 11:15	1041 Valley	Team Spade K	David Goldenberg , Food Safety and Security Training Coordinator
11:15 – 11:45	1041 Valley	Team Talklele	Chris Brunner, Communications and International Programs Coordinator, WIFSS; Michael Luo, Coordinator One Health Youth, and Dr. Bennie Osburn, Director Outreach & Training, WIFSS
11:45 – 12:15	1041 Valley	Certificate Ceremony	<i>Dr. Bennie Osburn</i> , Director, Outreach & Training, WIFSS
12:15 – 12:30	Outdoors	Group Photo	<i>Gregory Wlasiuk</i> , e-Learning Curriculum Designer
12:30 – 2:00	2030 Valley	LUNCH and Video Show	Lunch Catered by Woodstock's Pizza
CONGRATULATIONS!			
SATURDAY	- AUGUST	31	
6:30 am	Campus	Bus Departs for San Francisco International Airport	Visitor Parking Lot 15, California Avenue



Boaz Arzi

Dr. Boaz Arzi is an Associate Professor of Dentistry and Oral surgery at the department of Surgical and Radiological Sciences, School of Veterinary Medicine, at UC Davis. His clinical and research focus is on oral maxillofacial disorders and regenerative solutions in dogs and cats. His lab also investigates TMJ disorders and treatments across species. His work is translational with the aim of One Health treatment modalities for both human and animal health.



Chris Brunner

As the Communications and International Programs Coordinator 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.



Blanca Camacho

Dr. Blanca E. Camacho teaches Dairy Production Medicine within the clinical program at the VMTRC. She works alongside faculty, residents, and students and provides herd health and reproductive services. Dr. Camacho's research interests include epidemiology of antimicrobial resistance, antimicrobial use and stewardship, dairy laborer training and education, and neonatal calf disease.



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.



Rylie Ellison

Rylie Ellison graduated as Valedictorian from Pacific University in 2015 with a B.S. in Chemistry and a minor in mathematics and did her undergraduate research in nanochemistry. Currently, Rylie is a fourth year Ph.D. candidate in the Agricultural & Environmental Graduate Group in the Horwath biogeochemistry lab researching greenhouse gas emissions and nutrient cycling from dairy manure. At UC Davis, she has engaged in several leadership programs and science communication events, including with industry, policymakers, and the public. After graduate school, she is interested in pursuing a career in science policy and communication.



Andrea Fascetti

Dr. Andrea Fascetti, Professor in the Department of Molecular Biosciences in the School of Veterinary Medicine is faculty with the Nutrition Service at the Veterinary Medical Teaching Hospital at UC Davis. Dr. Fascetti is a world expert in veterinary nutrition and specifically taurine studies. Her research interests are in companion animal nutrition, trace mineral and amino acid metabolism, feline and canine nutrient requirements, obesity, improvement of pet foods, the role of clinical nutrition in the management and prevention of disease.



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.



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.



Bryan Jenkins

Professor Bryan M. Jenkins teaches and conducts research in the areas of energy and power, with emphasis on biomass and other renewable resources. He is Department Chair in the Department of Biological and Agricultural Engineering, University of California, Davis. Dr. Jenkins has more than thirty years of experience working in the area of biomass thermochemical conversion including combustion, gasification, and pyrolysis. His research also includes analysis and optimization of energy systems.



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 a veterinarian and research microbiologist with over 20 years of public health experience working in government and academia. She conducted numerous outbreak investigations while serving as an epidemiologist at the state and county levels in California. She currently manages the Western Center for Food Safety and serves as a liaison to WIFSS at UC Davis. Her recent work focuses on produce food safety with an emphasis on reducing risk of foodborne pathogen transmission from domesticated and wild animals, untreated biological soil amendments (raw manure), and other sources on 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.



Michael Luo

Michael Luo is affiliated with UC Davis Western Institute for Food Safety and Security. He has supported the Education Conferences for One Health for Food Safety and Security as assistant to the Conference Coordinator since 2015. Mr. Luo facilitates in Problem-based Learning team building exercises, and lectures on communication skills. With an M.S. in Agriculture Extension Mr. Luo shares concepts on agricultural extension education with students attending the One Health conferences. In his career with WIFSS, Mr. Luo promotes the One Health concept on a global basis.



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.



Jennine Ochoa

Dr. Jennine Ochoa is a diagnostic anatomic pathologist and teaches within DVM professional curriculum at the California Animal Health and Food Safety Laboratory in Tulare. She specializes in diseases of poultry and dairy cattle, but her caseload includes other production animals, horses, wildlife, and zoo species. She provides diagnostic testing support to clients for both infectious and toxic diseases. Dr. Ochoa's research interests include infectious diseases and emerging pathogens of agricultural animals.



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.



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 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.



Noelia Silva-del-Rio

Dr. Silva-del-Río obtained her Doctor of Veterinary Medicine in Spain in 1998. She completed her PhD in Dairy Science at the University of Wisconsin-Madison (2007), with an emphasis in dairy cattle nutrition and reproductive physiology. From Aug 2008 to Feb 2012, Dr. Silva-del-Río served as the dairy advisor for Tulare County in the University of California Cooperative Extension. Silva-del-Rio's research interests include nutritional management, corn silage management, milk quality, animal welfare, periparturient health problems, and the effects of heat stress on Central Valley dairy herds.



Luxin Wana

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.



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.



Gregory Wlasiuk

Mr. Greg Wlasiuk 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.



Crystal Yang

Dr. Xiang (Crystal) Yang is Assistant Professor; Assistant Meat Scientist, in the Department of Animal Science. Dr. Yang's research interests include the evaluation and validation of new antimicrobial chemicals and interventions against foodborne pathogens, as well as the investigations of the influence meat safety strategies have on the quality and shelf-life of meat products.



Ruihong Zhang

Ruihong Zhang is Professor and Graduate Program Chair in the Department of Biological and Agricultural Engineering, UC Davis. Dr. Zhang's focus of research is bioenvironmental engineering. She studies treatment of agricultural and food wastes for pollution prevention and resource utilization; air quality control for animal and human environments; study of biological, physical, and chemical processing techniques for organic waste conversion and nutrient management.

Staff Support



Chris Brunner Communications and International Programs Coordinator



Jenny Chen Public Relations Assistant, WIFSS



Nicole Nisson Program and Financial Assistant, WIFSS