

UC DAVIS EDUCATION CONFERENCE ON ONE HEALTH FOR FOOD SAFETY, AGRICULTURE, AND ANIMAL HEALTH

HOSTED BY: UNIVERSITY OF CALIFORNIA, DAVIS | WESTERN INSTITUTE FOR FOOD SAFETY
& SECURITY CO-HOSTED BY: CHINA AGRICULTURAL UNIVERSITY | COLLEGE OF VETERINARY MEDICINE









he 2022 UC Davis Education Conference on One Health for Food Safety, Agriculture, and Animal Health being held online, August 1 – 12, 2022, provides an in-depth educational experience for participants to learn about the importance of applying a One Health approach to solving problems concerning food safety and security, and animal health. The 2022 summer online conference is co-hosted by the College of Veterinary Medicine, China Agricultural University. One Health takes an interdisciplinary approach to solving specific, complex problems that arise at the interface of animals, humans, and the environment. Collaboration among professionals with diverse specializations is a necessary condition of One Health problem solving. The comprehensive program includes lectures, virtual field trips, and team-building exercises which increase the participants 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 on our planet. UC Davis WIFSS One Health conferences provide an in-depth educational experience for undergraduate and graduate students around the globe to learn about the importance of applying a One Health approach to solving specific, complex problems that arise at the interface of people, animals, and the environment. At this 2-week online conference participants will interface with respected professors from UC Davis School of Veterinary Medicine, College of Agricultural and Environmental Sciences, and from China Agricultural University and other universities around the world. In addition to lectures, participants will take part in team building exercises led by experienced subject matter experts and UC Davis students. Students from agricultural and veterinary colleges throughout the world will have the chance to work together on team-building activities and build friendships through problem-based learning projects.









TIME	PARTICIPANTS	SUBJECT	SPEAKER
	ON	E HEALTH INTERDISCIPLINARY EDUCATION	MORNING SESSION
8:00 – 8:55 a.m.	All	Welcome and Introduction of One Health	Dr. Bennie Osburn Director, Outreach and Training, Western Institute for Food Safety and Security, Dean Emeritus, School of Veterinary Medicine, University of California, Davis
9:00 – 9:10 a.m.	All	Opening Remarks	Dr. Jianzhong Shen Academician of Chinese Academy of Engineering Dean, College of Veterinary Medicine, China Agricultural University
9:10 – 10:05 a.m.	All	Welcome and Overview of One Health Research and Education at China Agricultural University.	Dr. Jun Han Associate Dean for Research and International Communications and Professor of Virology, Department of Preventive Veterinary Medicine, China Agricultural University College of Veterinary Medicine
10:10 – 11:00 a.m.	All	The Power of One	Ms. Chris Brunner Communications and International Programs Director, Western Institute for Food Safety and Security, University of California, Davis
11:00 a.m.– 1:00 p.m.	All	LUNCH BREAK	
	INTERNAT	ONAL YOUNG SCHOLARS ONE HEALTH FOR	RUM AFTERNOON SESSION
1:00 – 2:00 p.m.	Graduate & Undergraduate Students	Teamwork 1 Discussion Session  Meet your Team. Introduction of One Health Case Study – Learn How the One Health Approach Solves the Problem. Exploring the Problem and Finding Resources to Research the Problem.	UC Davis Facilitators: June Barrera, DVM, MPVM Peerawat Chintrakulchai, PhD Student in Epidemiology Margaux Ocampo, Pharmaceutical Chemistry Research Assistant Serene Liu, PhD Student in Epidemiology Ryan Jung, MPH Student Jose Pablo Gomez, DVM, MPVM, PhD Shadira Gordon, PhD Student in Epidemiology Carla Castro, Undergraduate in Human Biology Alseema Alemayehu, Undergraduate in Human Biology & Public Health Cesar Herraiz Fernandez, PhD Student in Epidemiology and Emerging Disease Control











TIME	PARTICIPANTS	SUBJECT	SPEAKER		
	INTERNATIONAL YOUNG SCHOLARS ONE HEALTH FORUM AFTERNOON SESSION				
2:00 – 2:15 p.m.	All	Genetic Evolution and Biological Characteristics of H5Ny Highly Pathogenic Avian Influenza Virus in Eastern China	Ruyi Gao Postdoctoral Researcher, College of Veterinary Medicine, Yangzhou University		
2:15 – 2:30 p.m.	All	Genetic Analysis and Biological Characteristics of Novel Zoonotic Avian Influenza Viruses with S Genotype H9N2 Internal Gene Cassette	Zhuxing Ji PhD Candidate, College of Veterinary Medicine, Yangzhou University		
2:30 – 2:45 p.m.	All	Genetics and Evolution of H7N9 Subtype Avian Influenza Viruses in China from 2013 to 2021	Xiyue Wang Master Candidate, College of Veterinary Medicine, Yangzhou University		
2:45 – 3:00 p.m.	All	The Study of HCoV-229E Neutralizing Antibody	Jiale Shi PhD Candidate, College of Animal Science and Technology & College of Veterinary Medicine, Huazhong Agricultural University		



















TIME	PARTICIPANTS	SUBJECT	SPEAKER
ONE HEALTH INTERDISCIPLINARY EDUCATION MORNING SESSION			
8:00 – 9:00 a.m.	All	Introduction of Problem-Based Learning and Overview of One Health Poster Project	Ms. Heather Johnson Instructional Designer, Western Institute for Food Safety and Security, University of California Davis
9:00 – 10:00 a.m.	All	ASF Prevention and Control Practices in Asia and Pacific Countries	Dr. Zhen Yang Associate Professor, College of Veterinary Medicine, Nanjing Agricultural University
10:00 – 11:00 a.m.	All	Public Health Leadership in Coordinating a One Health Approach to Preventing and Preparing for Pandemics Stemming from Novel, Emerging Zoonotic Diseases	Dr. Marguerite Pappaioanou Affiliate Professor and Associate Director, Center for One Health Research, Department of Environmental and Occupational Health Sciences, School of Public Health, University of Washington
11:00 a.m. – 1:00 p.m.	All	LUNCH BREAK	
	INTERNA	ATIONAL YOUNG SCHOLARS ONE HEALTH FO	DRUM AFTERNOON SESSION
1:00 – 2:00 p.m.	Graduate & Undergraduate Students	Teamwork 2 Discussion Session Building an Interdisciplinary Collaboration Group - Emphasizing Interdisciplinary Cooperation, which is an Approach to Address Public Safety Issues	UC Davis Facilitators: June Barrera, DVM, MPVM Peerawat Chintrakulchai, PhD Student in Epidemiology Margaux Ocampo, Pharmaceutical Chemistry Research Assistant Serene Liu, PhD Student in Epidemiology Ryan Jung, MPH Student Jose Pablo Gomez, DVM, MPVM, PhD Shadira Gordon, PhD Student in Epidemiology Carla Castro, Undergraduate in Human Biology Alseema Alemayehu, Undergraduate in Human Biology & Public Health Cesar Herraiz Fernandez, PhD Student in Epidemiology and Emerging Disease Control
2:00 – 2:15 p.m.	All	Essential Role of Viral Tegmument Protein UL13 in Modulation of Pseudorabies Virus Immune Evasion	Lu Li Master Candidate, College of Animal Science and Veterinary Medicine, Shandong Agricultural University
2:15 – 2:30 p.m.	All	PRRSV Structural Protein GP3 Inhibits Claudin 4 Mechanism of Promoting Early Infection by Porcine Reproductive and Respiratory Syndrome Virus	Guofei Ding PhD Candidate, College of Animal Science and Veterinary Medicine, Shandong Agricultural University
2:30 – 2:45 p.m.	All	Overview of African Swine Fever Virus and the Study of Structure and Function of Its Structural Protein P15	Yilin Guo PhD Candidate, College of Animal Science and Technology & College of Veterinary Medicine, Huazhong Agricultural University
2:45 – 3:00 p.m.	All	Effects of ZEA on Structural and Functional Proteins of MAMs in Piglet SCs.	Ma Li Master Candidate, College of Animal Science and Technology, Anhui Agricultural University









TIME	DADTIGIDANITO	CUDIFOT	CDEAVED
TIME	PARTICIPANTS	SUBJECT	SPEAKER
	ONI	HEALTH INTERDISCIPLINARY EDUCATION	MORNING SESSION
8:00 – 9:00 a.m.	All	Emerging and Re-emerging Diseases in Cultured Tilapia	Dr. Esteban Soto Martinez Professor, Medicine and Epidemiology, School of Veterinary Medicine, University of California, Davis
9:00 – 10:00 a.m.	All	From Farm to Table – Identifying Potential Pathogen Outbreaks Along the Food Chain	Mr. David Goldenberg Food Safety and Security Training Coordinator, Western Institute for Food Safety and Security, University of California, Davis
10:00 – 11:00 a.m.	All	Communicating Scientific Research to the Public	Mr. Gregory Wlasiuk, E-Learning Curriculum Designer; and Ms. Heather Johnson, Instructional Systems Designer, UC Davis Western Institute for Food Safety and Security
11:00 a.m. – 1:00 p.m.	All	LUNCH BREAK	
	INTERNA	TIONAL YOUNG SCHOLARS ONE HEALTH FOR	UM AFTERNOON SESSION
1:00 – 2:00 p.m.	All	One Health-Big Data Sharing	Dr. June Barrera DVM, MPVM Candidate, School of Veterinary Medicine, University of California, Davis
2:00 – 2:15 p.m.	All	New Insights into the Function of Plant Tannase as Hydrolase and Acyltransferase for Promoting the Biosynthesis of Galloylated Derivatives	Yifan Chen PhD Candidate, School of Tea and Food Science and Technology, Anhui Agricultural University
2:15 – 2:30 p.m.	All	The Transport of Alkaloids in Beverage Plants (Tea, Coffee, and Cocoa): Potential Mechanism and Perspectives	Yuanyuan Luo PhD Candidate, School of Tea and Food Science and Technology, Anhui Agricultural University
2:30 – 2:45 p.m.	All	Multi-omics Analysis Reveals the Metabolic Response of Tea Plant (Camellia sinensis L.) under Thiamethoxam Stress	Ping Zhang Master Candidate, College of Resources and Environment, Anhui Agricultural University



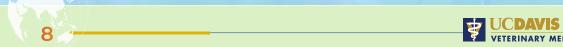








TIME	PARTICIPANTS	SUBJECT	SPEAKER	
	ONE HEALTH INTERDISCIPLINARY EDUCATION MORNING SESSION			
8:00 – 9:00 a.m.	All	Overview of Epidemiology Outbreak Investigation	Dr. Beatriz Martínez-López Professor, Department of Medicine & Epidemiology, School of Veterinary Medicine University of California, Davis	
9:00 – 10:00 a.m.	All	Overview of Small Animal Orthopedic Surgery	Dr. Po-Yen Chou Associate Professor, Department of Surgical and Radiological Sciences, School of Veterinary Medicine, University of California, Davis	
10:00 – 11:00 a.m.	All	One Health Poster Review	Graduate and Undergraduate Student Teams and UC Davis Facilitators	
11:00 a.m. – 1:00 p.m.	All	LUNCH BREAK	(b) - \(\sigma\)	
	INTERNA	TIONAL YOUNG SCHOLARS ONE HEALTH FOR	UM AFTERNOON SESSION	
12:00 – 1:00 p.m.	Faculty	What Steps Need to be Considered for a Problem- Based Model for One Health	Dr. Bennie Osburn Director, Outreach and Training, Western Institute for Food Safety and Security, Dean Emeritus, School of Veterinary Medicine, University of California, Davis	
2:00 – 2:15 p.m.	All	Characterization of the Protective Efficiency Against QX Strain of a Recombinant Infectious Bronchitis Virus with H120 Background and QX Spike Gene	Wenlian Weng PhD Candidate, College of Veterinary Medicine, China Agricultural University	
2:15 – 2:30 p.m.	All	The p72 Promoter-driven Luciferase Reporter System Identifies Compound A as a Potential Broad Spectrum Antiviral Drug	Yuhang Zhang PhD Candidate, College of Veterinary Medicine, Hunan Agricultural University	









	TIME	PARTICIPANTS	SUBJECT	SPEAKER		
		ONI	E HEALTH INTERDISCIPLINARY EDUCATION	HEALTH INTERDISCIPLINARY EDUCATION MORNING SESSION		
	8:00 – 9:00 a.m.	All	NARMS Surveillance of Antimicrobial Resistance in Retail Foods in California	Dr. Xunde Li Researcher, Department Population Health and Reproduction, School of Veterinary Medicine, University of California, Davis		
	9:00 – 10:00 a.m.	All	A "Bad Metal" Primer: 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 and Department of Molecular Biosciences, School of Veterinary Medicine, University of California, Davis		
	10:00 – 11:00 a.m.	All	One Health Approach for Exploring the Emergence and Spread of Resistances Against Last-resort Antibiotics	Dr. Yang Wang Professor and Vice Head of Section of Antimicrobial Resistance in Bacteria of Animal, Human and Environment Origin, College of Veterinary Medicine, China Agricultural University		
	11:00 a.m. – 1:00 p.m.	All	LUNCH BREAK			
INTERNATION!			TIONAL YOUNG SCHOLARS ONE HEALTH FOR	UM AFTERNOON SESSION		
	1:00 – 2:00 p.m.	Graduate &	Teamwork 3 Discussion Session	UC Davis Facilitators:		
	1.00 2.00 p.m.	Undergraduate Students	Structure of the Final Presentation – Determining One Health Issue, the Approach to Address the Problem, and the Short- term and Long-term Solutions	June Barrera, DVM, MPVM Peerawat Chintrakulchai, PhD Student in Epidemiology Margaux Ocampo, Pharmaceutical Chemistry Research Assistant Serene Liu, PhD Student in Epidemiology Ryan Jung, MPH Student Jose Pablo Gomez, DVM, MPVM, PhD Shadira Gordon, PhD Student in Epidemiology Carla Castro, Undergraduate in Human Biology Alseema Alemayehu, Undergraduate in Human Biology & Public Health Cesar Herraiz Fernandez, PhD Student in Epidemiology and Emerging Disease Control		
	2:00 – 2:15 p.m.	All	Screening of Antibiotic Substitutes and Inhibitors of Drug Resistance Related Enzymes Based on Network Pharmacology	Jinde Liu Master Candidate, College of Animal Science and Technology, Anhui Agricultural University		
	2:15 – 2:30 p.m.	All	Adsorption and Mechanism of Fluoroquinolone Antibiotics in Water by Controllable MOFs	Fei Fang Master Candidate, College of Resources and Environment, Anhui Agricultural University		
	2:30 – 2:45 p.m.	All	Antimicrobial Use and Antimicrobial Resistance in Pathogens Associated with Diarrhea and Pneumonia in Dairy Calves	Yi Xia Master Candidate, College of Veterinary Medicine, China Agricultural University		









TIME	PARTICIPANTS	SUBJECT	SPEAKER
	MORNING SESSION		
8:00 – 9:00 a.m.	All	Salmonella as a One Health Zoonotic Pathogen	Dr. Maurice Pitesky Associate Specialist in Cooperative Extension, Department of Population, Health and Reproduction, School of Veterinary Medicine, University of California, Davis
9:00 – 10:00 a.m.	All	Air Quality and Animal Farms: Impacts and Mitigation	Dr. Hamed El-Mashad Staff Research Associate, College of Biological and Agricultural Engineering, University of California Davis
10:00 – 11:00 a.m.	All	The Foreign Animal Disease Diagnostic Laboratory: Role in Identifying Zoonotic Diseases	Dr. Robin Holland Head of the Diagnostics Services Section at the Foreign Animal Disease Diagnostic Laboratory of the Plum Island Animal Disease Center
11:00 a.m. – 1:00 p.m.	All	LUNCH BREAK	
	INTERNA	TIONAL YOUNG SCHOLARS ONE HEALTH FOR	UM AFTERNOON SESSION
12:00 — 1:00 p.m.	Faculty	The Animal Science Curriculum in Community Colleges in California	Ms. Jessica Cardoso, Associate Professor, Animal Science, San Joaquin Delta College Ms. Brandi Asmus, Agriculture Tech & Sciences Faculty/CC Coordinator, Woodland Community College Dr. Candice Stafford-Banks Professor of Agriculture, Woodland Community College, Woodland CA
1:00 – 2:00 p.m.	All	Academic Writing	Huong Huynh DVM Candidate, School of Veterinary Medicine, University of California, Davis
2:00 – 2:15 p.m.	All	Insulin-like Growth Factor-1 is Involved in the Deteriorated Performance of Aged Laying Hens	Qian Xin Master Candidate, College of Animal Science and Veterinary Medicine, Shandong Agricultural University
2:15 – 2:30 p.m.	All	Structural Characteristics and Immunomodulatory Effects of a Long-chain Polysaccharide from Laminaria japonica	Yunpeng Wang PhD Candidate, College of Animal Science and Veterinary Medicine, Shandong Agricultural University









TIME	PARTICIPANTS	SUBJECT	SPEAKER
	ONI	E HEALTH INTERDISCIPLINARY EDUCATION	MORNING SESSION
8:00 – 9:00 a.m.	All	Role of Diagnostic Laboratories for Surveillance	Dr. Jennine Ochoa Professor, California Animal Health and Food Safety Laboratory, Department of Microbiology & Immunology, School of Veterinary, University of California, Davis
9:00 – 10:00 a.m.	All	Introduction to Essay Writing	Dr. June Barrera DVM, MPVM, School of Veterinary Medicine, University of California, Davis
10:00 – 11:00 a.m.	All	Sources of Fecal Contamination on Raw Produce	Dr. Michele Jay-Russell Program Manager, Western Center for Food Safety, University of California, Davis
11:00 a.m. – 1:00 p.m.	All	LUNCH BREAK	1/19/2017
	INTERNA	TIONAL YOUNG SCHOLARS ONE HEALTH FOR	UM AFTERNOON SESSION
1:00 — 2:00 p.m.	Graduate & Undergraduate Students	Teamwork 4 Discussion Session Interview: How's One Health Education at UC Davis Prepare Questions to Interview Facilitators. Record the Interview and Summarize	UC Davis Facilitators: June Barrera, DVM, MPVM Peerawat Chintrakulchai, PhD Student in Epidemiology Margaux Ocampo, Pharmaceutical Chemistry Research Assistant Serene Liu, PhD Student in Epidemiology Ryan Jung, MPH Student Jose Pablo Gomez, DVM, MPVM, PhD Shadira Gordon, PhD Student in Epidemiology Carla Castro, Undergraduate in Human Biology Alseema Alemayehu, Undergraduate in Human Biology & Public Health Cesar Herraiz Fernandez, PhD Student in Epidemiology and Emerging Disease Control
2:00 – 2:15 p.m.	All	Functional Study of Toxoplasma gondii Dense Granule Protein1	Bolin Fan PhD Candidate, College of Animal Science and Technology & College of Veterinary Medicine, Huazhong Agricultural University
2:15 – 2:30 p.m.	All	Electroacupuncture Relieves Visceral Hypersensitivity	Qiuhua Li Master Candidate, College of Animal Science and Technology & College of Veterinary Medicine, Huazhong Agricultural University
2:30 – 2:45 p.m.	All	Nitrogen-Doped Multiwalled Carbon Nanotubes Enhance Bone Remodeling through Immunomodulatory Functions	Dalin He PhD Candidate, College of Animal Science and Veterinary Medicine, Shandong Agricultural University









TIME	PARTICIPANTS	SUBJECT	SPEAKER	
	ONE HEALTH INTERDISCIPLINARY EDUCATION MORNING SESSION			
8:00 – 9:00 a.m.	All	Prevalence, Characterization, and Prevention of Swine Influenza Viruses	Dr. Honglei Sun Associate Professor of Department of Preventive Veterinary Medicine, College of Veterinary Medicine, China Agricultural University	
9:00 – 11:00 a.m.	All	Wheel of One Health	Mr. Gregory Wlasiuk E – Learning Curriculum Designer Ms. Heather Johnson Instructional Systems Designer, Western Institute for Food Safety and Security University of California, Davis	
11:00 a.m. – 12:00 p.m.	All	LUNCH BREAK		
	INTERNA	TIONAL YOUNG SCHOLARS ONE HEALTH FOR	UM AFTERNOON SESSION	
1:00 – 3:00 p.m.	Graduate & Undergraduate Students	Teamwork 5 Discussion Session Preparation for the Final Reports	UC Davis Facilitators: June Barrera, DVM, MPVM Peerawat Chintrakulchai, PhD Student in Epidemiology Margaux Ocampo, Pharmaceutical Chemistry Research Assistant Serene Liu, PhD Student in Epidemiology Ryan Jung, MPH Student Jose Pablo Gomez, DVM, MPVM, PhD Shadira Gordon, PhD Student in Epidemiology Carla Castro, Undergraduate in Human Biology Alseema Alemayehu, Undergraduate in Human Biology & Public Health Cesar Herraiz Fernandez, PhD Student in Epidemiology and Emerging Disease Control	









#### **FINAL DAY**

TIME	PARTICIPANTS	SUBJECT	SPEAKER
9:00 a.m. – 9:10 a.m.	All	Closing Remarks	Dr. Bennie Osburn Director, Outreach and Training, Western Institute for Food Safety and Security, Dean Emeritus, School of Veterinary Medicine, University of California, Davis
9:10 a.m. – 9:20 a.m.	All	Closing Remarks	Dr. Jun Han Associate Dean for Research and International Communications and Professor of Virology, Department of Preventive Veterinary Medicine, China Agricultural University College of Veterinary Medicine
9:20 a.m. – 9:25 a.m.	All	Closing Remarks	Mr. Michael Luo, Education Specialist, and International Programs Coordinator, Western Institute for Food Safety and Security, University of California, Davis
9:30 a.m. – 10:15 a.m.	All	Team Final Reports	Teams to Be Announced
10:15 a.m. – 10:30 a.m.	All	BREAK	
10:30 a.m. – 10:15 a.m.	All	Team Final Reports	Teams to Be Announced
11:15 a.m. – 12:00 p.m.	All	Certificate Ceremony	Mr. Taotao (Andy) Lu PhD Student in Epidemiology, University of California, Davis













#### **CONFERENCE SPEAKERS**



**DR. SHARIF ALY** 

Professor and Agronomist, Department of Population Health & Reproduction, School of Veterinary Medicine, University of California, Davis

PhD, University of California, Davis, CA
MPVM, University of California, School of Veterinary Medicine, Davis, CA
Residency, University of California, School of Veterinary Medicine, Davis, CA
Internship, University of Idaho, Caine Veterinary Teaching Center
BVSc, University of Cairo, Egypt
GCE, University of London,
IGCSE, University of Cambridge

**Research Focus:** Aly is a Professor of Epidemiology and Biostatistics at the School of Veterinary Medicine at UC Davis where he applies study design and quantitative methods to identify novel tools to advance dairy cattle health and welfare, public health, and food safety. Amongst the Dairy Epi Lab's output is large dairy herd surveillance for mastitis; the California Bovine Respiratory Disease (BRD) scoring system available as a free mobile app.



**BRANDI ASMUS** 

Agriculture Tech & Sciences Faculty/CC Coordinator, Woodland Community College, Woodland, CA

Master of Science degree in Animal Science, University of California, Davis

**Research Focus:** Agriculture Instructor at Woodland Community College. Brandi is a strong advocate for community college education, and she currently serves as the faculty mentor for the Agriculture Leadership group on campus, where students are given the opportunity to learn leadership skills and put them into action. Courses taught: Animal Science, Animal Feeds/Nutrition, Small Ruminant Production.



**DR. JUNE BARRERA** 

Master of Preventive Veterinary Medicine Candidate, University of California, Davis Research Advisors: Dr. Jonna Mazet, UC Davis Dr. Rudovick Kazwala, Sokoine University of Agriculture

DVM, University of California, School of Veterinary Medicine, Davis, CA BS in Ecology, Behavior, and Evolution, University of California, Los Angeles **Research Focus:** Best practices in data-sharing in the One Health community.



**MS. CHRIS BRUNNER** 

Communications and International Programs Director, Western Institute for Food Safety and Security, University of California, Davis

**Area of Focus:** Liaison for WIFSS international programs serving as link between WIFSS and international One Health programs involving multiple colleges and universities in East Asia.









#### **CONFERENCE SPEAKERS**



**JESSICA CARDOSO** 

Associate Professor, Animal Science, San Joaquin Delta College, Stockton, CA MS in Agriculture Education, California Polytechnic State University, San Luis Obispo **Area of Focus:** Instructor of Animal Science, including cattle, small ruminant, swine, and poultry. Manages student interns and the livestock lab which includes 6 acres, a herd of boer goats and a flock of show sheep.



**DR. PO-YEN CHOU** 

Associate Professor, Department of Surgical & Radiological Sciences, School of Veterinary Medicine, University of California, Davis

BVM, National Taiwan University, Taipei, Taiwan MVM, National Taiwan University, Taipei, Taiwan MS, Atlantic Veterinary College, University of Prince Edward Island, PE, Canada **Research Focus:** Surgical site infection, minimally invasive orthopedic surgery.



**DR. HAMED EL-MASHAD** 

Staff Research Associate, Department of Biological and Agricultural Engineering, University of California Davis

BSC and MSc in Agricultural Engineering from Mansoura University, Egypt PhD in Environmental Engineering from Wageningen University, Netherlands

**Research Focus:** Dr. El-Mashad's research focuses on bioenergy, bioproducts and biotechnical engineering. He has worked on areas such as bioaugmentations strategies of anaerobic digestion, sustainability, bioprocess engineering, fermentation technology, biomass research, infrared peeling of tomatoes and other vegetables, and much more. He has also been conducting research on air quality on dairy and poultry farms.



MR. DAVID GOLDENBERG

Food Safety and Security Training Coordinator, Western Institute for Food Safety and Security, University of California, Davis

BS, The Ohio State University MS, University of California, Davis

**Area of Focus:** Food safety, with primary focus on growing produce and food packing facilities. Food security to prevent intentional adulteration.











#### **CONFERENCE SPEAKERS**



**DR. JUN HAN** 

Associate Dean for Research and International Communications and Professor of Virology, Department of Preventive Veterinary Medi-cine, China Agricultural University College of Veterinary Medicine

DVM, China Agricultural University MS, China Agricultural University PhD, University of Minnesota-Twin Cities Postdoctoral Fellow, Penn State University **Research Focus:** Current research interests focus on the replication and pathogenesis of nidoviruses (PRRRSV and PEDV) and herpesviruses (PRV and HSV-1) with an aim to promote animal and human health through better understanding the viruses.



**DR. ROBIN HOLLAND** 

Head of the Diagnostics Services Section at the Foreign Animal Disease Diagnostic Laboratory of the Plum Island Animal Disease Center

DVM and PhD in the Veterinary Medical Scholars Program at the University of Illinois at Urbana-Champaign

**Research Focus:** Diagnostics and high biocontainment facilities, and preparedness and diagnostic response to major foreign animal disease incursions.



DR. MICHELE JAY-RUSSELL

Program Manager for the Western Center for Food Safety, University of California, Davis

DVM, University of California, Davis PhD in Comparative Pathology, University of California, Davis **Research Focus:** Food safety, public health, molecular epidemiology of environmental enteric pathogens from domestic and wildlife species affecting people.



**MS. HEATHER JOHNSON** 

Instructional Systems Designer, Western Institute for Food Safety and Security

MS in Microbiology, University of California, Davis

**Area of Focus:** 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.











#### **CONFERENCE SPEAKERS**



**DR. XUNDE LI** 

Researcher, Department of Population Health and Reproduction, School of Veterinary Medicine, University of California, Davis

PhD, University of Rouen, Rouen, France MS, Jilin University, China BS, Jilin Agricultural University, China **Research Focus:** The protection of the health of animals and the public and the improvement of food safety through laboratory and field-based studies on the sources, ecology, and transmission of bacterial and protozoal pathogens and bacterial antimicrobial resistance...



### MR. TAOTAO (ANDY) LU

PhD student, Epidemiology, University of California, Davis Research Advisor: Dr. Beatriz Martínez-López

MPVM, University of California, Davis

**Research Focus:** Zoonotic and infectious diseases, spatial and spatio-temporal epidemiology.



#### **MICHAEL LUO**

Education Specialist and International Programs Coordinator, Western Food Institute for Food Safety & Security

MS in Agriculture Extension

**Area of Focus:** 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.



MR. RICHARD MA

College of Biological Sciences, University of California, Davis

Cell Biology Major











#### **CONFERENCE SPEAKERS**



DR. BEATRIZ MARTÍNEZ-LÓPEZ

Professor and Agronomist Department of Medicine & Epidemiology, School of Veterinary Medicine, University of California, Davis

DVM, Complutense University, Madrid, Spain Expert, Complutense University of Madrid, Spain MPVM, University of California, Davis, California PhD, Complutense University, Madrid, Spain Research Focus: Currently, Dr. Martínez-López is leading the development, implementation and validation of novel Big Data analytical and visualization tools and their integration into operational, web-based, user-friendly platforms such as the novel Disease BioPortal to more timely support animal health decisions in livestock and aquaculture industries.



#### **DR. MAELI MELOTTO**

Professor and Vice-Chair of Agricultural Plant Biology, Department of Plant Sciences, University of California, Davis

MSc in Plant Physiology and Biochemistry, University of São Paulo, Brazil PhD in Plant Breeding and Genetics, Michigan State University

**Research Focus:** Plant-pathogen interactions, understanding the close interaction between plants and human pathogens at the molecular level.



## **DR. JENNINE OCHOA**

Assistant Professor, California Animal Health and Food Safety Lab; Pathology, Microbiology & Immunology School of Veterinary Medicine University of California, Davis

DVM, University of California, Davis PhD, Washington State University Diplomate, American College of Veterinary Pathologists **Research Focus:** Diagnostic pathology of agricultural livestock and poultry with an emphasis on diagnosis and surveillance of animal diseases that are of human and economic concern.



#### **DR. BENNIE OSBURN**

Director, Outreach and Training, Western Institute for Food Safety and Security Dean Emeritus, School of Veterinary Medicine, University of California, Davis

DVM, Kansas State University PhD, in Comparative Pathology, University of California, Davis Post-Doctoral Fellowship, Johns Hopkins Medical School

**Research Focus:** Infectious diseases of livestock, zoonotic diseases, including foodborne pathogens, and the ecology of infectious agents.











#### **CONFERENCE SPEAKERS**



#### **DR. MARGUERITE PAPPAIOANOU**

Affiliate Professor and Associate Director, Center for One Health Research Department of Environmental and Occupational Health Sciences School of Public Health, University of Washington

DVM, Michigan State University MPVM, University of California, Davis PhD in Comparative Pathology; UC Davis Diplomat, American College of Veterinary Preventive Medicine CDC Epidemic Intelligence Service **Research Focus:** Emerging zoonotic diseases of pandemic concern; infectious disease surveillance, prevention, and control; food safety, One Health, Planetary Health.



#### **DR. MAURICE PITESKY**

Associate Specialist in Cooperative Extension, Population Health & Reproduction, School of Veterinary Medicine, University of California, Davis

MPVM, University of California, Davis DVM, University of California, Davis **Research Focus:** Application of classic and spatial epidemiology in disease surveillance, food safety management, and other processes associated with poultry health. Application of One Health principles with respect to domestic poultry, wildlife, the environment, and food safety.



#### **DR. ROBERT POPPENGA**

Professor, California Animal Health and Food Safety Lab Molecular Biosciences, University of California, Davis

DVM, University of Illinois, College of Veterinary Medicine, Urbana-Champaign, IL PhD, University of Illinois, College of Veterinary Medicine, Urbana-Champaign, IL Diplomate, American Board of Veterinary Toxicology

**Research Focus:** Veterinary Clinical Toxicology, Diagnostic Veterinary Toxicology: Diagnostic testing methods for animal intoxications; wildlife toxicology; biomarker development to better define exposure to toxicants.

**Specialty Focus:** Toxicology.



## **DR. JORGE RODRIGUES**

Professor, Department of Land, Air and Water Resources, University of California, Davis

MSc in Microbiology, University of São Paulo, Brazil PhD, in Crop and Soil Sciences and Environmental Toxicology, (Minor) Microbial Ecology (Dual Degree) - Michigan State University

**Research Focus:** Nature and ecology of soil microbial communities of importance to mankind. Research spans from natural to agricultural ecosystems and focused on microbiome solutions under increased world food demand. Results from this work have broad implications from basic research in evolutionary biology to applied aspects, such conservation policies for natural forests.











#### **CONFERENCE SPEAKERS**



**DR. JIANZHONG SHEN** 

Academician of Chinese Academy of Engineering, and Dean, College of Veterinary Medicine, China Agricultural University

PhD, Applied Chemistry Specialty in College of Basic Science and Technology, China Agricultural University

MS, Veterinary Pharmacology and Toxicology, Beijing Agricultural University DVM, Beijing Agricultural

**Research Focus:** Theory and technology of animalderived food safety and veterinary public health.



#### **DR. ESTEBAN SOTO MARTINEZ**

Professor, Medicine and Epidemiology, School of Veterinary Medicine University of California, Davis

DVM, Escuela de Medicina Veterinaria, Universidad Nacional, Heredia, Costa Rica MS, Mississippi State University, College of Veterinary Medicine, Mississippi PhD, Louisiana State University, School of Veterinary Medicine, Louisiana

**Research Focus:** His main research interests are the pathogenesis of Important Infectious Diseases of Wild and Aquatic Animals and the Development of Best Management Strategies for Prevention and Treatment of these diseases.



#### **DR. CANDICE STAFFORD-BANKS**

Professor of Agriculture, Woodland Community College, Woodland CA. BS and MS in Entomology, University of California, Riverside PhD in Plant Pathology, University of California, Davis. **Research Focus:** Instructor at Woodland Community College. Candice serves as the dual enrollment faculty coordinator to ensure that high school students have access to high quality college level educational opportunities. Courses taught include: Plant Science, Environmental Horticulture, Pest Management, Entomology, Plant Pathology, Weed Science, and Environmental Science.



**DR. HONGLEI SUN** 

Associate Professor of Department of Preventive Veterinary Medicine, College of Veterinary Medicine, China Agricultural University

MS, Shandong Agricultural University DVM, Shandong Agricultural University PhD, China Agricultural University **Research Focus:** Interspecies transmission of the animal virus with potential to cause influenza pandemics in humans, molecular mechanism of interspecies transmission of influenza virus, and development of novel influenza vaccines.











#### **CONFERENCE SPEAKERS**



**DR. YANG WANG** 

Professor and Vice Head of Section of Antimicrobial Resistance in Bacteria of Animal, Human and Environment Origin, College of Veterinary Medicine, China Agricultural University

MS, South China Agricultural University DVM, Hunan Agricultural University **Research Focus:** Emergence and molecular genetics characteristic of bacterial resistance to antibiotic. The epidemiology, transmission, and associated risk factors of antimicrobial resistant bacteria.



**MR. GREGORY WLASIUK** 

E-Learning Curriculum Designer, Western Institute for Food Safety and Security

MA in English, University of California, Davis

**Area of Focus:** Designing online educational content for Western Institute for Food Safety and Security educational programs, development of interactive online courses and instructive videos.



**DR. ZHEN YANG** 

Associate Professor, College of Veterinary Medicine, Nanjing Agricultural University

BS, South China Agricultural University DVM, University of Minnesota

**Research Focus:** Population Medicine of Swine and Cattle; Animal Epidemiology and cross-border animal infectious diseases.











#### **GRADUATE SPEAKERS**



**MS. YIFAN CHEN** 

PhD Candidate, School of Tea and Food Science and Technology, Anhui Agricultural University

BS, Tea Science, Qingdao Agricultural University

**Research Focus:** Secondary Metabolism and Quality Chemistry of Tea



MR. GUOFEI DING

PhD Candidate, College of Animal Science and Veterinary Medicine, Shandong Agricultural University

BE, Shandong Agricultural University

**Research Focus:** Pathogenic Mechanism of Porcine Reproductive and Respiratory Syndrome Virus



**MR. BOLIN FAN** 

PhD Candidate, College of Animal Science and Technology & College of Veterinary Medicine, Huazhong Agricultural University

BS, Shenyang Agricultural University. MS, Huazhong Agricultural University **Research Focus:** Parasite Molecular Biology and Genetic Engineering



MS. FEI FANG

Master Candidate, College of Resources and Environment, Anhui Agricultural University

BE, Environmental Science, Liaoning Petrochemical University

**Research Focus:** Preparation of Environmental Functional Materials and Their Mechanism of Action on Pollutants











#### **GRADUATE SPEAKERS**



**MS. RUIYI GAO**Postdoctoral Researcher,
College of Veterinary Medicine, Yangzhou University

BS, Agronomy, Yangzhou University PhD, Yangzhou University **Research Focus:** Genetic Evolution and Pathogenic Mechanism of Avian Influenza Virus



**MS. YILIN GUO** 

PhD Candidate, College of Animal Science and Technology & College of Veterinary Medicine, Huazhong Agricultural University

BS, Henan University of Science and Technology MS, Huazhong Agricultural University

Research Focus: Animal Virology



**MR. DALIN HE** 

PhD Candidate, College of Animal Science and Veterinary Medicine, Shandong Agricultural University

BS, Shandong Agricultural University MS, Shandong Agricultural University

**Research Focus:** Veterinary Medicine



**MR. ZHUXING JI** 

PhD Candidate, College of Veterinary Medicine, Yangzhou University

BVSc, Yangzhou University

**Research Focus:** Mechanism of Avian Influenza Virus-host Interactions











#### **GRADUATE SPEAKERS**



MR. MA LI

Master Candidate, College of Animal Science and Technology, Anhui Agricultural University

**Research Focus:** Nutritional Metabolic Diseases and Poisoning of Livestock and Poultry



**MS. LU LI**Master Candidate, College of Animal Science and Veterinary Medicine, Shandong Agricultural University

BS, Veterinary Medicine, Shandong Agricultural University

BS, Anhui Agricultural University, Animal Medicine.

**Research Focus:** Viral Infection and Immune Regulation



**MS. QIUHUA LI**Master Candidate, College of Animal Science and Technology & College of Veterinary Medicine, Huazhong Agricultural University

BS, Animal Medicine, Sichuan University for Nationalities.

**Research Focus:** Clinical Veterinary Medicine



**MS. XIAOFEI LI**PhD Candidate, College of Veterinary Medicine, Yangzhou University

MS, Biology, Yangzhou University BS, Pharmacy, Xuzhou Medical University **Research Focus:** The Pathogenic Mechanisms and Putative Virulence Genes of Campylobacter Jejuni











#### **GRADUATE SPEAKERS**



MR. JINDE LIU

Master Candidate, College of Animal Science and Technology, Anhui Agricultural University

BS, Shandong Agricultural University Animal Medicine

MS, Tea Science, Anhui Agricultural university

**Research Focus:** Veterinary Pharmacology Food Safety of Animal Origin



MS. YUANYUAN LUO
PhD Candidate, School of Tea and Food Science and Technology, Anhui Agricultural University
BS, Tea Science, South China Agricultural University

**Research Focus:** The Transport of Caffeine in Tea Plants (Camellia Sinensis)



**DR. CHUANG MENG**Lecturer, PhD, College of Bioscience and Biotechnology, Yangzhou University

Visiting Scholar, College of Medicine, University of Illinois at Chicago Ph.D., In Animal Immunology, College of Veterinary Medicine, Yangzhou University MS, Genetics, College of Bioscience and Biotechnology, Yangzhou University BS, Biotechnology, College of Bioscience and Biotechnology, Yangzhou University **Research Focus:** Innate Immunity of Foodborne Pathogens



MR. JIALE SHI
PhD Candidate, College of Animal Science and Technology & College of Veterinary Medicine,
Huazhong Agricultural University

BS, Shanxi Agricultural University.
MS, Huazhong Agricultural University

**Research Focus:** Preventive Veterinary Medicine











#### **GRADUATE SPEAKERS**



MS. XIYUE WANG

Master Candidate, College of Veterinary Medicine, Yangzhou University

BVSc, Yangzhou University

**Research Focus:** Virus Evolution



MR. YUNPENG WANG

PhD Candidate, College of Animal Science and Veterinary Medicine, Shandong Agricultural University

BS, Aquaculture Science, Shandong Agricultural University MS, Zootechnical Science, Shandong Agricultural University

Research Focus: Animal Nutrition



MS. WENLIAN WENG

PhD Candidate, College of Veterinary Medicine, China Agricultural University

BS, Longyan University
MS, Chinese Academy of Agricultural Sciences

**Research Focus:** Research on Animal Viruses



**MS. QIAN XIN** 

Master Candidate, College of Animal Science and Veterinary Medicine, Shandong Agricultural University

BS, Shandong Agricultural University

Research Focus: Animal Nutrition











#### **GRADUATE SPEAKERS**



MS. XIA YI

Master Candidate, College of Veterinary Medicine, China Agricultural University

BS, Veterinary Medicine, Nanjing Agricultural University

Research Focus: Herd Health Management



MS. PING ZHANG

Master Candidate, College of Resources and Environment, Anhui Agricultural University

BS, Huang Shan University

Research Focus: Food Safety



**MR. YUHANG ZHANG**PhD Candidate, College of Veterinary Medicine, Hunan Agriculture University

BS, Biological Sciences, Hunan Agricultural University.
MS, Basic Veterinary Medicine, Hunan Agricultural University;

**Research Focus:** Drug Screen; Antiviral Drugs; African Swine Fever Virus; Immune Evasion



**MS. YANAN ZHAO** 

Master Candidate, College of Animal Science and Veterinary Medicine, Shandong Agricultural University

BS, Shandong Agricultural University

**Research Focus:** Animal Genetics, Breeding and Reproduction











## **GRADUATE SPEAKERS**



MS. YI ZHOU
PhD Candidate, College of Veterinary Medicine, Yangzhou University
BS, Yangzhou University
MS, Yangzhou University

**Research Focus:** Interaction between Salmonella and Autotroph











UC DAVIS EDUCATION CONFERENCE ON ONE HEALTH FOR FOOD SAFETY, AGRICULTURE, AND ANIMAL HEALTH

HOSTED BY: UNIVERSITY OF CALIFORNIA, DAVIS | WESTERN INSTITUTE FOR FOOD SAFETY
& SECURITY CO-HOSTED BY: CHINA AGRICULTURAL UNIVERSITY | COLLEGE OF VETERINARY MEDICINE







