ONE HEALTH
FOOD SAFETY, AGRICULTURE
AND ANIMAL HEALTH

CONFERENCE SCHEDULE
FEBRUARY 7 - 18, 2022

HOSTED BY: UNIVERSITY OF CALIFORNIA, DAVIS | WESTERN INSTITUTE FOR FOOD SAFETY AND SECURITY
The 2022 UC Davis Education Conference on One Health for Food Safety, Agriculture, and Animal Health held online February 7 – February 18, 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. 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 other universities around the world. 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. Our comprehensive program includes lectures, learning activities, and team-building exercises which increase participants’ awareness of taking an interdisciplinary approach to solving complex problems. Participants will have the chance to work together on team-building activities and build friendships through problem-based learning projects.
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<th>SPEAKER</th>
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| 9:00 – 10:00 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 |
| 10:00 – 11:00 a.m.| All          | One World, One Pandemic and One Health                       | Dr. Linfa Wang  
Director of the Programme in Emerging Infectious  
Diseases at Duke – NUS Medical School, Singapore |
| 11:00 a.m. – 12:00| All          | The Power of One  
One World – One Health                                      | Ms. Chris Brunner  
Communications and International Programs Director,  
Western Institute for Food Safety and Security, University  
of California, Davis |
| 12:00 – 1:30 p.m. | All          | LUNCH BREAK                                                 |                                                                                                |
| 1:30 – 2:20 p.m. | Graduate &  
Undergraduate Students | Team Work 1                                                  | UC Davis Facilitators                                                                           |
| 2:30 – 3:10 p.m. | All          | Benefit and Risk of Utilizing Antimicrobials                | Dr. Yang Yu  
Associate Professor in Pharmacology and Toxicology,  
College of Veterinary Medicine  
South China Agricultural University |
| 3:20 – 4:00 p.m. | All          | Impacts of the ASFV Outbreak in China (SE Asia) on Food  
Security, Human Health, and Environment                     | Dr. Yingjuan Qian  
Professor in Preventive Veterinary Medicine, College of  
Veterinary Medicine  
Nanjing Agricultural University |
| 4:05 – 4:25 p.m. | All          | Graduate Report - Novel Plasmid-mediated Efflux Pumps  
Conferring Resistance to Multiple Drugs Including Tigecycline | Mr. Chengzhen Wang  
College of Veterinary Medicine, South China Agricultural  
University |
| 4:30 – 4:50 p.m. | All          | Graduate Report - Global Transcriptional Responses in  
Ciprofloxacin Heteroresistant Sub-clones of Salmonella  
Enterica Serovar Typhimurium Bearing pHXY0908 by  
Weighted Gene-coexpression Network Analysis               | Ms. Mengyuan Li  
College of Veterinary Medicine, South China Agricultural  
University |
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| 9:00 – 10:00 a.m. | All          | Soil Health: Linking Ecosystem Health to Human and Animal Health: The Challenges and Opportunities | Dr. Jorge Rodrigues  
                      |               |                                                                          | Professor, Department of Land, Air and Water Resources, University of California, Davis          |
| 10:00 – 11:00 a.m.| All          | Study of Infection and Contamination of Plants (Model and Crop) with Plant and Human Pathogens | Mr. David Bridges  
                      |               |                                                                          | PhD student in Plant Biology, Department of Plant Sciences, University of California, Davis      |
| 11:00 a.m. – 12:00 p.m. | All       | Introduction to Essay Writing                                             | Dr. June Barrera  
                      |               |                                                                          | DVM, MPVM  
                      |               |                                                                          | University of California, Davis                                                              |
| 12:00 – 2:00 p.m. | All          | LUNCH BREAK                                                              |                                                                                                    |

**ONE HEALTH INTERNATIONAL YOUNG SCHOLARS FORUM**

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| 2:00 – 2:40 p.m.  | All          | Challenges, Landscape and Outlook for AMR in the Future                  | Dr. Yang Wang  
                      |               |                                                                          | Professor and Vice Head, Section of Antimicrobial Resistance in Bacteria of Animal, Human and Environment Origin, College of Veterinary Medicine, China Agricultural University |
| 2:50 – 3:30 p.m.  | All          | A Further Understanding of Antimicrobials and Antimicrobial-resistance (AMR) in the Food Chain | Dr. Libang Zhou  
                      |               |                                                                          | Assistant Professor, College of Food Science and Technology, Nanjing Agricultural University   |
| 3:40 – 4:20 p.m.  | All          | Understanding the Transmission of Novel Antimicrobial Resistance Genes in the One Health Perspective | Dr. Ruichao Li  
                      |               |                                                                          | Professor, College of Veterinary Medicine, Yangzhou University                                  |
| 4:25 – 4:45 p.m.  | All          | Graduate Report – Prevalence Characteristics and Transmission Mechanism of Multidrug – resistant Plasmids in the Live Poultry Market | Ms. Yi Yin  
                      |               |                                                                          | College of Veterinary Medicine, Yangzhou University                                              |
# Conference Schedule

**Week 1: Wednesday, February 9**

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<th>TIME</th>
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| 9:00 – 10:00 a.m.   | All          | Overview of Dairy Herd Health                                           | Dr. Richard Pereira  
Associate Professor of Clinical Livestock Herd Health, School of Veterinary Medicine, University  
of California, Davis                                                                                      |
| 10:00 – 11:00 a.m.  | All          | Hazard Analysis Critical Control Point (HACCP) – Training One Health Practitioners for Food Systems Inspections | Mr. David Goldenberg  
Food Safety and Security Training Coordinator, Western Institute for Food Safety and Security, University of California, Davis |
| 11:00 a.m. – 12:00 p.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 |
| 12:00 – 2:00 p.m.   | All          | LUNCH BREAK                                                             |                                                                                                       |
| 2:00 – 2:40 p.m.    | All          | One Health Approach to Address AMR                                      | Dr. Joanna McKenzie  
Specialist in One Health Epidemiology and International Development in the mEpiLab, School of Veterinary Science, Massey University, New Zealand |
| 2:50 – 3:30 p.m.    | All          | The Superbug Transmission between Human and Animals: A Very Complicated Issue. | Dr. Rui Zhou  
Professor, College of Animal Science and Technology · College of Veterinary Medicine, Huazhong Agricultural University |
| 3:40 – 4:20 p.m.    | All          | Research Progress on the Emergence and Transmission of Antibiotics Resistance of Staphylococcus aureus Based on Omics | Dr. Huping Xue  
PhD, Associate Professor, Northwest A&F University                                                                 |
| 4:25 – 4:45 p.m.    | All          | Graduate Report – Molecular Epidemiology of Multidrug – Resistant Escherichia coli from Migratory Birds in Eastern China | Mr. Wenhui Zhang  
College of Veterinary Medicine, Yangzhou University                                                                 |
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| 9:00 – 10:00 a.m.| All          | Demand for Animal Protein/ Protecting the Environment                    | Dr. Frank Mitloehner  
Professor and Air Quality Extension Specialist, Department  
of Animal Science, and Director of Clarity and Leadership  
for Environmental Awareness and Research (CLEAR Center),  
University of California, Davis |
| 10:00 – 11:00 a.m.| All          | Environmental Impact of Dairy – The Dairy Digester                       | Dr. Pramod Pandey  
Associate Agronomist and Associate Specialist in  
Cooperative Extension, Department of Population Health  
and Reproduction, School of Veterinary Medicine, University  
of California, Davis |
| 11:00 a.m. – 12:00 p.m.| All | Managing a Dairy Farm for Animal Health, Public Health, Ecosystem Health, and Its Financial Well – Being  | Dr. James Cullor  
Professor Emeritus, Department of Population, Health and Reproduction, University of California, Davis |
| 12:00 – 1:30 p.m.| All          | LUNCH BREAK                                                              |                                                                                                                                         |
| 1:30 – 2:20 p.m.| Graduate & Undergraduate Students | Team Work 2                                                               | UC Davis Facilitators                                                                                                                                 |
| 2:30 – 3:10 p.m.| All          | Challenges, Landscape and Outlook, Research Focuses, Global Collaborative Actions | Dr. Wim van der Poel  
Professor of Emerging and Zoonotic Viruses, Wageningen  
Bioveterinary Research, Wageningen University, The Netherlands |
| 3:20 – 4:00 p.m.| All          | Contamination of Salmonella and Biofilm Formation on Food-contact Surfaces | Dr. Huhu Wang  
Associate Professor, College of Food Science and Technology, Nanjing Agricultural University |
| 4:05 – 4:25 p.m.| All          | Graduate Report – Prediction of Fusarium Head Blight in Wheats           | Ms. Nan Wang  
College of Plant Protection, Anhui Agricultural University |
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| 9:00 – 10:00 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                                                                                     |
| 10:00 – 11:00 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 Lab Molecular Biosciences, UC Davis                                                                                                           |
| 11:00 a.m. – 12:00 p.m. | All          | Poster Review                                                          | Dr. Bennie Osburn  
Director, Outreach and Training, Western Institute for Food Safety and Security, Dean Emeritus, School of Veterinary Medicine, University of California, Davis                                                  |
|                  |              |                                                                        | Ms. Chris Brunner  
Communications and International Programs Director, Western Institute for Food Safety and Security, University of California, Davis                                                                 |
|                  |              |                                                                        | Mr. Taotao (Andy) Lu  
PhD student, Epidemiology, University of California, Davis                                                                                                                                            |
| 12:00 – 2:00 p.m. | All          | LUNCH BREAK                                                            |                                                                                                                                                                                                       |
| **ONE HEALTH INTERNATIONAL YOUNG SCHOLARS FORUM** |
| 2:00 – 2:40 p.m. | All          | One health framework to advance food safety and security: A case study in the Rwandan dairy sector | Dr. Sara Garcia  
Project Scientist, Western Institute for Food Safety and Security, University of California, Davis                                                                                             |
| 2:50 – 3:30 p.m. | All          | Role of Hypermutability in the Development of Antibiotic Resistance in Staphylococcus aureus | Dr. Shaochen Wang  
Lecturer, College of Food Science and Technology, Nanjing Agricultural University                                                                                                                   |
| 3:35 – 3:55 p.m. | All          | Graduate Report – Mobilization of tet(X4) by IS1 Family Elements in Porcine Escherichia coli Isolates | Mr. Zheng Chen  
College of Veterinary Medicine, Henan Agricultural University                                                                                                                                       |
## CONFERENCE SCHEDULE

### WEEK 2: MONDAY, FEBRUARY 14

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<th>SPEAKER</th>
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| 9:00 – 10:00 a.m.     | All              | West Nile Virus as a Model for One Health                                | Dr. Christopher Barker  
Associate Professor, Pathology, Microbiology, & Immunology, School of Veterinary Medicine, University of California, Davis |
| 10:00 – 11:00 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 |
| 11:00 a.m. – 12:00 p.m.| All              | Sources of Fecal Contamination on Raw Produce                           | Dr. Michele Jay – Russell  
Program Manager, Western Center for Food Safety, University of California, Davis |
| 12:00 – 1:30 p.m.     | All              | LUNCH BREAK                                                             |                                                                                                                                 |

### ONE HEALTH INTERNATIONAL YOUNG SCHOLARS FORUM

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<tr>
<td>1:30 – 2:20 p.m.</td>
<td>Graduate &amp; Undergraduate Students</td>
<td>Team Work 3</td>
<td>UC Davis Facilitators</td>
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| 2:30 – 3:10 p.m.      | All              | Vaccine Development for the Ubiquitous Parasite Toxoplasma gondii       | Dr. Bang Shen  
PhD, Professor, College of Animal Science and Technology•College of Veterinary Medicine, Huazhong Agricultural University |
| 3:15 – 3:35 p.m.      | All              | Graduate Report – miRNAs Regulate HCT – 8 Cells Apoptosis Induced by Cryptosporidium Parvum Infection | Ms. Juanfeng Li  
College of Veterinary Medicine, Henan Agricultural University |
# Week 2: Tuesday, February 15

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<tr>
<th>Time</th>
<th>Participants</th>
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| 9:00 – 10:00 a.m. | All          | A Day in the Life of the Emergency Animal Clinic, Veterinary Medical Teaching Hospital, UC Davis | Dr. Kate Hopper  
Professor, Surgical & Radiological Sciences, School of Veterinary Medicine, University of California, Davis |
| 10:00 – 11:00 a.m. | All          | One Health Approaches in Agricultural Engineering                        | Dr. Andre Daccache  
Assistant professor, Department of Biological and Agricultural Engineering, University of California, Davis |
| 11:00 a.m. – 12:00 p.m. | All          | Preparing for Disasters – Issues from a One Health Approach               | Ms. Heather Johnson  
Instructional Systems Designer, Western Institute for Food Safety and Security, University of California, Davis |
| 12:00 – 2:00 p.m. | All          | LUNCH BREAK                                                              |                                                                                                                                         |

### One Health International Young Scholars Forum

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| 2:00 – 2:40 p.m. | All          | Toxoplasmosis: cats should not take all the blame     | Dr. Feng Yu (Lydia)  
DVM, Associate Professor, College of Veterinary Medicine, China Agricultural University |
| 2:50 – 3:30 p.m. | All          | Some Stories of Parasite Roundworms                   | Dr. Yue Xie  
Associate Professor, College of Veterinary Medicine, Sichuan Agricultural University  |
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| 9:00 – 10:00 a.m.  | All          | Taking a One Health Approach to Comparative Genetic Diseases Affecting Animals and People | Dr. Danika Bannasch  
Professor, Department of Population Health and Reproduction, University of California, Davis                                               |
| 10:00 – 11:00 a.m. | All          | Taking a One Health Approach to Achieve Public and Global Health Objectives | Dr. Marguerite Pappaioanou  
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. – 12:00 p.m. | All  | Student Life at UC Davis                                                | Mr. Taotao (Andy) Lu  
PhD student, Epidemiology, University of California, Davis                                                                                  |
| 12:00 – 1:30 p.m.  | All          | LUNCH BREAK                                                            |                                                                                                                                           |
| **ONE HEALTH INTERNATIONAL YOUNG SCHOLARS FORUM** |              |                                                                         |                                                                                                                                           |
| 1:30 – 2:20 p.m.   | Graduate & Undergraduate Students | Team Work 4                                                              | UC Davis Facilitators                                                                                                                     |
| 2:30 – 3:10 p.m.   | All          | The Function of Shuttle Proteins in Toxoplasma Replication             | Dr. Heng Zhang  
PhD, Lecturer, College of Veterinary Medicine, Henan Agricultural University                                                               |
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| 9:00 – 10:00 a.m.| All               | How to Communicate Scientific Subjects to the Public         | Mr. Gregory Wlasiuk  
E – Learning Curriculum Designer  
Ms. Heather Johnson  
Instructional Systems Designer, Western Institute for Food Safety and Security University of California, Davis |
| 10:00 a.m. – 12:00 p.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 |
| 12:00 – 1:30 p.m. | All | LUNCH BREAK                                                  |                                                                         |
| 1:30 – 2:20 p.m. | Graduate & Undergraduate Students | Team Work 5                                                  | UC Davis Facilitators                                                  |
| 2:30 – 3:10 p.m. | All | Coronavirus S and HE Proteins: A Two-component System for Dynamic Virus-receptor Interactions | Dr. Yifei Lang  
Associate Professor, College of Veterinary Medicine, Sichuan Agricultural University |
| 3:20 – 4:00 p.m. | All | Seroepidemiological Study of SARS-CoV-2 Infections in Companion Animals | Dr. Shan Zhao  
Lecturer, College of Veterinary Medicine, Sichuan Agricultural University |
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<td>9:00 – 9:15 a.m.</td>
<td>All</td>
<td>Closing Remarks</td>
<td>Dr. Bennie Osburn&lt;br&gt;Director, Outreach and Training, Western Institute for Food Safety and Security, Dean Emeritus, School of Veterinary Medicine, University of California, Davis</td>
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<td>All</td>
<td>Team Presentations</td>
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<td>All</td>
<td>Certificate Ceremony</td>
<td>Mr. Taotao (Andy) Lu&lt;br&gt;PhD student, Epidemiology, University of California, Davis</td>
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DR. DANIKA BANNASCH
Professor and Maxine Adler Endowed Chair in Genetics, Department of Population Health and Reproduction, School of Veterinary Medicine, University of California Davis
PhD, Princeton University
DVM, University of California Davis

Research Focus: Inherited diseases in companion animals.

DR. CHRISTOPHER BARKER
Associate Professor, Pathology, Microbiology, & Immunology, School of Veterinary Medicine, University of California, Davis
MS, Virginia Polytechnic Institute and State University, Blacksburg, VA
MS, PhD, University of California, Davis


DR. JUNE BARRERA, DVM
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, Davis School of Veterinary Medicine
BS in Ecology, Behavior, and Evolution, University of California, Los Angeles

Research Focus: Best practices in data-sharing in the One Health community.

MR. DAVID BRIDGES
PhD student in Plant Biology, Department of Plant Sciences, University of California, Davis

Research Advisor: Dr. Maeli Melotto
MS, Food Science and Human Nutrition, University of Maine
BS, Biology and Ecology, University of Maine

Research Focus: Foodborne pathogens, post-harvest processing, plant-microbe interactions
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<th>Area of Focus</th>
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<tr>
<td><strong>MS. CHRIS BRUNNER</strong></td>
<td>Communications and International Programs Director, Western Institute for Food Safety and Security</td>
<td>Liaison for WIFSS international programs serving as link between WIFSS and international One Health programs involving multiple colleges and universities in East Asia.</td>
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<td><strong>DR. JAMES CULLOR</strong></td>
<td>Professor Emeritus, Department of Population, Health and Reproduction, School of Veterinary Medicine, University of California, Davis</td>
<td>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.</td>
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<tr>
<td><strong>DR. ANDRE DACCACHE</strong></td>
<td>Assistant professor, Department of Biological and Agricultural Engineering, University of California, Davis</td>
<td>Agricultural water management, precision irrigation, remote sensing, climate change impact on crop productivity and water resources availability, irrigation engineering.</td>
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<tr>
<td><strong>DR. SARA GARCIA</strong></td>
<td>Project Scientist, Western Institute for Food Safety and Security, University of California, Davis</td>
<td>Food safety, microbiology, and molecular genetics. 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.</td>
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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.

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

DR. KATE HOPPER
Professor of Small Animal Emergency and Critical Care, School of Veterinary Medicine, University of California, Davis
BVSc, University of Melbourne, Australia
MVS, University of Melbourne, Australia
PhD, University of California, Davis

Research Focus: Acid-base and electrolyte disorders, cardiopulmonary resuscitation, and mechanical ventilation

MS. HEATHER JOHNSON
Instructional Systems Designer, Western Institute for Food Safety and Security
MS in Microbiology, University of California, Davis

Areas 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.

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

Areas of Focus: Food safety, with primary focus on growing produce and food packing facilities. Food security to prevent intentional adulteration.
### Conference Speakers

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<th>Name</th>
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<th>Research Focus</th>
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<tr>
<td><strong>DR. YIFEI LANG</strong></td>
<td>Associate Professor, College of Veterinary Medicine, Sichuan Agricultural University</td>
<td>Coronavirus-receptor interaction and cross-host transmission.</td>
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<td>PhD, University of Utrecht</td>
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<td>MS, Preventive Veterinary Medicine, Graduate School of Chinese Academy of Agricultural Sciences</td>
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<td><strong>DR. RUICHAO LI</strong></td>
<td>Responsible for five research projects covering nanopore sequencing application and AMR research.</td>
<td>Antimicrobial resistance (AMR) and application of novel sequencing technologies (such as Oxford Nanopore Technologies), focusing on molecular mechanisms of resistance, MDR plasmids and bacterial genomics.</td>
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<td>PhD in Biological science, The Hong Kong Polytechnic University</td>
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<td>MS in Basic veterinary medicine, China Agricultural University</td>
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<td><strong>MR. TAOTAO (ANDY) LU</strong></td>
<td>PhD student, Epidemiology, University of California, Davis</td>
<td>Zoonotic and infectious diseases, spatial and spatio-temporal epidemiology.</td>
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<td>Research Advisor: Dr. Beatriz Martínez-López</td>
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<td>MPVM, University of California, Davis</td>
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<td><strong>MR. MICHAEL LUO</strong></td>
<td>Education Specialist and International Programs Coordinator, Western Food Institute for Food Safety &amp; Security</td>
<td>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.</td>
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<td>MS in Agriculture Extension</td>
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## Conference Speakers

### DR. JOANNA MCKENZIE
Specialist in One Health Epidemiology and International Development in the mEpiLab, School of Veterinary Science, Massey University, New Zealand

- PhD (Epidemiology), Massey University, NZ
- Master of Preventive Veterinary Medicine (Epidemiology), University of California, Davis, USA
- Bachelor of Veterinary Science, Massey University, NZ

**Research Focus:** Expertise and experience in implementing AMR and infectious disease surveillance in resource-limited settings. Major interest and expertise in research that informs policy for controlling endemic and emerging zoonotic diseases, antimicrobial resistance and the ecology and epidemiology of diseases involving wildlife reservoirs.

### DR. FRANK MITLOEHNER
Professor and Air Quality Extension Specialist, Department of Animal Science, University of California, Davis

- MS, Agricultural Engineering and Animal Science, University of Leipzig, Germany
- Grad studies, Animal Science, University of Goettingen, Germany
- PhD, Animal Science, Texas Tech University, Lubbock, TX

**Research Focus:** Air quality (dust emission and microbial sampling in feedlot cattle and pigs), environmental physiology (heat stress in cattle and pigs), and ethology.

### 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. 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.
<table>
<thead>
<tr>
<th><strong>DR. BENNIE OSBURN</strong></th>
<th><strong>Research Focus</strong>: Infectious diseases of livestock, zoonotic diseases, including foodborne pathogens, and the ecology of infectious agents.</th>
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</thead>
<tbody>
<tr>
<td>Director, Outreach and Training, Western Institute for Food Safety and Security Dean Emeritus, School of Veterinary Medicine, University of California, Davis</td>
<td>DVM, Kansas State University PhD, in Comparative Pathology, University of California, Davis Post-Doctoral Fellowship, Johns Hopkins Medical School</td>
</tr>
<tr>
<td><strong>DR. PRAMOD PANDEY</strong></td>
<td><strong>Research Focus</strong>: Pathogenic bacteria transport at watershed-scale, in-stream and overland bacteria transport, watershed modeling, anaerobic digestion, renewable energy, water resources management, and rainwater harvesting.</td>
</tr>
<tr>
<td>Associate Agronomist and Associate Specialist in Cooperative Extension, Department of Population Health and Reproduction, School of Veterinary Medicine, University of California, Davis; and Assistant Cooperative Extension Specialist, Food Science and Technology</td>
<td>MS, Washington State University, Pullman, and M. Tech. at Indian Institute of Technology, Kharagpur; PhD, from Iowa State University, Ames</td>
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<tr>
<td><strong>DR. MARGUERITE PAPPAIONOU</strong></td>
<td><strong>Research Focus</strong>: Emerging zoonotic diseases of pandemic concern, infectious disease surveillance, prevention, and control; food safety, One Health, Planetary Health.</td>
</tr>
<tr>
<td>Affiliate Professor and Associate Director, Center for One Health Research Department of Environmental and Occupational Health Sciences School of Public Health, University of Washington</td>
<td>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</td>
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<tr>
<td><strong>DR. RICHARD PEREIRA</strong></td>
<td><strong>Research Focus</strong>: Food Animal Herd Health &amp; Reproduction; Epidemiology; Antimicrobial Resistance.</td>
</tr>
<tr>
<td>Associate Professor, Department of Population Health and Reproduction, School of Veterinary Medicine, University of California, Davis Externship, Washington State University, Veterinary Teaching Hospital, Pullman, WA</td>
<td>BVSc, Federal University of Uberlandia, Uberlandia, MG, Brazil Intern, University of Florida, Gainesville, FL Resident Certificate, Cornell University Hospital for Animals (CUHA), Ithaca, NY PhD, Cornell University, College of Veterinary Medicine, Ithaca, NY</td>
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<td><strong>DR. ROBERT POPPENGA</strong></td>
<td>Professor, California Animal Health and Food Safety Lab Molecular Biosciences, University of California, Davis</td>
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<tr>
<td><strong>DR. YINGJUAN QIAN</strong></td>
<td>Professor in Preventive Veterinary Medicine, Nanjing Agricultural University</td>
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<tr>
<td><strong>DR. JORGE RODRIGUES</strong></td>
<td>Professor, Department of Land, Air and Water Resources, University of California, Davis</td>
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<tr>
<td><strong>DR. BANG SHEN</strong></td>
<td>Professor, School of Veterinary Medicine, Huazhong Agricultural University</td>
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CONFERENCE SPEAKERS

**DR. WIM VAN DER POEL**
Professor of Emerging and Zoonotic Viruses, Wageningen Bioveterinary Research, Wageningen University, The Netherlands
DVM, Utrecht University
PhD, in Virology, Utrecht University
Diplomat of the European College of Veterinary Microbiology

**Research Focus:** New and emerging viruses, Foodborne and Zoonotic viruses and ‘Global One Health’. Detection and characterization of emerging and zoonotic viruses in the different hosting animals, as well as in food and environmental matrices.

**DR. HUHU WANG**
Associate professor, PhD supervisor, key member of National center of meat quality and safety and control in China
PhD in Food Science, Nanjing Agricultural University

**Research Focus:** Eliminate biofilms formed by meat-borne pathogens (Salmonella, E. coli, and others), Enable targeted recognition of microbial spoilage and environmental persistence, and extend the shelf life of meat, poultry and related products.

**DR. LINFA WANG**
Director of the Programme in Emerging Infectious Diseases at Duke-NUS Medical School, Singapore
BS, East China Normal University in Shanghai
PhD, University of California, Davis

**Research Focus:** Dr. Wang played a leading role in identifying bats as the natural host of the Severe Acute Respiratory Syndrome (SARS) virus. Current research focuses on better understanding virus-bat interaction.

**DR. SHAOCHEN WANG**
College of Food Science and Technology, Nanjing Agricultural University
PhD in Veterinary Pharmacology and Toxicology, Beijing Agricultural University
DVM in Veterinary Medicine, Nanjing Agricultural University

**Research Focus:** AMR mechanisms; Soil Resistome; Functional Metagenomics
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<tr>
<th>NAME</th>
<th>ROLE/PROFESSIONAL BACKGROUND</th>
<th>RESEARCH FOCUS</th>
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<tr>
<td><strong>DR. YANG WANG</strong></td>
<td>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</td>
<td>Emergence and molecular genetics characteristic of bacterial resistance to antibiotic. The epidemiology, transmission, and associated risk factors of antimicrobial resistant bacteria.</td>
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<tr>
<td><strong>MR. GREGORY WLASIUK</strong></td>
<td>E-Learning Curriculum Designer, Western Institute for Food Safety and Security; MA in English, University of California, Davis</td>
<td>Designing online educational content for Western Institute for Food Safety and Security educational programs, development of interactive online courses and instructive videos.</td>
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<tr>
<td><strong>DR. YUE XIE</strong></td>
<td>Associate Professor, College of Veterinary Medicine, Sichuan Agricultural University; D.V.Sc and M.V.Sc, Sichuan Agricultural University, China; Joint Ph.D., Beltsville Human Nutrition Research Center, ARS-USDA, USA</td>
<td>Drug resistance and vaccine development of animal parasitic diseases.</td>
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<tr>
<td><strong>DR. HUPING XUE</strong></td>
<td>Associate professor, PhD supervisor, evaluating expert of NSFC, communication review expert for dissertations of the Ministry of Education in China; PhD, Fudan University</td>
<td>Mining new antimicrobial peptides and antibacterial agents from natural products, and reforming them; The mechanism of antimicrobial peptides/antibiotics was elucidated by using Staphylococcus aureus as target bacteria, Escherichia coli, Bacillus subtilis, lactic acid bacteria and Pichia pastoris were used as expression hosts to construct high expression system of antimicrobial peptides and achieve large-scale production of antimicrobial peptides.</td>
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<tr>
<td>Speaker</td>
<td>Position and Institutions</td>
<td>Research Focus</td>
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<td><strong>DR. FENG YU</strong></td>
<td>Associate Professor, College of Veterinary Medicine, China Agricultural University</td>
<td>Small animal internal medicine, oncology, exotic species</td>
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<td>DVM, University of California, Davis</td>
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<tr>
<td><strong>DR. YANG YU</strong></td>
<td>Associate Professor, College of Veterinary Medicine, South China Agricultural University</td>
<td>Pharmacology, pharmacokinetics and pharmacodynamics; Antimicrobial resistance; Infectious diseases and microbiology</td>
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<td>MS, South China Agricultural University</td>
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<td>PhD, South China Agricultural University and Cardiff University</td>
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<tr>
<td><strong>DR. HENG ZHANG</strong></td>
<td>College of Veterinary Medicine, Henan Agricultural University, China</td>
<td>Molecular function of Toxoplasma gondii and Neospora caninum</td>
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<td>PhD, College of Veterinary Medicine, China Agricultural University, China</td>
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<tr>
<td><strong>DR. LIBANG ZHOU</strong></td>
<td>Assistant Professor, College of Food Science and Technology, Nanjing Agricultural University, Nanjing</td>
<td>Food microbiology, food biotechnology, metabolic engineering, synthetic biology.</td>
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<td>BS, Nanjing Agricultural University</td>
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<td>PhD, Institute of Bioprocess and Biosystems Engineering, Hamburg University of Technology</td>
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DR. SHAN ZHAO
Lecturer, College of Veterinary Medicine, Sichuan Agricultural University
PhD, University of Utrecht
MS, College of Veterinary Medicine, Sichuan Agricultural University

Research Focus: Animal coronavirus

DR. RUI ZHOU
Professor, College of Veterinary Medicine, Huazhong Agricultural University
Director of International Research Center for Animal Disease (Ministry of Science & Technology of China)
MS, Huazhong Agricultural University (HZAU)
DVM, the University of Munich

Research Focus: Pathogenomics and control strategies of veterinary and zoonotic bacterial diseases, including microbial population genomics and epidemiology, dynamics of antimicrobial resistance (AMR) transmission, mechanism of bacterial cell division and metabolism regulation, development of diagnostics, vaccines, and antibacterial drugs.
MR. ZHENG CHEN
School of Veterinary Medicine, Henan Agriculture University
BS, School of Veterinary Medicine, Henan Agriculture University

Research Focus: Veterinary Pharmacology and Toxicology

MS. JUANFENG LI
College of Veterinary Medicine, Henan Agricultural University
BS, College of Veterinary Medicine, Henan University of Science and Technology

Research Focus: During the postgraduate period, mainly engaged in the study on the mechanism of miR-942 and miR-3976 regulates HCT-8 cell apoptosis during the early phase of Cryptosporidium parvum infection, as well as the molecular identification and biological characteristics of Cryptosporidium.

MS. MENGYUAN LI
College of Veterinary Medicine, South China Agricultural University
BS, Henan University of Animal Husbandry and Economy

Research Focus: Transcriptional regulation mechanism of heteroresistance in Salmonella.

MR. CHENGZHEN WANG
College of Veterinary Medicine, South China Agricultural University
BS, College of Veterinary Medicine, South China Agricultural University

Research Focus: Plasmid-mediated antimicrobial resistances transmission and mechanisms in Gram-negative bacteria; RND-type efflux pumps and its regulation in antibiotic resistance.
**MS. YIN YI**  
College of Veterinary Medicine, Yangzhou University  
BS, Yangzhou University, Veterinary Medicine  

**Research Focus:** Molecular mechanism of transfer element-mediated gene transfer of emerging drug resistance; Application of novel sequencing technology in genomics research of drug-resistant bacteria.

**MR. WENHUI ZHANG**  
Yangzhou University, Basic veterinary, Veterinary Pharmacology and Toxicology laboratory  
BS, Yangzhou University, Veterinary Medicine  

**Research Focus:** Prevalence and dissemination of antibiotic resistance genes in environment and animals.

**MS. NAN WANG**  
University of Agricultural Anhui China (AAU)  
BS, The University of Agricultural Jiangxi China  

**Research Focus:** Prediction of Fusarium head blight in wheats