UCDAVIS UNIVERSITY OF CALIFORNIA

HEALTH

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

CONFERENCE SCHEDULE

AUGUST 1 - 12, 2022

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



INTERACTIVE & GROUNDBREAKING

CONFERENCE

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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.











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CONFERENCE SCHEDULE WEEK 1: MONDAY, AUGUST 1

| TIME | PARTICIPANTS | SUBJECT | SPEAKER | |
|-----------------------|--|--|--|--|
| | ONE 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 | | |

| 1:00 – 2:00 p.m. | Graduate & | Teamwork 1 Discussion Session | UC Davis Facilitators: |
|------------------|---------------|---|--|
| | Undergraduate | Meet your Team. Introduction of One Health Case | June Barrera, DVM, MPVM |
| | Students | Study – Learn How the One Health Approach | Peerawat Chintrakulchai, PhD Student in Epidemiology |
| | | Solves the Problem. Exploring the Problem and | Margaux Ocampo, Pharmaceutical Chemistry Research |
| | | Finding Resources to Research the Problem. | 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 |
|------------------|--------------|---|---|
| | INTERNATI | ONAL YOUNG SCHOLARS ONE HEALTH FOR | RUM 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 |









CONFERENCE SCHEDULE WEEK 1: TUESDAY, AUGUST 2

| TIME | PARTICIPANTS | SUBJECT | SPEAKER |
|------------------------|--------------|---|--|
| | ONI | E HEALTH INTERDISCIPLINARY EDUCATION | MORNING SESSION |
| 8:00 – 9:00 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 |
| 9:00 – 10:00 a.m. | All | Study of Infection and Contamination of Plants (Model and Crop) with Plant and Human Pathogens | Dr. Maeli Melotto Professor and Vice-Chair of Agricultural Plant Biology, Department of Plant Sciences, University of California, Davis |
| 10:00 – 11:00 a.m. | All | Overview of the Development of a Risk Assessment for Bovine Respiratory Disease (BRD) in Dairy Calves | Dr. Sharif Aly Professor of Epidemiology and Biostatistics with UC Davis School of Veterinary Medicine's Veterinary Medicine Teaching and Research Center in Tulare, and Professor in the Department of Population Health, School of Veterinary Medicine, University of California, Davis |
| 11:00 a.m. – 1:00 p.m. | All | LUNCH BREAK | |

| 12:00 – 1:00 p.m. | Faculty | Why Consider the Transition from Traditional Education to the 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 |
|-------------------|---------|--|---|
| 1:00 – 2:00 p.m. | All | Welcome and Overview of UC Davis and the UC System | Richard Ma, College of Biological Sciences, University of California Davis |
| 2:00 – 2:15 p.m. | All | Regulation of m6A Methylation in Chickens Infected with Campylobacter jejuni | Yanan Zhao Master Candidate, College of Animal Science and Veterinary Medicine, Shandong Agricultural University |
| 2:15 – 2:30 p.m. | All | Insights into the Impact of Flagellar Regulator FlhF on Campylobacter jejuni Colonization of Chick and Mice Gut | Xiaofei Li PhD Candidate, College of Veterinary Medicine, Yangzhou University |
| 2:30 – 2:45 p.m. | All | Immunologic Functions of Murine cDC and pDC Subsets Response to Mycobacterium bovis BCG Infection in Vitro and in Vivo | Chuang Meng Lecturer, PhD, College of Bioscience and Biotechnology, Yangzhou University |
| 2:45 – 3:00 p.m. | All | Salmonella Enteritidis RfbD Enhances Bacterial Colonization and Virulence through Inhibiting Autophagy | Yi Zhou PhD Candidate, College of Veterinary Medicine, Yangzhou University |









CONFERENCE SCHEDULE WEEK 1: WEDNESDAY, AUGUST 3

| TIME | PARTICIPANTS | SUBJECT | SPEAKER |
|------------------------|--------------|---|---|
| | 01 | NE HEALTH INTERDISCIPLINARY EDUCATIO | N 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 | |

| 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 | PARTICIPANTS | SUBJECT | SPEAKER |
|------------------------|--------------|--|--|
| | ON | E 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 | YTTERS IN THE REAL OF THE REAL |
| | INTERNAT | 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 |









| ТІМЕ | 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 | BI- | | |
| | 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 | | |









CONFERENCE SCHEDULE WEEK 2: MONDAY, AUGUST 8

| TIME | PARTICIPANTS | SUBJECT | SPEAKER | | |
|------------------------|--|--|---|--|--|
| | ONE 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 | | | |
| | INTERNA | FIONAL YOUNG SCHOLARS ONE HEALTH FOR | RUM AFTERNOON SESSION | | |
| 1:00 – 2:00 p.m. | Graduate & Undergraduate Students | Teamwork 3 Discussion Session Structure of the Final Presentation – Determining One Health Issue, the Approach to Address the Problem, and the Short- term and Long-term Solutions | 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 | 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 | | |







P國東景大學动物医学院 College of Vereinary Medicine, China Agricultural University

CONFERENCE SCHEDULE WEEK 2: TUESDAY, AUGUST 9

| TIME | PARTICIPANTS | SUBJECT | SPEAKER |
|------------------------|--------------|--|--|
| | ON | E HEALTH INTERDISCIPLINARY EDUCATION | 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 <i>Laminaria japonic</i> a | Yunpeng Wang PhD Candidate, College of Animal Science and Veterinary Medicine, Shandong Agricultural University |



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CONFERENCE SCHEDULE WEEK 2: WEDNESDAY, AUGUST 10

| ТІМЕ | PARTICIPANTS | SUBJECT | SPEAKER | | |
|------------------------|--|--|--|--|--|
| | ONE 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 | A STATE AND A STAT | | |
| | 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 | | |



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| ТІМЕ | 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 | 10-11/2 S | |

| 1:00 – 3:00 p.m. | Graduate & | Teamwork 5 Discussion Session | UC Davis Facilitators: |
|------------------|---------------|-----------------------------------|--|
| | Undergraduate | Preparation for the Final Reports | June Barrera, DVM, MPVM |
| | Students | | 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 | | 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 |













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



BRANDI ASMUS

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

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

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



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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.

Research Focus: Aly is a Professor of Epidemiology and Biostatistics at the School of Veterinary Medicine

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.

Research Focus: Agriculture Instructor at Woodland Community College. Brandi is a strong

advocate for community college education, and

leadership skills and put them into action. Courses taught: Animal Science, Animal Feeds/Nutrition,

Research Focus: Best practices in data-sharing in

she currently serves as the faculty mentor for the Agriculture Leadership group on campus, where students are given the opportunity to learn

Small Ruminant Production.

the One Health community.

at UC Davis where he applies study design and

quantitative methods to identify novel tools to advance dairy cattle health and welfare, public











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

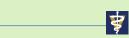
BSC and MSc in Agricultural Engineering from Mansoura University, Egypt PhD in Environmental Engineering from Wageningen University, Netherlands **Research Focus:** Dr. El-Mashad's research focuses on bioenergy, bioproducts and biotechnical engineering. He has worked on areas such as bioaugmentations 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.













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



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

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:** Current research interests focus on the replication and pathogenesis of nidoviruses (PRRSV and PEDV) and herpesviruses (PRV and HSV-1) with an aim to promote animal and human health through better understanding the viruses.

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

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.











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..

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

MPVM, University of California, Davis

Martínez-López

MR. TAOTAO (ANDY) LU



MICHAEL LUO Area of Focus: Supported the Education Conferences for One Health for Food Safety and Education Specialist and International Programs Coordinator, Western Food Institute for Food Security as assistant to the Conference Coordinator Safety & Security since 2015. Mr. Luo facilitates in Problem-based MS in Agriculture Extension

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

MR. RICHARD MA College of Biological Sciences, University of California, Davis Learning team building exercises, and lectures on communication skills.

Cell Biology Major











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| DR. B | EATRIZ | MARTINE | Z-LOPEZ |

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



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:** 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.

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.

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



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



COLLEGE OF AGRICULTURAL







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



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

Research Focus: Emerging zoonotic diseases of pandemic concern; infectious disease surveillance,

prevention, and control; food safety, One Health,

Planetary Health.

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.

environment, and food safety.



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.











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.











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.











| 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 |
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| 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 |











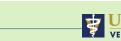






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| MS. RUIYI GAO Postdoctoral Researcher, College of Veterinary Medicine, Yangzhou University BS, Agronomy, Yangzhou University PhD, Yangzhou University | Research Focus: Genetic Evolution and Pathogenic Mechanism of Avian Influenza Virus |
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| 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 |
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| 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 | Research Focus: Mechanism of Avian Influenza |
| PhD Candidate, College of Veterinary Medicine, Yangzhou University | Virus-host Interactions |
| BVSc, Yangzhou University | |













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| MR. MA LI Master Candidate, College of Animal Science and Technology, Anhui Agricultural University BS, Anhui Agricultural University, Animal Medicine. | Research Focus: Nutritional Metabolic Diseases and Poisoning of Livestock and Poultry |
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| MS. LU LI Master Candidate, College of Animal Science and Veterinary Medicine, Shandong Agricultural University BS, Veterinary Medicine, Shandong Agricultural University | Research Focus: Viral Infection and Immune Regulation |
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| 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 |
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| MS. XIAOFEI LI PhD Candidate, College of Veterinary Medicine, Yangzhou University | Research Focus: The Pathogenic Mechanisms and Putative Virulence Genes of Campylobacter Jejuni |

MS, Biology, Yangzhou University BS, Pharmacy, Xuzhou Medical University











| 7 | MR. JINDE LIU Master Candidate, College of Animal Science and Technology, Anhui Agricultural University BS, Shandong Agricultural University Animal Medicine | 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 MS, Tea Science, Anhui 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 |











| MS. XIYUE WANG Master Candidate, College of Veterinary Medicine, Yangzhou University BVSc, Yangzhou University | Research Focus: Virus Evolution |
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| 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 | Research Focus: Animal Nutrition |

BS, Shandong Agricultural University











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

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



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













MS. YI ZHOU

PhD Candidate, College of Veterinary Medicine, Yangzhou University

BS, Yangzhou University MS, Yangzhou University **Research Focus:** Interaction between Salmonella and Autotroph















ONE HEALTH

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