



**VETERINARY
MEDICINE**



UC DAVIS
UNIVERSITY OF CALIFORNIA

2024 WINTER ONE HEALTH CONFERENCE

FOR FUTURE GLOBAL HEALTH

CONFERENCE SCHEDULE

JANUARY 22 – FEBRUARY 2, 2024

HOSTED BY: UNIVERSITY OF CALIFORNIA, DAVIS | WESTERN INSTITUTE FOR FOOD SAFETY AND SECURITY



CONFERENCE DESCRIPTION

The 2024 Winter One Health Conference for Future Global Health, held January 22 – February 2, 2024, was an on-site at the University of California, Davis.

The conference was hosted by the WIFSS of UCD, a distinguished member of the Global One Health Research Partnership (GOHRP). Joining WIFSS as co-hosts were the other esteemed members of GOHRP, including Nanjing Agricultural University in China, Wageningen University and Research in the Netherlands, and Massey University of New Zealand.

In-depth Educational Experience

This was an in-depth educational experience for undergraduate and graduate students 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. The conference raised awareness of the concept of One Health by instilling confidence to build multidisciplinary teams to solve problems. The conference inspired participants to take action to address complex problems that arise at the interface of animals, humans, and the environment.

Working Together – Building Friendships

In addition to lectures, participants took part in team building exercises led by graduate students from UC Davis. Team participants had a chance to work together on team-building activities and build friendships through problem-based learning projects. Students form lasting friendships through team experiences that provide lifelong support through graduate programs, careers, and innovative research.

Long History and Bright Future

WIFSS is the original creator of One Health educational conferences covering the areas of food systems and animal health spanning nine years with more than 1,000 faculty members, undergraduate and graduate students in attendance. They represent multiple disciplines including veterinary, agricultural science, engineering, and nutrition, from 21 different universities in China and Southeast Asia.

WIFSS One Health conferences introduce undergraduate and graduate students from a variety of disciplines who may want to be involved in addressing the multidisciplinary fields it takes to work together to solve complex problems global health issues.



WELCOME TO
THE 2024
WINTER ONE
HEALTH
CONFERENCE
FOR FUTURE
GLOBAL HEALTH!

MONDAY – JANUARY 22 – 1041 Valley

9:00 – 9:30	Welcome and Conference Overview	Dr. Bennie Osburn Director, Outreach & Training, Western Institute for Food Safety and Security, UCD
9:30 – 10:00	Overview of School of Veterinary Medicine and One Health programs initiatives of the American Association Veterinary Medical Colleges	Dr. Mark D. Stetter, Dean, School of Veterinary Medicine, and Dr. Andrew T. Maccabe, Chief Executive Officer, American Association of Veterinary Medical Colleges
10:00 – 10:30	Global Development and Challenges of One Health	Dr. Chang Cai, UN FAO One Health Specialist/ Adjunct Associate Professor at Murdoch University Australia
10:30 – 10:45	BREAK	
10:45 – 11:30	The Future of Veterinary Medicine as a Leader for One Health	Dr. Bennie Osburn Director, Outreach & Training, Western Institute for Food Safety and Security, UCD
11:30 – 12:00	The Power of One	Ms. Chris Brunner Communications and International Programs Director, Western Institute for Food Safety and Security, UCD
12:00 – 1:30	LUNCH	
1:30 – 2:30	Introduction of Problem-Based Learning and Overview of One Health Poster Project	Ms. Heather Johnson Instructional Designer, Western Institute for Food Safety and Security, UCD

TUESDAY – JANUARY 23 – 1041 Valley & Veterinary Medical Teaching Hospital

9:00 – 10:30	DISCUSSION #1 – Team Introductions and One Health Team Poster	UC Davis Team Facilitators <ul style="list-style-type: none">• Siqi (Gigi) Wang• Peerawat Chintrakulchai• Shadira Gordon• Marta Carreño Gútiéz
10:30 – 10:45	BREAK	
10:45 – 11:30	One Health Approach to Mastitis Control in a Developing Country	Dr. Sara Garcia Assistant Project Scientist, Department of Population Health and Reproduction, School of Veterinary Medicine, UCD
11:30 – 1:00	LUNCH	
1:00 – 2:00	Disruptive Ecosystem Impact on Soils	Dr. Jorge Rodrigues Professor, Department of Land, Air and Water Resources, UCD
2:00 – 3:00	Tour Veterinary Medical Teaching Hospital – and Group Photo	Tour Guides TBD

WEDNESDAY – JANUARY 24 – 1041 Valley

9:00 – 9:45	Feed-based Technologies to Improve Weaned Pig Health and Production	Dr. Yanhong Liu Associate Professor, Animal Nutrition, Department of Animal Science, UCD
9:45 – 10:00	BREAK	
10:00 – 10:45	Satisfy the Rising Demand for Animal Protein While Protecting the Environment	Dr. Frank Mitloehner Department of Animal Science, UCD
10:45 – 11:00	BREAK	
11:00 – 12:00	DISCUSSION #2 – Discussion of One Health and Introduction of Final Report	UC Davis Team Facilitators <ul style="list-style-type: none">• Siqi (Gigi) Wang• Peerawat Chintrakulchai• Shadira Gordon• Marta Carreño Gútiéz
12:00 – 1:30	LUNCH	
1:30 – 2:15	Modeling of HPAI Infection for Mitigating the Spread of Disease	Dr. Maurice Pitesky Associate Specialist in Cooperative Extension, Department of Population, Health and Reproduction, School of Veterinary Medicine, UCD
2:15 – 3:00	How Evidence-based Medicine can be used to Address Small Animal Health Issues	Dr. Philip Kass Professor, Department of Population Health & Reproduction, School of Veterinary Medicine, UCD

THURSDAY – JANUARY 25 – 1020 Valley

9:00 – 9:45	Communicating Scientific Research to the Public	Ms. Heather Johnson Instructional Systems Designer, and Mr. Gregory Wlasiuk, E-Learning Curriculum Designer, Western Institute for Food Safety and Security, UCD
9:45 – 10:00	BREAK	
10:00 – 11:00	Presentation of Team One Health Posters	Teams
11:00 – 12:00	NARMS Surveillance of Antimicrobial Resistance in Retail Foods in California	Dr. Xunde Li Researcher, Department Population Health and Reproduction, School of Veterinary Medicine, UCD
12:00 – 1:30	LUNCH	
1:30 – 2:30	Wildlife Programs at the One Health Institute, UCD	Dr. Woutrina Smith Associate Dean of Global Programs, School of Veterinary Medicine, UCD

FRIDAY – JANUARY 26 – FIELD TRIP - Hilmar

8:15 a.m.	Board bus (Campus)	Meet in parking lot outside Valley Hall
10:30 a.m.	Tour Dairy Facility	Location to be Announced
12:00 p.m.	Bus Tour and Lunch	Hilmar Cheese Visitor Center 9001 N. Lander Avenue, Hilmar CA 95324
2:00 p.m.	Board Bus	
4:00 p.m.	Arrive campus	Parking lot outside Valley Hall

MONDAY – JANUARY 29 – 1041 Valley

9:00 – 9:45	Graduate Education at UC Davis and USA	Dr. Xin Chen Associate Director of International Partnerships and Development International and Access Programs, UCD
9:45 – 10:30	Overview of Epidemiology Outbreak Investigation	Marta Carreño Gútiéz - PhD candidate in Epidemiology School of Veterinary Medicine UCD
10:30 – 12:00	DISCUSSION #3 – Foodborne Illness Outbreak Investigation	UC Davis Team Facilitators <ul style="list-style-type: none">• Siqi (Gigi) Wang• Peerawat Chintrakulchai• Shadira Gordon• Marta Carreño Gútiéz
12:00 1:30	LUNCH	
1:30 – 2:15	Overview of Public Health Related to Foodborne Diseases Associated with Produce	Dr. Michele Jay-Russell Program Manager, Western Center for Food Safety, UCD

TUESDAY – JANUARY 30 – FIELD TRIP

8:30 a.m.	Campus	Board Bus	Meet in parking lot outside Valley Hall
10:30 a.m.	Orland	Visit almond field crop and almond production and processing facility	Big Sky Almond Ranch and Four Corners Almond Processing Facility
12:30 p.m.	Chico	LUNCH	In n Out Burger, 9501 Agues Frias Road, Chico, CA 95928
4:00 p.m.	Campus	Arrive Campus	Parking lot outside Valley Hall

WEDNESDAY – JANUARY 31 – 1043 Valley

9:00 – 9:45	Overview of UC Davis School of Veterinary Medicine Community Practice	Dr. Ilana Halperin Health Sciences Associate Professor of Clinical Medicine & Epidemiology, School of Veterinary Medicine, UCD
9:45 – 10:30	Leptospirosis as a One Health Issue in Companion Animals	Dr. Jane Sykes Professor, Department of Medicine and Epidemiology, School of Veterinary Medicine, UCD
10:30 – 10:45	BREAK	
10:45 – 11:30	Epidemiology of Antimicrobial Resistance on California Dairies	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, UCD
11:30 – 1:00	LUNCH	
1:30 – 2:30	DISCUSSION #4 – Creation of Final Reports	UC Davis Team Facilitators <ul style="list-style-type: none">• Siqi (Gigi) Wang• Peerawat Chintrakulchai• Shadira Gordon• Marta Carreño Gútiéz

THURSDAY – FEBRUARY 1 - 2030 Valley

9:00 – 9:45	Precision Technology for Dairy Cattle	Mr. Jason Osburn West Territory Sales Manager, Afimilk
9:45 – 10:30	Zoonotic Diseases of Livestock and the One Health Connection	Dr. Sarah M. Depenbrock Assistant Professor and Assistant Agronomist, Department of Medicine & Epidemiology, School of Veterinary Medicine, UCD
10:30 – 10:45	BREAK	
10:45 – 11:30	Overview of the Importance of Animal Waste in a Sustainable Environment	Dr. Pramod Pandey Associate Agronomist and Associate Specialist in Cooperative Extension, Department of Population Health and Reproduction, School of Veterinary Medicine, UCD
11:30 – 1:00	LUNCH	
1:00 – 3:00	Teams work on final report presentations	Teams

FRIDAY – FEBRUARY 2 - 1102 Gourley

9:00 – 9:30	Closing Remarks	Dr. Bennie Osburn, Western Institute for Food Safety and Security, University of California, Davis Dr. Chang Cai, UN FAO One Health Specialist/ Adjunct Associate Professor at Murdoch University Australia
9:30 – 9:45	Team Presentation – Final Report	Symptom
9:45 – 10:00	Team Presentation – Final Report	Plastic Surgeons
10:00 – 10:15	BREAK	
10:15 – 10:30	Team Presentation – Final Report	One-fur-all Stray Animals
10:30 – 10:45	Team Presentation – Final Report	Health Knight Network
10:45 – 11:30	Certificate Ceremony	All Participants
11:30	Group Photo	
12:00	PIZZA PARTY	
1:00		CONRATULATIONS!

CONFERENCE SPEAKERS



DR. BENNIE OSBURN

Emeritus Dean, School of Veterinary Medicine, UCD
Director of Outreach and Training, Western Institute for Food
Safety and Security (WIFSS).
Post-Doctoral Fellowship, Johns Hopkins Medical School
DVM, Kansas State University
PhD in Comparative Pathology, UCD

Research Focus: During his career, his research focused on infectious and immune mediated diseases of livestock, zoonotic diseases, including foodborne pathogens, and the ecology of infectious agents. His interest is in One Health educational approaches to food safety and security, and all hazard disasters to facilitate a better understanding of the complex interactions of humans, animals, and the environment.



DR. MARK D. STETTER

Dean/Professor, School of Veterinary Medicine, UCD
Diplomate, American College of Zoological Medicine
DVM, University of Illinois at Champaign-Urbana
BS, University of Illinois at Champaign-Urbana

Research Focus: Dr. Stetter is a veterinary specialist in zoo and wildlife medicine and a Diplomate of the American College of Zoological Medicine. His research interests have included advancing minimally invasive surgery in non-domestic species, diagnostic imaging of fish, amphibians and reptiles, and infectious diseases of zoological species. His work has resulted in more than a hundred scientific publications and conference presentations.

CONFERENCE SPEAKERS



DR. ANDREW T. MACCABE

Chief Executive Officer of the American Association of Veterinary Medical Colleges (AAVMC)
DVM, The Ohio State University
MPH, Harvard University

Area of Focus: Dr. Maccabe brings a broad range of experience in military, law, public health, and veterinary medicine to 12 years of service as the Chief Executive Officer of the American Association of Veterinary Medical Colleges (AAVMC). Andy encourages global initiatives promoting One Health education and research with a special focus on veterinary expertise.

CONFERENCE SPEAKERS



DR. CHANG CAI

UN FAO One Health Specialist, Adjunct Associate Professor at Murdoch University Australia
Master in Veterinary Surveillance at Murdoch University
PhD at Murdoch University

Research Focus: Transboundary animal diseases, risk assessment, disease modelling, AMR risk analysis using one health approach; Big data analysis using artificial intelligence.



MS. CHRIS BRUNNER

Emeritus communications and international programs director, Western Institute for Food Safety and Security, UCD

Area of Focus: In retirement Chris continues to offer her services as liaison for WIFSS international programs serving as link between WIFSS and international One Health programs involving multiple colleges and universities in East Asia.



MS. HEATHER JOHNSON

Instructional Systems Designer, Western Institute for Food Safety and Security
MS in Microbiology, UCD

Area of Focus: Heather oversees the instructional design component of WIFSS training and educational projects in accordance with certification standards that meet local, state, and federal agency requirements. She designs blended - learning educational materials specifically using principles of adult education.

CONFERENCE SPEAKERS



DR. SARA GARCIA

Assistant Project Scientist
Department of Population Health and Reproduction
School of Veterinary Medicine, UCD
PhD in Integrative Pathobiology, UCD
BS in Genetics, University of California, Davis

Research Focus: 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.

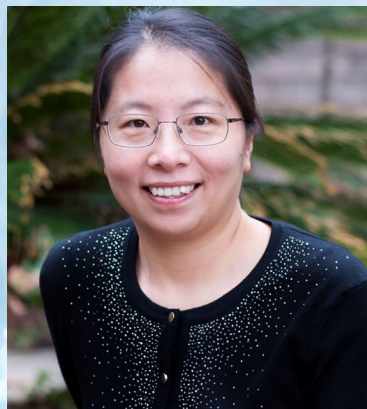


DR. JORGE RODRIGUES

Professor, Department of Land, Air and Water Resources,
University of California, Davis
MSc in Microbiology, University of São Paulo, Brazil
PhD, in Crop and Soil Sciences and Environmental Toxicology,
(Minor) Microbial Ecology (Dual Degree) - Michigan State
University

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

CONFERENCE SPEAKERS



Dr. YANHONG LIU

Associate Professor of Animal Nutrition,
Department of Animal Science, UCD
PhD, University of Illinois, Urbana-Champaign,
(Animal Science)
MS, China Agricultural University, (Animal Nutrition)
BS, China Agricultural University, (Biological
Science)

Research Focus: Evaluation of dietary effects on pig health by investigating impacts of products now available to the industry and developing new approach for the industry.



DR. FRANK MITLOEHNER

Professor and Air Quality Specialist in Cooperative Extension,
Department of Animal Science, University of California, Davis
PhD, Animal Science, Texas Tech University
MS, Agricultural Engineering and Animal Science, University of Leipzig,
Germany

Research Focus: Dr. Mitloehner shares his knowledge and research, both domestically and abroad, with students, scientists, farmers and ranchers, policy makers, and the public at large. Frank is also director of the CLEAR Center, (Clarity and Leadership for Environmental Awareness and Research) which has two cores – research and communications. The CLEAR Center brings clarity to the intersection of animal agriculture and the environment.

CONFERENCE SPEAKERS



DR. MAURICE PITESKY

Associate Specialist in Cooperative Extension,
Population Health & Reproduction, School of
Veterinary Medicine, UCD
MPVM, School of Veterinary Medicine, UCD
DVM, School of Veterinary Medicine, UCD

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



DR. PHILIP H. KASS

Vice Provost Academic Affairs, Chancellors Office, UCD, and Professor,
Department of Population Health & Reproduction, School of Veterinary Medicine
Post-doc, UCLA School of Public Health, Los Angeles, CA
PhD, University of California, Davis, CA
MS, University of California, Davis, CA
MPVM, University of California, Davis, CA
DVM, University of California, Davis, CA
BS, University of California, Davis, CA

Research Focus: Quantitative epidemiology (companion animals). Non-experimental inference. Epidemiologic methodology and analysis. Epidemiology of environmental hazards of animals and humans. Companion animal epidemiology. Hospital-based surveillance methodology. Cancer research.

Specialty Focus: Epidemiology and biostatistics.

CONFERENCE SPEAKERS



DR. XUNDE LI

Researcher, Department of Population Health and Reproduction, School of Veterinary Medicine, University of California, Davis
PhD, University of Rouen, Rouen, France
MS, Jilin University, China
BS, Jilin Agricultural University, China

Research Focus: The protection of the health of animals and the public and the improvement of food safety through laboratory and field-based studies on the sources, ecology, and transmission of bacterial and protozoal pathogens and bacterial antimicrobial resistance.



DR. WOUTRINA SMITH

Associate Dean for Global Programs and Professor of Infectious Disease Epidemiology, School of Veterinary Medicine, UCD
PhD, University of California, Davis
MPVM, School of Veterinary Medicine, UCD
DVM, School of Veterinary Medicine, UCD

Research Focus: Dr. Smith has worked on One Health research and training projects across Africa, Asia, and in the Americas, where multidisciplinary teams innovate together to solve complex health problems. Waterborne, foodborne, and vectorborne zoonotic diseases are her main research focus, engaging with colleagues across veterinary medicine, human health, the social sciences, and environmental disciplines.

CONFERENCE SPEAKERS



DR. XIN CHEN

Associate Director for International Partnerships and Development, Division of Continuing and Professional Education, University of California, Davis
PhD in higher education management and administration, University of Virginia, US
Master's degree at Fudan University, and BA from East China Normal University

Research Focus: Dr. Chen is responsible for planning and developing customized learning opportunities that focus on diversity of higher education for students, faculty, professionals, and university administrators. She is tasked with conducting marketing, creating and managing partnerships and developing customized academic and professional development programs for international universities in teaching, learning and scholarship collaboration.

CONFERENCE SPEAKERS



DR. BEATRIZ MARTÍNEZ-LÓPEZ

Professor and Agronomist
Department of Medicine & Epidemiology, School of Veterinary
Medicine, University of California, Davis
PhD, Complutense University, Madrid, Spain
MPVM, University of California, Davis, California
Expert, Complutense University of Madrid, Spain
DVM, Complutense University, Madrid, Spain

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



DR. MICHELE JAY-RUSSELL

Program Manager for the Western Center
for Food Safety, UCD

PhD in Comparative Pathology, University
of California, Davis DVM, University of
California, School of Veterinary Medicine,
Davis

Research Focus: Food safety, public
health, molecular epidemiology of
environmental enteric pathogens from
domestic and wildlife species affecting
people.

CONFERENCE SPEAKERS



DR. ILANA HALPERIN

Health Sciences Associate Professor of Clinical
Medicine & Epidemiology
Department of Medicine & Epidemiology, School of
Veterinary Medicine, UCD
CVA, International Veterinary Acupuncture Society
DVM, School of Veterinary Medicine, UCD
BA, UCD

Research Focus: Primary Care and Feline Medicine.
Improving community practice client communications
and answering clinical questions relevant to primary
care and preventive veterinary medicine.



DR. JANE SYKES

Professor, Department of Medicine and Epidemiology,
School of Veterinary Medicine, University of California,
Davis
PhD, University of Melbourne, Australia
MBA, University of Georgia Terry School of Business
BVSc (Hons), University of Melbourne, Victoria,
Australia

Research Focus: Infectious diseases of dogs and
cats, especially those of public health significance
(leptospirosis, fungal diseases, vector-borne diseases,
antimicrobial resistant bacterial infections)

CONFERENCE SPEAKERS



DR. SHARIF ALY

Professor and Agronomist, Department of Population Health & Reproduction, School of Veterinary Medicine, UCD

PhD, University of California, Davis, CA

MPVM, School of Veterinary Medicine, UCD

Residency, School of Veterinary Medicine, UCD

Internship, University of Idaho, Caine Veterinary Teaching Center

BVSc, University of Cairo, Egypt

GCE, University of London, England

IGCSE, University of Cambridge, England

Research Focus: Dr. Aly is a Professor of Epidemiology and Biostatistics at the School of Veterinary Medicine at UC Davis where he applies study design and quantitative methods to identify novel tools to advance dairy cattle health and welfare, public health, and food safety. Among 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.

CONFERENCE SPEAKERS



MR. JASON OSBURN

BA Louisiana State University, Animal Science

Area of Focus: Jason has held a variety of positions in the dairy industry including drug development, livestock production, pharmaceutical sales, feed/nutrition sales and computer technology for the dairy industry. In his current position with Israeli company, Afimilk, he is responsible for business growth in Western US and Canada for precision farming practices to advance sustainability, animal welfare, efficiencies, and profitability for the dairy industry.



DR. SARAH DEPENBROCK

Assistant Professor and Assistant Agronomist, Department of Medicine and Epidemiology, School of Veterinary Medicine, UCD
DVM, School of Veterinary Medicine, UCD
MS, The Ohio State University, Department of Veterinary Clinical Sciences, Columbus, OH
BS, College of Biological Sciences, UCD

Research Focus: Antimicrobial use and resistance in livestock, particularly as relates to bovine respiratory disease and calf management practices. Residue investigation in livestock.

CONFERENCE SPEAKERS



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; and Assistant Cooperative Extension
Specialist, Food Science and Technology
PhD, from Iowa State University, Ames, IA
MS, Washington State University, Pullman, WA
MS, M. Tech. at Indian Institute of Technology, Kharagpur

Research Focus: Pathogenic bacteria transport at watershed-scale, in-stream
and overland bacteria transport, watershed modeling, anaerobic digestion,
renewable energy, water resources management, and rainwater harvesting.

CONFERENCE SPEAKERS

PROGRAM FACILITATORS



Taotao (Andy) Lu

Lead Coordinator for UC Davis Team Facilitators
MPVM, PhD candidate in Epidemiology



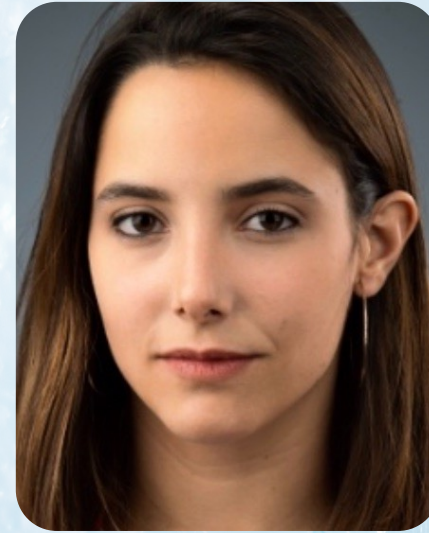
Peerawat Chintrakulchai

PhD candidate in Epidemiology



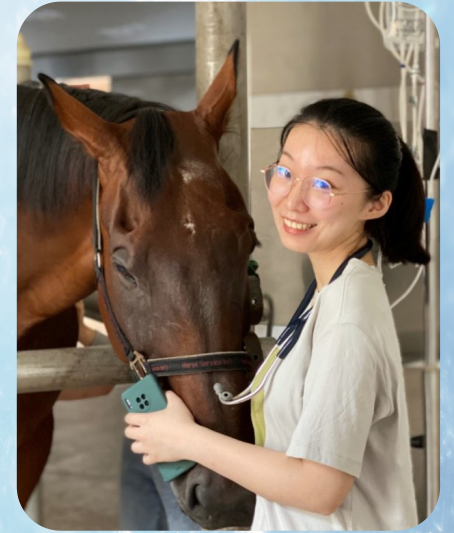
Shadira Gordon

DVM, MPVM
PhD candidate in Epidemiology



Marta C Gútiez

PhD candidate in Epidemiology



Siqi (Gigi) Wang

BVM, MPVM



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